SUPREME AUDIT INSTITUTION OF INDIA

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

Government of Bihar

Report No. 4 of 2024

(Performance Audit - Civil)

Report of the
Comptroller and Auditor General of India

Performance Audit on Public Health Infrastructure and Management of Health Services

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Preface

This Performance Audit Report of the Comptroller and Auditor General of India for the period 2016-22 containing the results of performance audit of Public Health Infrastructure and Management of Health Services in Bihar has been prepared for submission to the Governor of Bihar under Article 151 of the Constitution.

The instances mentioned in this Report are those which came to notice in the course of test-audit of records of Health Department. Matters relating to the period subsequent to 2021-22 have also been included, wherever pertinent.

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

Executive Summary

Performance Audit on "Public Health Infrastructure and Management of Health Services"

Executive Summary

Bihar, being the state with most population density (1,106 persons per square km) in the country, requires proper healthcare services infrastructure to deal with all types of diseases. In the state, public healthcare delivery system is categorised under the Allopathic and AYUSH (Ayurveda, Yoga, Unani, Siddha and Homoeopathy) systems of medicine and consists of three levels *i.e.,* primary, secondary and tertiary levels. Keeping in view its importance, a performance audit on '*Public Health Infrastructure and Management of Health Services'* was conducted and important findings relating to the different aspects of the healthcare infrastructure and services are as under:

Human Resources

- There were 49 *per cent* vacancies across the offices of the department *i.e.,* Directorate of Health Services, State Drug Controller, Food Safety wing, AYUSH and Medical College and Hospitals (MCHs).

(Paragraph 2.3)

- In Bihar, against the projected population of 12.49 crore as of March 2022, 1,24,919 allopathic doctors (1:1,000) were required to fulfil the recommendation of World Health Organisation (WHO) against which, only 58,144 (1:2,148) allopathic doctors were available as of January 2022.

(Paragraph 2.4)

- Shortage of staff nurse against sanctioned strength varied from 18 *per cent* (Patna) to 72 *per cent* (Purnea). Shortage of paramedics against the sanctioned strength ranged from 45 *per cent* (Jamui) to 90 *per cent* (East Champaran).

(Paragraph 2.7)

- There was significant staff shortage in all the cadres ranging from 35 *per cent* to 81 *per cent,* in AYUSH health care facilities.

(Paragraph 2.15)

- The Human Resource agency hired for recruitment of required manpower, at different levels of healthcare services published (October 2019-January 2021) advertisements for 82 types of 24,496 posts. However, recruitment of 35 types of 13,340 posts was pending as of January 2022.

(Paragraph 2.17.2)

Healthcare Services

- Basic amenities such as drinking water, fan, separate toilets for males and females, chairs *etc.,* were deficient in the Out-Patient Department (OPD)/ registration areas of the test-checked healthcare facilities (four SDHs, two RHs, four CHCs and 10 PHCs).

(Paragraph 3.1.8)

- As per Indian Public Health Standards, emergency OT was to be made available in each SDH, but it was not available in all the test-checked four SDHs. Besides, accident and trauma care services were also not available in any of the test-

checked SDHs (except Mahua (Vaishali)).

(Paragraph 3.3.1and 3.2.2)

- Out of 20 test-checked healthcare facilities, Antenatal Care (ANC) facility was not available in SDH, Udakishunganj, PHC, Bihta and Noorsarai. In the remaining 17 healthcare facilities, whenever a registered pregnant woman turned up for ANC, a new number was being allotted to her. Besides, one *per cent* to 67 *per cent* of the registered pregnant women were not supplemented with full course of IFA tablets during 2016-22.

(Paragraph 3.4.1 & 3.4.3)

- Out of 24 cases of maternal deaths reported in 16 test-checked healthcare facilities, during FYs 2016-22, maternal death review had been conducted in only one case, in PHC, Goraul.

(Paragraph 3.4.12)

- In test-checked 68 healthcare facilities of different levels (from HSC to SDH) required number of diagnostic test facilities were not available from 19 *per cent* to 100 *per cent* and diagnostic facilities were not available beyond OPD hours except CHC, Kako and PHCs Ratni Faridpur, Sikariya and Shankarpur.

(Paragraph 3.5.1)

- In test-checked healthcare facilities, shortages of Lab Technicians (LTs) ranged from nil to 100 *per cent* (on average) against the sanctioned strength during 2016-22.

(Paragraph 3.5.3)

- Joint physical verification of 25 ambulances showed that none of the ambulances had required equipment/medicine/consumables as per the agreement. The shortages ranged from 14 *per cent* to 100 *per cent*.

(Paragraph 3.6.3)

- Six test-checked blood banks operated without valid license, for a period ranging between three years to 21 years. This depicts lack of monitoring control on the part of SDC.

(Paragraph 3.6.7.1)

- None of the test-checked 10 SDHs, RHs and CHCs had functional Blood Storage Units **(**BSUs). In eight healthcare facilities, BSUs were non-functional due to the non-availability of manpower and authorisation certificates issued by the State Licensing Authority even when the equipment and consumables were available.

(Paragraph 3.6.7.2)

Availability of Drugs/Medicines, Equipment and Other Consumables

- For providing necessary medicines to the patients free of cost at all health care facilities, the department had prepared an Essential Drugs List (containing up to 387 number of drugs during 2016-22), but the nodal agency *i.e.,* BMSICL, had executed rate contracts with suppliers for only 14 to 63 *per cent* drugs, during the period, resulting in non-availability of such medicines.

(Paragraph 4.2.2)

- During 2016-22, BMSICL received 197.38 crore units of drugs/ surgical items

valuing ₹ 1,290.39 crore, against 13,440 purchase orders. The received drugs/ surgical items had remaining shelf life from 35 *per cent* to 74 *per cent* of their total life against the required minimum 75 *per cent*.

(Paragraph 4.2.5)

- In test-checked healthcare facilities, non-availability of essential drugs for Out-Patient Departments ranged between 21 *per cent* to 65 *per cent* and for In-Patient Departments, the non-availability was 34 *per cent* to 83 *per cent,* during 2016-22.

(Paragraph 4.2.10)

- In Darbhanga Medical College and Hospital (DMCH) and Government Medical College and Hospital (GMCH), Bettiah, it was observed that 45 *per cent* to 68 *per cent* drugs were not available during FYs 2019-21, due to short/non-supply of drugs by the BMSICL.

(Paragraph 4.2.13)

- State Ayush Society, Bihar, could not purchase essential drugs prescribed by Government of India (GoI), though grants of ₹ 35.36 crore for this purposewere provided during FYs 2014-20.

(Paragraph 4.2.17)

- In Government Tibbi College & Hospital, Patna, 55 drugs costing ₹ 22.33 lakh, purchased during October 2018 to October 2019, without assessment of their requirement, could not be utilised and had been kept idle in stock, and the shelf-life of 20 medicines had already expired.

(Paragraph 4.2.19)

- Acute shortages of equipment were noticed in the departments of each of the test-checked medical college and hospitals. The shortages, against the required number of machines and equipment, ranged between 25 *per cent* and 100 *per cent*, 33 *per cent* and 94 *per cent* and 50 *per cent* and 100 *per cent*, in DMCH, PMCH and GMCH, respectively.

(Paragraph 4.3.5)

- Out of available 132 ventilators in test-checked healthcare facilities, only 71 (54 *per cent*) ventilators were found functional. Four ventilators were non-functional and 57 (43 *per cent*) were lying idle, due to non-availability of technician and non-functional ICU.

(Paragraph 4.3.9)

Healthcare Infrastructure

- There was significant shortage of healthcare facilities, from Health Sub-Centre (HSC) level to Referral Hospital (RH)/Community Health Centre (CHC) level. Further, Sub-Divisional Hospitals (SDHs) were not available in 47 sub-divisions.

(Paragraph 5.2)

- Government of Bihar had not prepared any comprehensive health policy/ plan, aligned with the National Health Policy, 2017, to address the gaps of infrastructure/equipment in every healthcare facility.

(Paragraph 5.3)

- Health Department accorded (March 2007 to February 2010) sanction for upgradation of 399 out of 533 Primary Health Centres (PHCs) into CHCs but the executing agency *i.e.*, Bihar State Building Construction Corporation Limited had completed construction work of buildings in only 191 PHCs, as of March 2022.

(Paragraph 5.3.3)

- The Department provided (April 2011 to November 2015) funds of ₹ 257.02 crore to Bihar Medical Services & Infrastructure Corporation Limited (BMSICL), for upgradation of 198 PHCs into CHCs but work was started at 93 places and only 67 works for construction of buildings could be completed.

(Paragraph 5.3.3)

- Out of total 1,932 Primary Health Centres/Additional Primary Health Centres (APHCs), 846 (44 *per cent*) were not functioning on 24X7 basis. Further, only 566 (29 *per cent*) had labour room, 276 (14 *per cent*) had Operation Theatre (although mandatory as per guidelines) and only 533 (28 *per cent*) had at least four beds, against the requirement of six beds.

(Paragraph 5.5)

- It was observed that only 4,129 (52 *per cent*) Health and Wellness Centres (HWCs) were in existence, as on March 2022, against the target of 7,974 in the State and several deficiencies such as non-availability of toilets, drinking water, waiting space facilities were found in the test-checked HWCs.

(Paragraphs 5.6.1 & 5.6.2)

Financial Management

- Government of Bihar (GoB) made budget provisions of ₹ 69,790.83 crore during financial years (FYs) 2016-17 to 2021-22. Out of these provisions, only ₹ 48,047.79 crore (69 *per cent*) were spent by the Department, leading to savings of ₹ 21,743.04 crore (31 *per cent*).

- The savings were mainly attributable to: (i) the absence of gap analysis for raising demands for the budget and (ii) non-receipt of indents/demands from districts, on time.

(Paragraph 6.2)

- The percentage of expenditure on healthcare against the Gross State Domestic Product (GSDP) ranged between 1.33 *per cent* and 1.73 *per cent* only, whereas the percentage of healthcare expenditure against the Budget of the state, was between 3.31 *per cent* and 4.41 *per cent*, less than the required 2.5 *per cent* and 8 *per* cent of the GSDP and State Budget, respectively.

(Paragraph 6.5)

- In all the test-checked three Medical College and Hospitals (MCHs), during FYs 2016-22, 100 *per cent* persistent savings were noticed, in certain heads of expenditure *viz*., Training, Publishing and printing *etc*. However, the Department kept releasing funds, which remained unutilised and were surrendered on the last day of that financial year.

(Paragraph 6.9.1)

Implementation of Centrally Sponsored Schemes

- There were delays in payments (31 to 60 days in 17 *per cent*, 61 to 180 days in 18 *per cent* and more than 180 days in six *per cent* cases) made to sampled 2,378 *Janani Suraksha Yojana* beneficiaries, covered in nine test-checked healthcare facilities during financial years 2016-22. In 11 *per cent* cases, no payments were made.

(Paragraph 7.2)

Adequacy and Effectiveness of the Regulatory Mechanisms

- Only 27 to 42 *per cent* of sellers could be inspected by the Drug Inspectors during FYs 2016-22 (up to November 2021) and due to inadequate number of inspections, it could not be ascertained that provisions of the Act/Rules were being complied and quality drugs were being provided to the patients.

(Paragraph 8.2.1)

- There was acute shortage of manpower in State Drug Controller (SDC) establishment (100 *per cent* on the post of Deputy Drug Controller, 26 *per cent* in Assistant Drug Controller and 36 *per cent* in Drug Inspector), as of December 2021. This was one of the important reason for less inspections leading to ineffective monitoring mechanism.

(Paragraph 8.2.2)

- Out of 1,350 samples collected for quality test, only 17 *per cent* samples could be analysed within the stipulated time and remaining were analysed with delays of 61 days to 540 days. Due to delays in analysis, it could not be possible to take timely action, in case the drugs were found of sub-standard quality.

(Paragraph 8.2.5)

Sustainable Development Goals

- As per SDG India Index Report (2020-21) of NITI Aayog, Bihar scored 66, out of 100 SDG index score for SDG-3.
- Achievement of Bihar in respect of key health indicators (like MMR, NMR, TFR *etc*.) was far below the SDG target, as well as average national achievement during 2020-21.

(Paragraph 9.2)

Audit recommends that the State government may ensure:

1. *that adequate number of healthcare personnel are deployed in healthcare facilities, according to relevant norms/benchmark.*
2. *that waiting time for registration is reduced, by adding registration counters and registration staff etc.*
3. *availability of maternity services (Antenatal Care, Intra-partum care and Post-partum care) to every pregnant woman/mother.*
4. *that radiology and Ambulance services are operational in the designated healthcare facilities, with the required manpower and equipment.*
5. *preparation of Comprehensive plans for Bio-Medical Waste management.*
6. *segregation of Bio-Medical Waste and proper disposal thereof, as also the establishment of Effluent Treatment Plants in all healthcare facilities.*

7. *that Fire Safety Plan is prepared by the Health Department and fire extinguishers are installed in every healthcare facility.*
8. *at healthcare facility level there is a defined and established system for grievance redressal mechanism for beneficiaries.*
9. *BMSICL executes rate contracts, prepare annual procurement plan for procurement of equipment, to ensure their timely availability and distribution thereof across healthcare facilities.*
10. *terms and conditions of the supply contracts are adhered to, for ensuring the timely supply and adequate shelf life of drugs.*
11. *that drugs and surgical items are stored at the prescribed temperature and moisture standards, to help preserve their shelf life.*
12. *that required equipment and drugs as per EDL, are available in all the healthcare facilities.*
13. *carrying out quality tests of each batch of drugs and surgical items. Further, proficiency tests of drugs are conducted, to ensure random cross-checking of the quality of test results.*
14. *to provide the required equipment and make them functional in healthcare facilities, in accordance with MCI/NMC norms.*
15. *proper utilisation of idle ventilators through deployment of adequate manpower.*
16. *that Health Department conducts a proper review of all civil works, for their timely completion, through the concerned agencies.*
17. *to prepare a comprehensive health policy/plan, to bridge gaps in infrastructure, in the existing healthcare facilities.*
18. *that budget provisions of the Health Department are prepared on a realistic basis, considering the demands raised on the basis of gap analysis, at the district level.*
19. *timely finalisation of tenders and completion of projects, so that available funds are utilised effectively.*
20. *adequate allocation of funds for primary healthcare, as well as enhancement in healthcare sector spending, in line with the National Health Policy, 2017.*
21. *that available funds are utilised in line with time bound targets, as framed under the guidelines of NAM.*
22. *that arrangements are made to ensure timely payment to the beneficiaries under the Janani Suraksha Yojna.*
23. *periodic inspections of manufacturers'/sellers' establishments.*
24. *deployment of sufficient and qualified manpower in the offices of the State Drug Controller and State Drug Controller (AYUSH), for their effective functioning.*
25. *timely testing of Allopathic and AYUSH drugs, to mitigate the possible risks of spurious/NSQ drugs.*

26. *upgradation of training infrastructure to ensure regular training to technical staff, for updating their skills.*
27. *proper maintenance and regular updation of records relating to Application, Renewal, Cancellation and Grant of licences, to Manufacturing Units and Blood Banks.*
28. *that District Registration Authorities monitor clinical establishments under their area and enforce the provisions of the Clinical Establishments Act.*
29. *that Maternal and child healthcare services are provided according to the relevant norms and standards, to achieve the desired SDG target, related to maternal and child health.*
30. *phased targets are outlined for all districts, in line with the overall targets, as outlined in the Bihar SDG Vision document.*
31. *district-wise status of SDG health indicators is prepared and monitored regularly.*

Chapter-I
Introduction

Chapter-I

Introduction

Health is one of the most important parameters for ascertaining the quality of human life. 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 for 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. Further, the Constitution of the World Health Organisation (WHO) states that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition".

1.1 Health services

In India, the right to health care and protection has been recognised and considered a priority. Public Health is a subject in the State List of the constitution of India.

Health services provided by the hospitals can broadly be divided in the categories *viz.,* Line services, support services and Auxiliary services as shown below:

Line services

i. Outdoor patient department
ii. Indoor patient department
iii. Super specialty (OT, ICU)
iv. Emergency Services
v. Diagnostic Services
vi. Maternity

Support services

i. Oxygen Services
ii. Dietary service
iii. Laundry service
iv. Biomedical waste management
v. Ambulance service
vi. Mortuary service
vii. Blood Bank services

Auxiliary services

i. Patient safety facilities
ii. Patient registration
iii. Grievance / complaint redressal

Resource Management

i. Building Infrastructure
ii. Human Resources
iii. Drugs and Consumables
iv. Equipment

All public health services depend on the presence of basic infrastructure including availability of human resources. Further, every public health program - such as immunisation, infectious disease monitoring, cancer and asthma prevention, drinking water quality and 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.

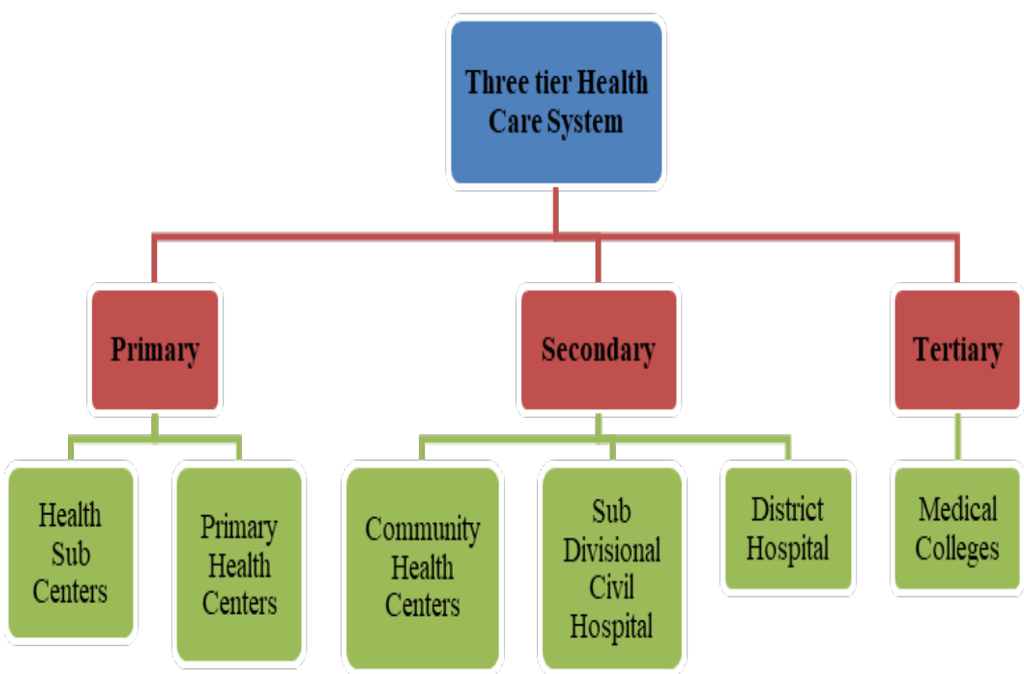
The National Health Policy, 2017, consists of Specific Quantitative Goals and Objectives outlined under three broad components viz. (a) health status and programme impact (b) health systems performance and (c) health system strengthening. These goals are aligned to achieve sustainable development in the health sector. The National Health Mission (NHM) Framework of Indian Public Health Standards (IPHS) envisages 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.

Indian Public Health Standards (IPHS) are a set of uniform standards envisaged to improve the quality of healthcare delivery in the country. These 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. The State has adopted IPHS norms for healthcare services.

1.2 Overview of healthcare facilities in the State

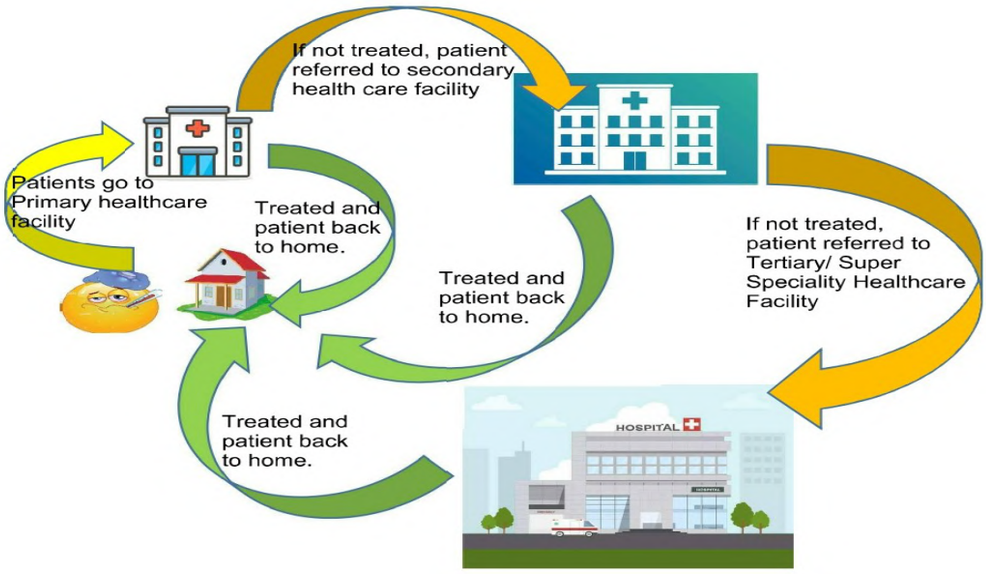
In the State, public health care is structured into three levels for providing primary care, secondary care and tertiary care as indicated in **Chart 1.1**.

Chart 1.1: Three tier Healthcare System



The public healthcare delivery system of the State is categorised under the Allopathic and AYUSH (Ayurveda, Yoga, Unani, Siddha and Homoeopathy) systems of medicine and consists of three levels *i.e.* primary, secondary and tertiary levels. Flow of treatment, as well as referral to next level of healthcare facility, is depicted in **Chart 1.2**.

Chart 1.2: Treatment and referral of patients



The primary health care infrastructure is the first level of contact for people and consists of Health Sub-Centres (HSCs), Additional Primary Health Centres (APHCs) and Primary Health Centres (PHCs). The secondary healthcare level consists of healthcare facilities, where patients from primary healthcare centres are referred to the specialists for treatment and are the first level referral units. The centres for secondary healthcare include District Hospitals (DHs) at the district level, Sub-Divisional Hospitals (SDHs) at the Sub-Division level and Referral Hospitals (RHs)/Community Health Centres (CHCs) at the block level. The tertiary healthcare level, at the third level, provides highly specialised care to patients, usually on referral from the primary and secondary healthcare levels. The tertiary level of health care includes Medical College and Hospitals and standalone speciality hospitals.

Details of the public healthcare infrastructure available in Bihar are shown in **Table 1.1**.

Table 1.1: Public healthcare infrastructure in Bihar as of March 2022

Type of Healthcare facility (Allopathy)	No. of Healthcare facilities	Type of Healthcare facility (AYUSH)	No. of Healthcare facilities
Hospitals attached to Medical College (including AIIMS, Patna)	11	Government Ayurvedic College and Hospital	5
Super speciality and specialty hospitals	4	Government Homeopathic College and Hospital	1
Government Dental College	1	Government Unani College and Hospital	1
College of Physiotherapy and Occupational Therapy	1	Government Homeopathic Hospital	1
District Hospital (DH)	35	District Joint Dispensary	26

Type of Healthcare facility (Allopathy)	No. of Healthcare facilities	Type of Healthcare facility (AYUSH)	No. of Healthcare facilities
Sub-Divisional Hospitals (SDH)	45	State Ayurvedic Dispensary (at primary level)	69
Referral Hospital (RH)	67	State Homeopathic Dispensary (at primary level)	29
Community Health Centres (CHC)	256	State Unani Dispensary (at primary level)	30
Primary Health Centres (PHC)	533		
Additional Primary Health Centres (APHC)	1,399		
Health Sub-Centres (HSC)	10,258		
Total	**12,610**	**Total**	**162**

(Source: State Health Society (SHS), Health Department, GoB and National Medical Commission, Ministry of Health and Family Welfare, GoI)

Apart from above, 11,591 healthcare facilities were registered under private sector in the State.

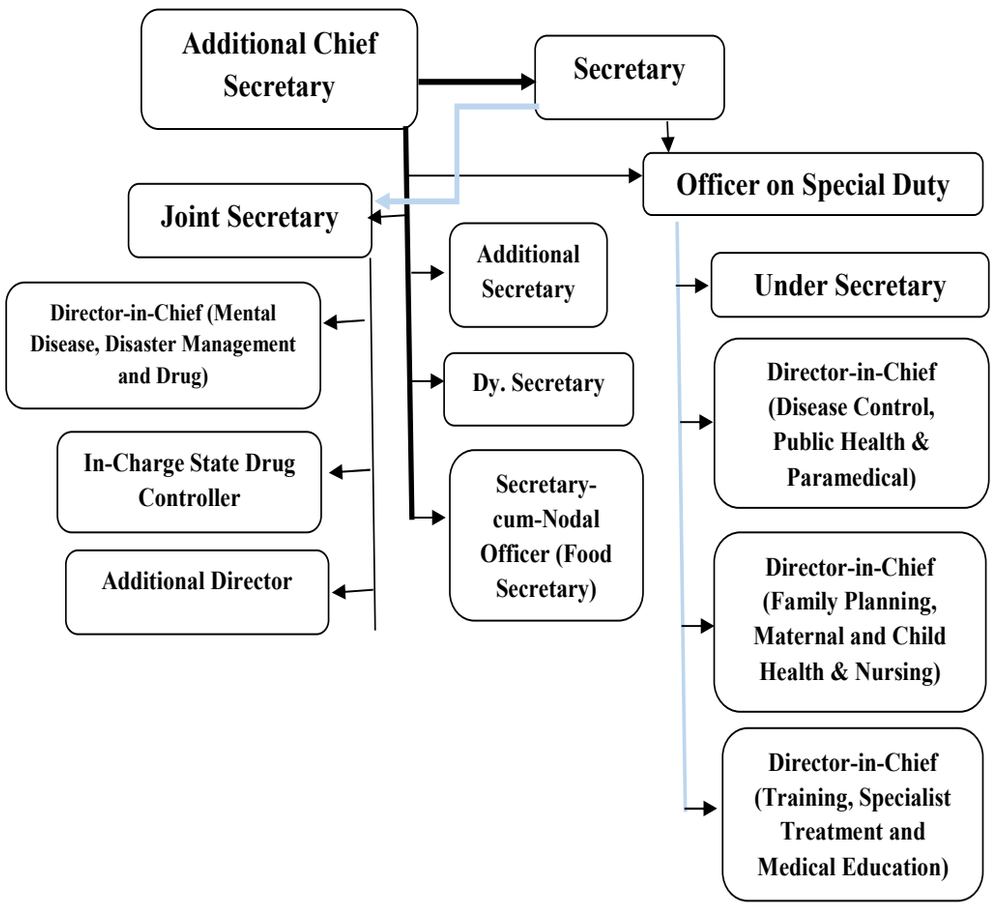
Keeping in view the importance of health sector in the State, a performance audit on '*Public Health Infrastructure and Management of Health Services*' was conducted.

1.3 Organisational set-up

Health Department, Government of Bihar (GoB), is responsible for the management of the Primary, Secondary and Tertiary Health Care levels. Additional Chief Secretary (ACS) of the Department is responsible for managing affairs and policies relating to health care in the State. At the apex level, ACS is assisted[1] by the Secretary, Additional Secretary, Joint Secretary, Directors-in-Chief and State Drug Controller. The Organogram of the Health Department is given in **Chart 1.3**.

[1] *As per office order (June 2022) of the Health Department, section-wise functions were categorised at first, second, third and final level of officer. Additional Chief Secretary and Secretary were final level of authority, whereas Additional Secretary, Joint Secretary and Officer on Special Duty were the third level of authority. Director-in-Chief was categorised in second level authority whereas, State Drug Controller was a first level authority.*

Chart 1.3: Organogram of the Health Department



(Source: Health Department, GoB)

Besides, GoB set up State Health Society (SHS), Bihar in 2005 and Bihar Medical Services & Infrastructure Corporation Limited (BMSICL) in July 2010. The SHS is mandated to serve as additional managerial and technical capacity to Health Department for implementation of National Rural Health Mission (NRHM), which was renamed as National Health Mission (NHM) in 2013. The affairs of the SHS is managed and regulated by the Governing Body headed by Development Commissioner, GoB. The Executive committee of SHS entrusted with the responsibility to regulate and manage its administrative affairs is headed by the Principal Secretary, Health-cum-Chief Executive Officer, who is assisted by an Executive Director (ED). The ED is assisted by two Additional EDs, State Programme Officers and Deputy Directors to oversee, support and manage various health programmes within the Department of Health.

BMSICL is the sole procurement and distribution agency of drugs and equipment for all establishments under the Health Department, GoB. It is also responsible for undertaking construction of infrastructure/building of healthcare facilities in the State. For promoting AYUSH system of medicine and to review AYUSH policy and programme implementations *etc*., the State AYUSH Society (SAS) Bihar, was constituted (March 2018).

At the district level, Civil Surgeon-cum-Chief Medical Officer (CS-cum-CMO) manages all affairs relating to the Health Department and functioning of different healthcare facilities (DH, SDHs, RHs, CHCs, PHCs, APHCs and HSCs). Additional Chief Medical Officer (ACMO) manages and supervises different National/ State health associated programmes in a district. Further, in-charges of different healthcare facilities at district (DH), Sub-division (SDH) and block (RH/CHC and PHC) levels, are mentioned in **Table 1.2**.

Table 1.2: In-charges of different healthcare facilities

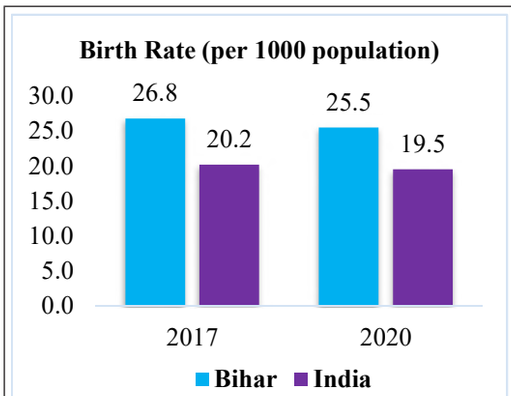
Sl. No.	Healthcare facility	In-charge
1.	Medical College and Hospital	Superintendent
2.	District Hospital	Superintendent/ Deputy Superintendent
3.	District Joint Dispensary	District Indigenous Medical Officer
4.	Sub-Divisional Hospital	Deputy Superintendent
5.	Referral Hospital	Dy. Superintendent/Medical Officer
6.	Community Health Centre	Medical Officer
7.	Primary Health Centre*	Medical Officer

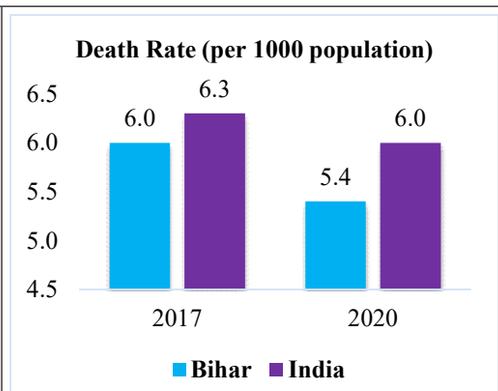
**APHC and HSC function under PHC's Medical Officer in-charge*

1.4 Health Indicators of the State as compared with National Indicators

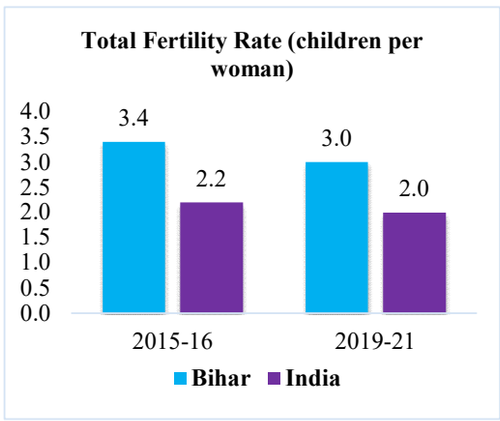
The healthcare services in the State can be evaluated based on the achievement against benchmark of health indicators. The status of a few important health indicators of Bihar vis-*a-vis* National average are given below:

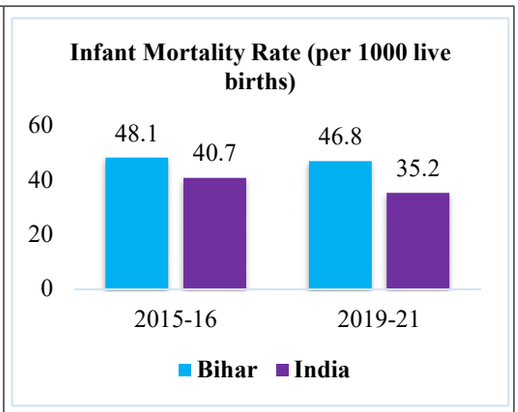
Chart 1.4: Health indicators of Bihar *vis-à-vis* India





(Source: National Family Health Survey (NFHS)- 4 and 5; Sample Registration System (SRS) bulletin published from time to time by the Registrar General of India, Ministry of Home Affairs, GoI)





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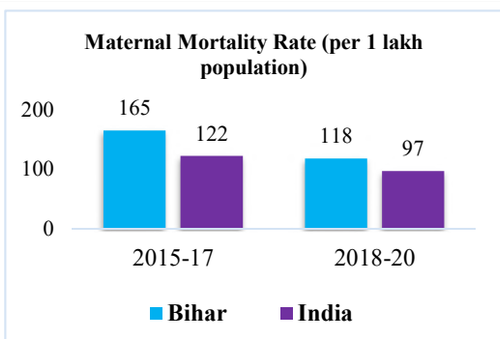
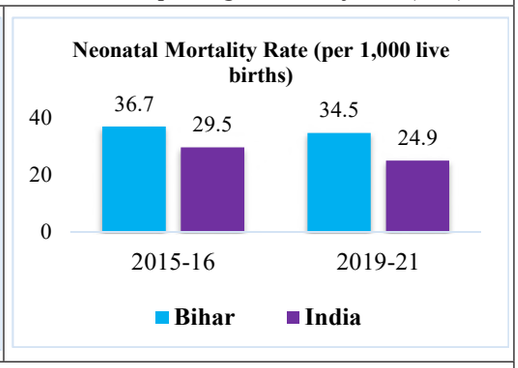
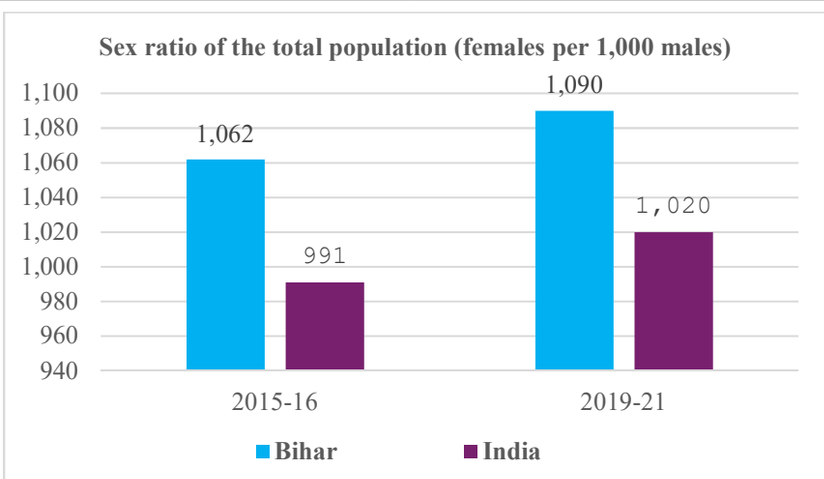




(Source: National Family Health Survey (NFHS)- 4 and 5; Sample Registration System (SRS)



(Source: National Family Health Survey (NFHS)- 4 and 5

It can be observed from **Chart 1.4** that the birth rate (per 1,000) in the State has decreased from 26.8 (2017) to 25.5 (2020), which is more than the national figures. Death rate in the State decreased from 6.0 (2017) to 5.4 (2020) which is below the national figures. In case of total fertility rate, it has decreased from 3.4 of 2015-16 to 3.0 (children per woman) of 2019-21, which is more than the national figures. Infant mortality rate decreased from 48.1 (2015-16) to 46.8 (2019-21) but above than the national Infant Mortality Rate.

Maternal Mortality Rate of the State has decreased from 165 (2015-17) to 118 (2018-20), which is more than the national figure. Neonatal Mortality Rate has decreased from 36.7 (2015-16) to 34.5 (2019-21), which is more than national figure. Sex ratio (females per 1,000 males) of the State has remained above the national average and has increased from 1,062 of 2015-16 to 1,090 in 2019-21.

1.4.1 Bihar Health indicators compared with National Health Indicators as per National Family Health Survey

The National Family Health Survey conducted in 2015-16 (NFHS-4) and in 2019-21 (NFHS-5), provides information on population, health, and nutrition for India and each state/union territory (UT). Some of the important health indicators of State of Bihar *vis-à-vis* India are given in **Table 1.3**.

Table 1.3: Health indicators of Bihar *vis-à-vis* India

Indicator	NFHS -4 (2015-16)		NFHS-5 (2019-21)	
	Bihar	India	Bihar	India
Sex ratio of the total population (females per 1,000 males)	1,062	991	1,090	1,020
Sex ratio at birth for children born in the last five years (females per 1,000 males)	934	919	908	929
Total fertility rate (children per woman)	3.4	2.2	3.0	2.0
Neonatal mortality rate (NNMR)	36.7	29.5	34.5	24.9
Infant mortality rate (IMR)	48.1	40.7	46.8	35.2
Under-five mortality rate (U5MR)	58.1	49.7	56.4	41.9
Mothers who had an antenatal check-up in the first trimester (%)	34.6	58.6	52.9	70.0
Mothers who had at least 4 antenatal care visits (%)	14.4	51.2	25.2	58.1
Mothers whose last birth was protected against neonatal tetanus (%)	89.6	89.0	89.5	92.0
Mothers who consumed Iron Folic Acid for 100 days or more when they were pregnant (%)	9.7	30.3	18.0	44.1
Mothers who consumed Iron Folic Acid for 180 days or more when they were pregnant (%)	2.3	14.4	9.3	26.0
Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (%)	79.9	89.3	89.5	95.9
Mothers who received postnatal care from a doctor/ nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	42.3	62.4	57.3	78.0
Average out-of-pocket expenditure per delivery in a public health facility (₹)	1,784	3197	2,848	2,916
Children born at home and were taken to a health facility for a check-up within 24 hours of birth (%)	1.8	2.5	2.9	4.2
Children who received postnatal care from a doctor/ nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	NA*	NA*	59.3	79.1
Institutional births (%)	63.8	78.9	76.2	88.6

Indicator	NFHS -4 (2015-16)		NFHS-5 (2019-21)	
	Bihar	India	Bihar	India
Institutional births in public facility (%)	47.6	52.1	56.9	61.9
Home births that were conducted by skilled health personnel (%)	8.2	4.3	6.1	3.2
Births attended by skilled health personnel (%)	70.0	81.4	79.0	89.4
Births delivered by caesarean section (%)	6.2	17.2	9.7	21.5
Births in a private healthcare facility that were delivered by caesarean section (%)	31.0	40.9	39.6	47.4
Births in a public healthcare facility that were delivered by caesarean section (%)	2.6	11.9	3.6	14.3

(Source: National Family Health Survey (NFHS)- 4 and 5) **NA: Not available*

Colour code		Indicates improvement as compared to NFHS-4		Indicates decline in position as compared to NFHS-4

1.5 Audit Objectives

This Performance Audit was taken up to:

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

1.6 Audit Criteria

Audit criteria adopted to achieve the audit objectives are:

- Indian Public Health Standards (IPHS) (2012)
- National Health Policy, 2017
- Bihar SDG Vision Document, 2017
- Regulations of the Medical Council of India[2]
- Clinical Establishments Act, 2010
- Bihar Clinical Establishments (Registration and Regulation) Rules, 2013
- Drugs and Cosmetics Act, 1940
- The Indian Medicine Central Council Act, 1970, replaced by the National Commission for Indian System of Medicine Act, 2020

[2] *As per Section 61 (2) of the National Medical Commission Act, 2019, notwithstanding the repeal of the Indian Medical Council Act, 1956, the rules and regulations made thereunder shall continue to be enforced.*

- Bio Medical Waste Management Rules, 2016
- Atomic Energy (Radiation Protection) Rules, 2004
- National Health Mission Assessor's Guidebook, 2013
- National Disaster Management Guidelines, 2014
- Bye-laws of the State Health Society, Bihar
- MoU between GoI and Government of Bihar on 16 April 2013
- NHM's Records of Proceedings (ROP) for implementation of NHM
- National Medical Commission Act, 2019
- Sample Registration System Bulletin of Registrar of India
- Bihar Financial Rules (BFR), 2005 and Bihar Budget Manual, 2016

1.7 Audit Scope and Methodology

Performance Audit for the period from 2016-17 to 2021-22[3] was conducted during February 2022 to July 2022. The audit was conducted through test-check of records of the offices of the Additional Chief Secretary/Principal Secretary (Health Department), State Health Society, Bihar (SHSB), State AYUSH Society, Bihar and Bihar Medical Services & Infrastructure Corporation Limited (BMSICL) (including two[4] Regional Warehouses) at the apex level. At the district level, records of the offices of CS-cum-CMOs, District Health Societies (DHS), Additional Chief Medical Officers (ACMOs), along with Superintendents/Dy. Superintendents of DHs in five selected districts, were examined ***(Appendix 1.1)***. Further, records of four SDHs, four District Joint Dispensaries (AYUSH), two RHs, four CHCs, 10 PHCs, 17 APHCs/Health and Wellness Centres (HWCs)[5], 31 HSCs and 12 State AYUSH dispensaries (at block level), were also test-checked ***(Appendix 1.1)***. In respect of tertiary healthcare facilities, records of three Government Medical Colleges and Hospitals, three AYUSH College and Hospitals and one Super speciality Medical Institute, were test-checked (***Appendix 1.1)***. Sampled Medical College and Hospitals were selected through Stratified Random Sampling, on the basis of last three financial years' (2018-21) data of expenditure, including certain hospitals of unique nature. The remaining units were selected on the basis of number of out-patients, by Random Sampling, using IDEA software. Further, in order to get a holistic picture of the healthcare facilities in the state, data (particularly related to the availability of human resources and other facilities in the healthcare units) had been collected (May 2023) from 694 healthcare facilities[6] of all the 38 districts and had been incorporated suitably in the report.

Audit methodology comprised of document/ database analysis, responses to audit queries, collection of information/data through questionnaires/ proforma and joint physical verification. The existing databases/digital records, maintained at the state/

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3 *Office of the State Drug Controller provided data up to November 2021.*

4 *Regional Warehouse, Fatuha and Muzaffarpur.*

5 *HWCs created by transforming the existing HSCs and PHCs, into centres for delivering Comprehensive Primary Health Care (CPHC).*

6 *AYUSH: 7, Community Health Centres: 218, District Hospitals: 35, Medical College and Hospitals (including Super Speciality Hospitals): 19, Primary Health Centres: 295, Referral Hospitals: 67 and Sub-Divisional Hospitals: 53.*

directorate/hospital levels, were also examined. Interview/survey of beneficiaries/ stakeholders was conducted by Audit, to assess the effectiveness of delivery of line/ support/auxiliary services and adequacy of the existing infrastructure. Photographic evidences were also collected, to support the audit observations.

Keeping in mind the limitation of resources and to observe the variations across the entire audit period, questionnaires/ proforma were designed to capture data at different frequencies, such as yearly and monthly[7].

An Entry Conference, to discuss audit objectives, audit criteria and methodology, was held (April 2022) with the Additional Chief Secretary of the Health Department.

An Exit Conference, to discuss audit observations and to obtain response thereon, was held (December 2022) with the Additional Chief Secretary of the Department; Executive Director, State Health Society, Bihar and Managing Director, BMSICL. Further, a meeting was held (October 2023) with the Department, to discuss additional audit observations, and to obtain response thereon. Replies received (December 2022, February 2023, August 2023 and October 2023) from the Department, have been incorporated, at appropriate places in the Report.

1.8 Acknowledgement and Limitations

Audit acknowledges the cooperation of State Government, including the Executive Director, SHSB and MD, BMSICL. Audit also appreciates the assistance provided by the field functionaries of the Department, for smooth conduct of audit. However, non-production of records/information/data and non-production of reply of audit memos, were some of the constraints faced in some auditee units, as detailed in ***Appendix 1.2***.

1.9 Structure of this Audit Report

This report includes major audit observations on the components of health care services, which are placed under 9 chapters, as mentioned in **Table 1.4**.

Table 1.4: Structure of Audit Report

Chapter No.	Name and description of the Chapter
I	**Introduction**: deals with Organisational set-up, Audit Objective, Audit Criteria, Audit Scope and Methodology *etc*.
II	**Human Resources**: deals with shortfalls in the availability of human resources
III	**Healthcare services**: deals with services regarding Line, Support and Auxiliary services provided to patients in the healthcare facilities
IV	**Availability of Drugs/Medicines, Equipment, and other consumables:** deals with shortages of drugs and equipment in the healthcare facilities
V	**Healthcare Infrastructure**: deals with shortcomings in health infrastructure
VI	**Financial Management**: deals with allocation and utilisation of state budget and NHM funds *etc*.

[7] *May 2016, August 2017, November 2018, February 2020, May 2020 and August 2021.*

Chapter No.	Name and description of the Chapter
VII	**Implementation of Centrally Sponsored Schemes:** deals with implementation of different centrally sponsored schemes
VIII	**Adequacy and effectiveness of the regulatory mechanisms**: deals with the functions of State Drug Controller and District Registering Authorities
IX	**Sustainable Development Goals**: deals with targets and achievement of state towards SDG

1.10 Previous Audit Efforts

A Performance Audit on *"Functioning of District Hospitals"*, covering the period from 2014-15 to 2019-20, was conducted through test-check of records of five district hospitals *viz*. Nalanda, Vaishali, Jehanabad, Madhepura and Patna. The Performance Audit featured in the Report of Comptroller and Auditor General of India (Performance and Compliance Audit) for the year ended 31 March 2020 on Government of Bihar (Report No. 5 of the year 2021). A summary of the findings of this PA is given in ***Appendix 1.3***. Audit findings featured in the said report have been included in this report also, in order to portray a holistic picture of the public healthcare facilities in the State of Bihar.

1.11 Coverage of Ayushman Bharat Scheme

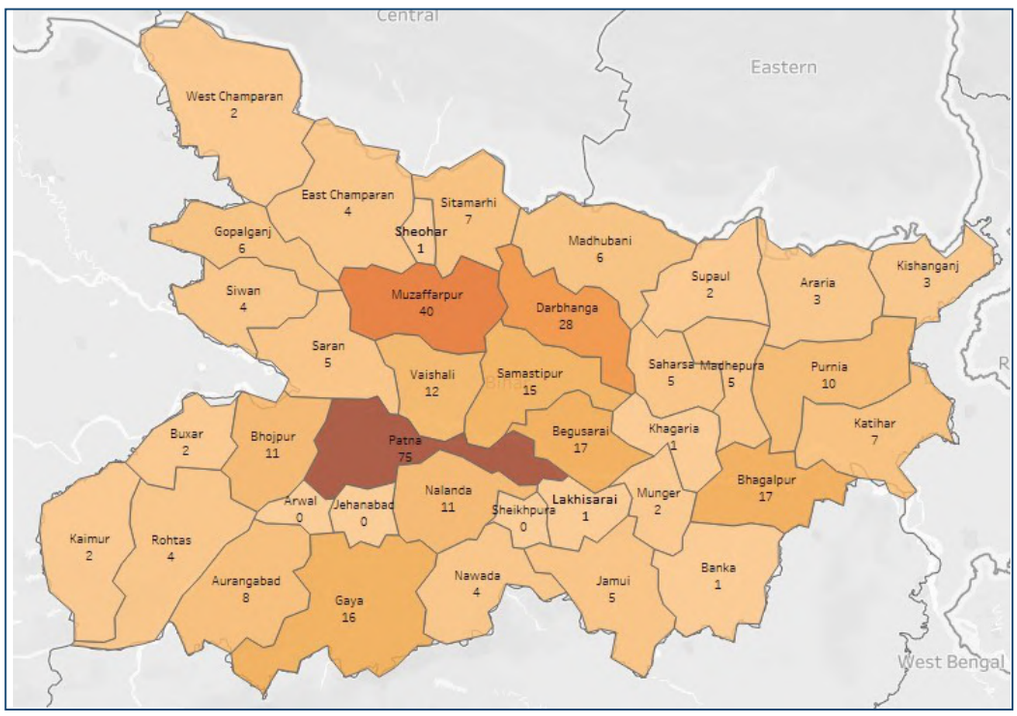
Ayushman Bharat, a flagship scheme of GoI, was launched to achieve the vision of Universal Health Coverage (UHC) in the country. This initiative has been designed to meet Sustainable Development Goals (SDGs) and its underlining commitment, which is to "leave no one behind". The performance of Bihar under Ayushman Bharat approach, comprising of two inter-related components *i.e.* Health and Wellness Centres (HWCs) and *Pradhan Mantri Jan Arogya Yojana* (PM-JAY), are discussed in ***Paragraph 5.6 (Chapter V)*** and in the succeeding paragraphs.

1.11.1 Pradhan Mantri Jan Arogya Yojana

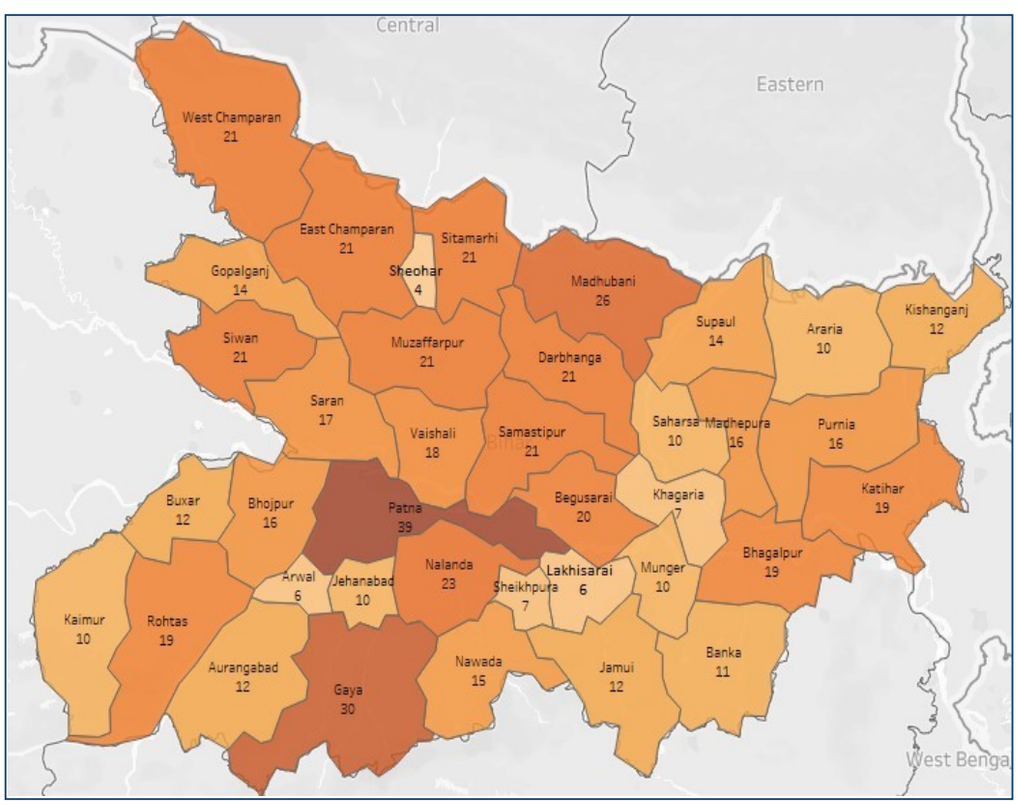
Pradhan Mantri Jan Arogya Yojana (PM-JAY) is the world's largest health insurance/assurance scheme launched by GoI. It provides a cover of ₹ 5 lakhs per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India, for availing cashless treatment. Expenses under PMJAY are to be shared between the Central and State Governments in the ratio of 60:40.

During scrutiny of records, it was observed (May 2023) that there were total 1,08,95,571 households/families and 5,55,62,406 eligible beneficiaries in the state. Out of the total households/families and beneficiaries, only 36,19,665 (33 *per cent*) families and 77,68,559 (14 *per cent*) beneficiaries, respectively had been verified. Further, total 949 healthcare facilities (342 private and 607 under public sector) were empanelled (as shown in **Chart 1.5**) in the State. In three districts *i.e.*, Arwal, Jehanabad and Sheikhpura, no private hospital was empaneled under the scheme.

Chart 1.5: No. of private and public hospitals empaneled under PMJAY



Private Hospitals



Public Hospitals

(Source: information furnished by the Department)

Colour Code: Scaled on dark to light colour, darker the maximum.

Therefore, efforts should be made to enhance the coverage of the Ayushman Bharat (PM-JAY) scheme in the State.

The Department stated (October 2023) that efforts were being made to increase the coverage of Ayushman cards.

1.12 Corrective measures taken by the Department

In the light of audit observations, following corrective measures had been taken by the Department:

- After being pointed out (May 2022) by Audit, emergency services had been started (January 2023) in SDH, Udakishunganj (Madhepura) ***(Paragraph 3.3.1)***.
- PMCH had recovered (November 2022) ₹ 0.61 crore, out of inadmissible payment of ₹ 2.04 crore, pertaining to duplication of manpower in the pay bills, generated by trolley and cleaning services providing agency ***(Paragraph 3.6.11)***.
- PMCH, had recovered (December 2022) ₹ 36 lakh against the inadmissible payment made to the agency towards GST, for providing disposal of Bio-Medical Waste. Further, a certificate case for recovery of the remaining amount had been lodged (December 2022) against the agency **(*Paragraph 3.7.2)***.
- After being pointed out (May 2022) by Audit, drinking water facility had been made available (July to August 2022) by the hospital management in In-patient Department of Darbhanga Medical College and Hospital, Darbhanga ***(Paragraph 5.8)***.
- CS-cum-CMO, Madhepura has directed (December 2022) all institutions to deposit delay charges, under the Clinical Establishment Act and ₹ 1.31 lakh has been deposited by one institution ***(Paragraph 8.4.2)***.

Chapter-II
Human Resources

Chapter-II

Human Resources

There were significant shortfalls in the availability of human resources (like doctors, healthcare support staff, technicians etc.) across healthcare facilities. Besides, majority of the post of Specialist Doctors were vacant in the State. Non-availability of required manpower adversely affected the functioning of healthcare facilities.

2.1 Introduction

Delivery of quality healthcare services in hospitals largely depends on availability of adequate manpower, especially in the cadres of doctors, staff nurses, paramedical and other support staff. Human Resources density[1] is directly related to achievements in health outcomes and is critical to achieving health policy goals. Further, as per the National Rural Health Mission (NRHM) guidelines (2005), the core strategy of the mission is to strengthen the existing PHCs through better staffing and Human Resource (HR) development policy. Audit observations related to these issues are discussed in this chapter.

2.2 Planning and assessment of human resources

As per NHM guidelines (2012), a road map delineating the priority areas, such as dilapidated or absent physical infrastructure, non-availability of doctors/para-medical staff, shortage of drugs, non-functional equipment *etc*., in the state, was to be prepared. For this purpose, Human Resource policy for Doctors, Nurses, allied health professionals and programme management staff was to be framed by the state. The HR policy was expected to help in minimising regular vacancies, achieving expeditious recruitment, aligning the recruitment rules with the needs of human resources *etc*.

The State Health Society (SHS), Bihar, was established (July 2005) to implement health programmes under the NRHM[2]. The bye-laws (Memorandum of Association) and Financial and Service Rules of the Society were implemented in the year 2005. The 11th meeting of the Governing Body of the Society ordered (December 2010) framing of the rules and regulations for HR. However, a committee for framing the HR policy was constituted only in December 2017. The policy was approved (June 2021) and implemented (November 2021), after 16 years of implementation of the NRHM and nine years of implementation of the NHM.

The Department replied (December 2022) that, as per report of MOHFW, GoI (November 2022), the HR gap index has decreased from 53.21 to 33.25, showing an improvement in availability of HR in the State (at 19th rank as on September 2022 from 36th rank in September 2021). However, specific reply regarding the audit observation about delay in the approval of an HR policy, was not given.

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1 *Total number of human resources for health, relative to the population.*

2 *Renamed as the National Health Mission (NHM) in 2012.*

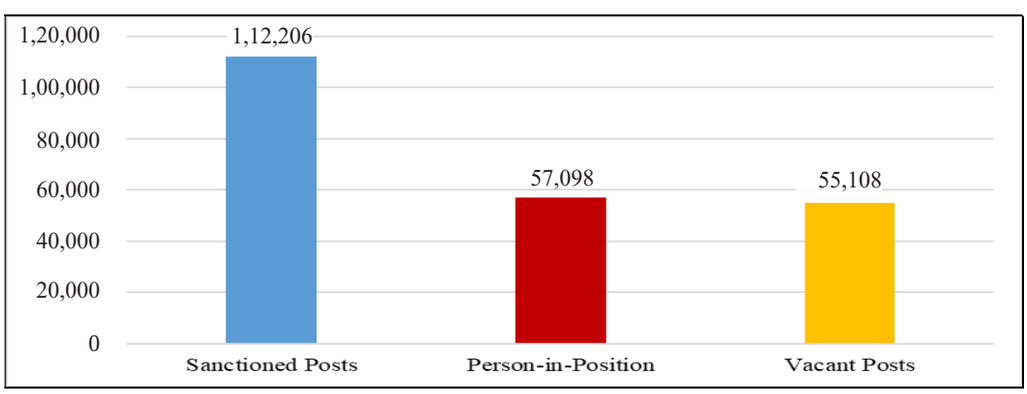
2.3 Human resources availability against sanctioned strength in the State

With regards to HR availability, data provided (in May 2023) by the Health Department for the following services has been analysed:

I. Directorate of Health Services
II. State Drug Controller
III. Food Safety wing of the Department
IV. AYUSH

The data provided, contained sanctioned strength and persons-in-position for all the offices (Directorates, Medical Colleges, DHs, SDHs, CHCs, PHCs, HSCs, Field staff, etc.). Analysis of the sanctioned strength and persons-in-position (regular employees), in the above-mentioned health sector-related offices in the State taken together, is given in **Chart 2.1**.

Chart 2.1: Manpower position in Government Institutions of the Health Department (as of March 2023)



(Source: Records of the Health Department, GoB)

As can be seen in the **Chart 2.1**, 49 *per cent* of the sanctioned posts (regular) were vacant.

Details of manpower in different institutions/offices of the Department had been shown in **Table 2.1**.

Table 2.1: Manpower position across the different institutions/offices of the Departments (as of March 2023)

Name of the Institution/ Office	Sanctioned strength	Share in total Workforce (in *per cent*)	Working Strength	Vacant Posts	Percentage of Vacant Posts
Directorate, Health Services	90,926	81	47,886	43,040	47
Directorate, AYUSH*	4,870	4	853	4,017	82
Food Safety wing	178	0.20	33	145	81
State Drug Controller#	222	0.20	141	81	36
Medical Colleges and Hospitals	16,010	14	8,185	7,825	49
Total	**1,12,206**		**57,098**	**55,108**	**49**

*(Source: Records of Health Department) *Sanctioned Strength and working position have been taken as of March 2021, except 'Doctors' (wherein information was provided up to March 2023)*
#As on December 2021
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Directorate, Health Services, had major share in the total sanctioned strength. It contributed to 81 *per cent* of the total sanctioned workforce of the Department. In terms of percentage, AYUSH had the maximum vacant posts (82 *per cent*), after which, Food Safety has 81 *per cent* vacant posts.

The Department replied (October 2023) that: (i) requisition, for appointment of 55 Drug Inspectors, had been sent to the Bihar Public Service Commission (BPSC) (ii) requisition had been sent (February 2023) for filling up the vacant posts of Food Safety Officers and (iii) four Food Analysts had been appointed in 2023.

2.4 Availability of doctors in the State

The second report of the Voluntary National Review (VNR)[3], 2020, published by the NITI Aayog, GoI, mentioned that the country has a doctor-population ratio of 1:1,456, against the WHO benchmark of 1:1,000. In Bihar, against the projected population of 12.49 crore (March 2022), 1,24,919 doctors were required to fulfil the recommendation of WHO. However, only 58,144 (1:2,148[4]) allopathic doctors were available in the State (as of January 2022), which was 53 *per cent* less than the recommended norms of WHO and 32 *per cent* less than the national average. Further, against the sanctioned posts of 11,298 Allopathic Doctors, 4,741 (42 *per cent*) were posted in the State, as of March 2023.

The Department replied (October 2023) that the recruitment process, for filling up the vacancies, was in progress.

2.5 Availability of staff in various posts in healthcare facilities

In Primary and Secondary healthcare facilities of the State, 23,475 (61 *per cent*) and 18,909 (56 *per cent*) posts were lying vacant against the total sanctioned strength and requirement as per IPHS norms, respectively. Similarly, 49 *per cent* and 82 *per cent* posts were lying vacant against sanctioned strength in Tertiary and AYUSH healthcare facilities, respectively. There was overall shortage of 35,317 (60 *per cent*) against the sanctioned strength of 59,168.

Category-wise vacancy position is shown in **Table 2.2**.

Table 2.2: Availability of staff in various Posts in healthcare facilities (as of March 2023)

Type of Healthcare Facility	Category	Sanctioned Strength	Requirement as per IPHS[#]	Persons-in-position	Vacancy (In *per cent*)	
					Against Sanction strength	Against IPHS
Primary & Secondary	Doctor	8,861	6,393	3,712	5,149 (58)	2,681 (42)
	Nurse	11,548	11,189	5,416	6,132 (53)	5,773 (52)
	Paramedic	9,105	9,369	1,870	7,235 (79)	7,499 (80)
	Other	8,774	6,771	3,815	4,959 (57)	2,956 (44)
	Total (A)	**38,288**	**33,722**	**14,813**	**23,475 (61)**	**18,909 (56)**

[3] *Voluntary National Review Report is related to the progress made towards achieving the Sustainable Development Goals.*

[4] *12,49,19,000 (projected population) ÷ 58,144 (total number of available doctors).*

Type of Healthcare Facility	Category	Sanctioned posts	Persons-in-position	Vacancy	Percentage of vacancy
Tertiary	Doctor	2,437	1,029	1,408	58
	Nurse	7,211	4,707	2,504	35
	Paramedics	1,939	598	1,341	69
	Other	4,423	1,851	2,572	58
	Total (B)	**16,010**	**8,185**	**7,825**	**49**
AYUSH*	Doctor	3,770	403	3,367	89
	Nurse	70	59	11	16
	Paramedic	303	102	201	66
	Other	727	289	438	60
	Total (C)	**4,870**	**853**	**4,017**	**82**
Grand Total (A+B+C) (as per SS)		**59,168**	**23,851**	**35,317**	**60**

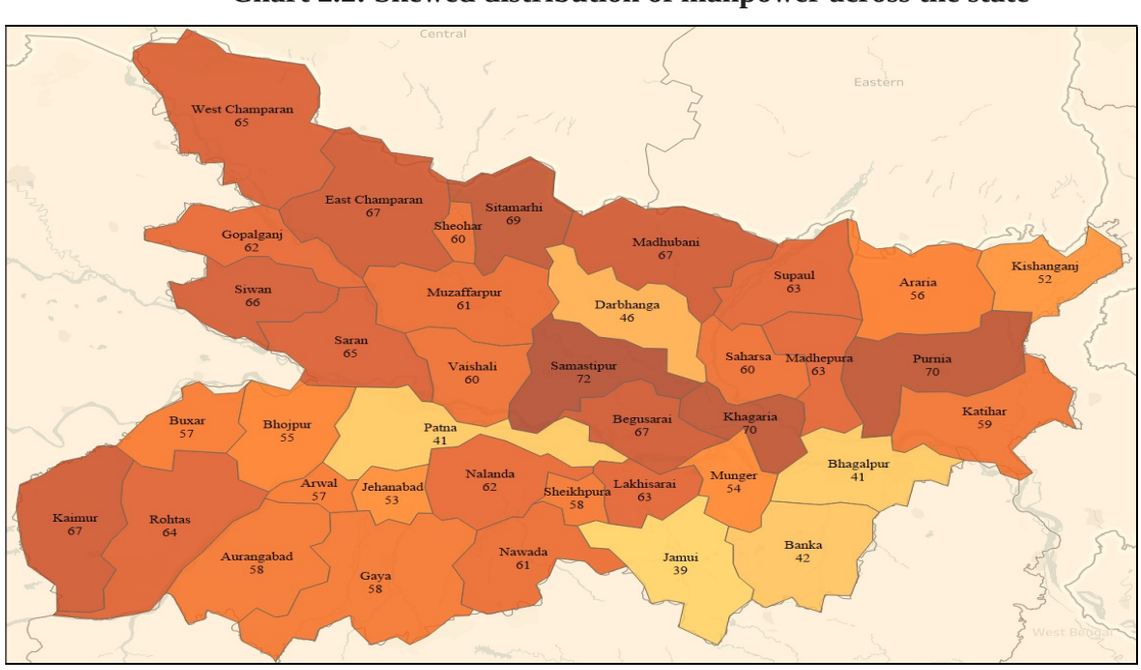
(Source: Records of the healthcare facilities) #Although State has adopted IPHS norms, it has sanctioned posts for healthcare facilities over and above these norms.
**Sanctioned posts and persons-in-positions are as of March 2021, except 'Doctors' (wherein information was provided up to March 2023)*
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

The Department replied (October 2023), that the recruitment process, for filling up the vacancies, was in progress

2.5.1 Skewed distribution of available manpower

It is important for the government to deploy available manpower uniformly across the State. Audit, however, observed that 31,300 posts, lying vacant in primary, secondary and tertiary healthcare facilities of the State, were unevenly distributed. The vacancy position varied from as low as 39 *per cent* (Jamui) to 72 *per cent* (Samastipur), as shown in **Chart 2.2.**

Chart 2.2: Skewed distribution of manpower across the state

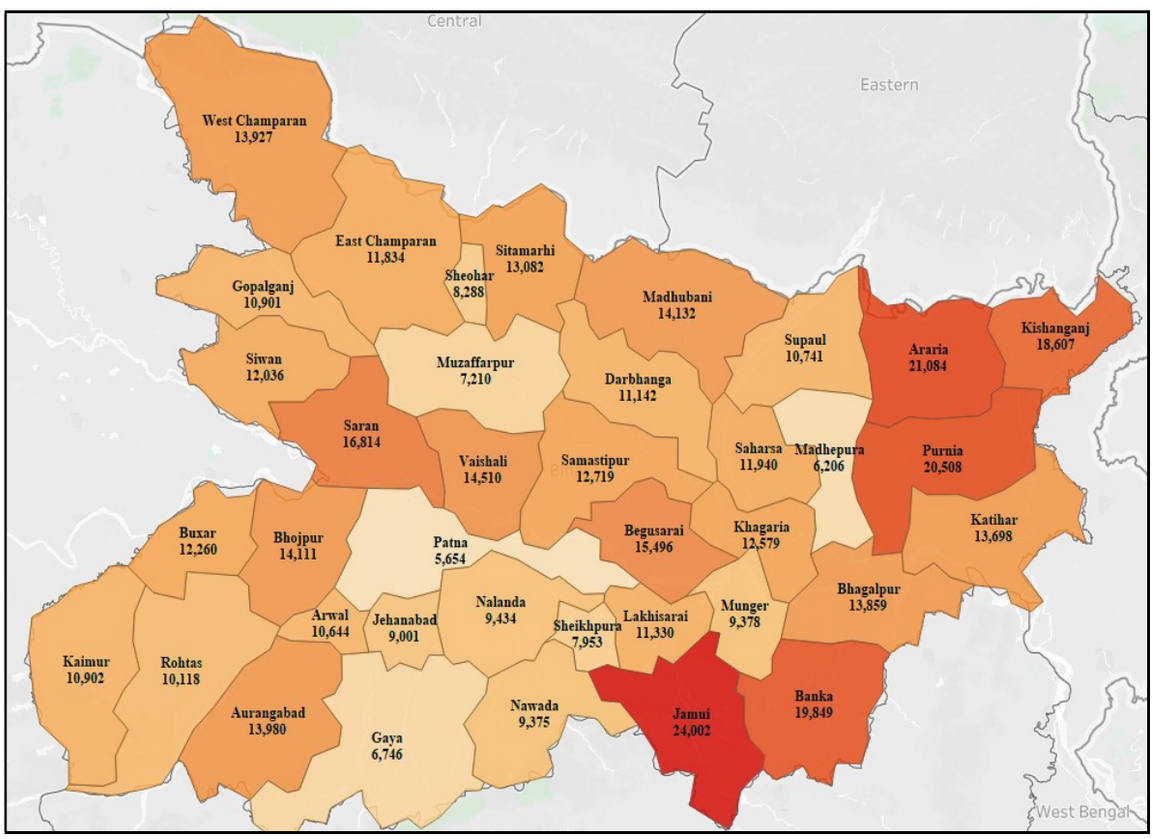


(Source: Records of healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

2.5.2 Uneven sanctioned strength of doctors in the districts

State of Bihar has 11,298 posts sanctioned for allopathic government doctors *i.e.*, one government doctor for 11,055 people. It had been observed that sanctioned posts of doctors were not correlated with population of the districts, as shown in **Chart 2.3**.

Chart 2.3: Uneven sanctioned strength of doctors in the districts



(*Source: Records of healthcare facilities)*
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vaccancies.

As evident from **Chart 2.3**, comparing with the respective population (as mentioned in **Table 2.3** in following paragraph) of the districts, the post of a doctor was sanctioned for 5,654 people in Patna district (best), whereas in Jamui district, it was sanctioned for 24,002 people (worst).

The Department replied (October 2023) that: (i) manpower had been deployed as per the demand and requirement of districts and (ii) in future, appointment process will be adopted, as per the audit observation.

2.6 District-wise vacancy position of doctors

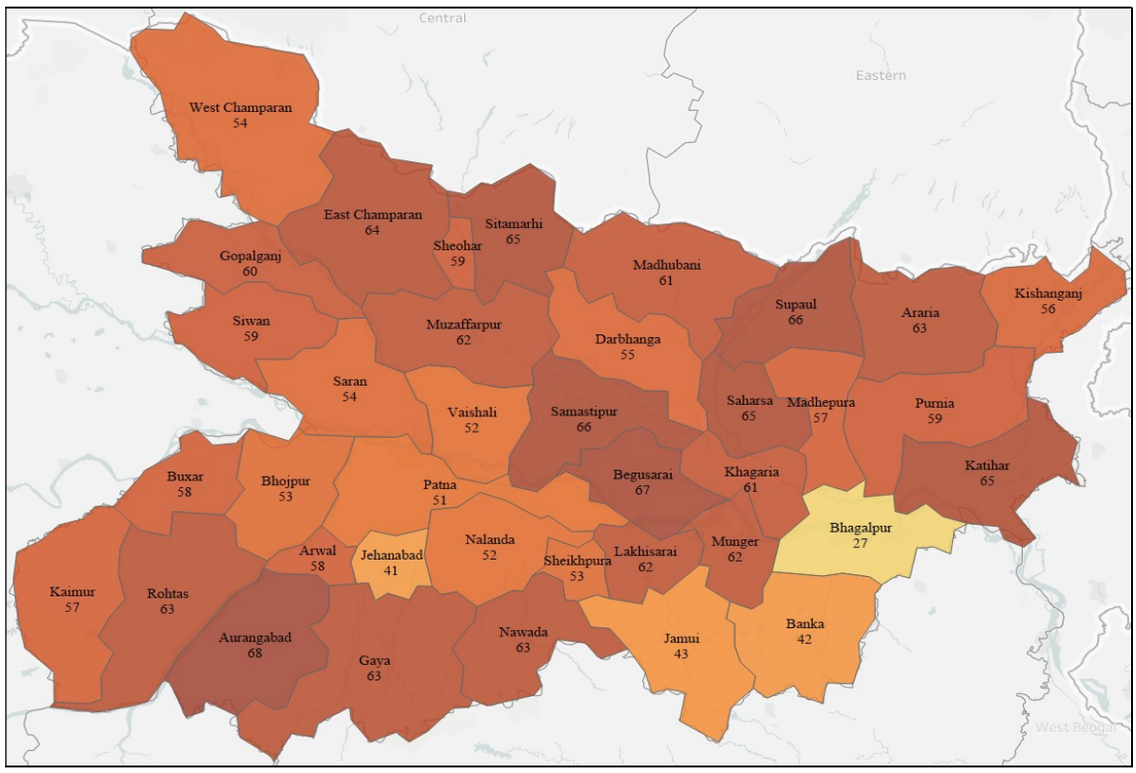
In the Department, overall 4,741 public doctors (Allopathic) were available against their total sanctioned strength of 11,298 (including Specialists). Thus, 6,557 (58 *per cent*) posts of doctors were lying vacant overall in the State. District-wise position of doctors along with population of the districts, is shown in **Table 2.3 & Chart 2.4.**

Table 2.3: District-wise vacant posts of doctors (including Specialist doctors), as of March 2023

District	Projected Population (as of 2022)	Sanctioned Posts	Men-in-position	Vacant Posts	Percentage of Vacant Posts
Araria	33,73,424	160	60	100	63
Arwal	8,40,898	79	33	46	58
Aurangabad	30,47,673	218	69	149	68
Banka	24,41,383	123	71	52	42
Begusarai	35,64,165	230	76	154	67
Bhagalpur	36,44,823	263	193	70	27
Bhojpur	32,73,644	232	109	123	53
Buxar	20,47,344	167	70	97	58
Darbhanga	47,24,219	424	191	233	55
East Champaran	61,18,413	517	188	329	64
Gaya	52,68,985	781	290	491	63
Gopalganj	30,73,997	282	112	170	60
Jamui	21,12,199	88	50	38	43
Jehanabad	13,50,192	150	89	61	41
Kaimur	19,51,395	179	77	102	57
Katihar	36,84,733	269	93	176	65
Khagaria	19,99,991	159	62	97	61
Kishanganj	20,28,204	109	48	61	56
Lakhisarai	12,00,931	106	40	66	62
Madhepura	24,01,788	387	165	222	57
Madhubani	53,84,123	381	147	234	61
Munger	16,41,095	175	66	109	62
Muzaffarpur	57,60,491	799	305	494	62
Nalanda	34,52,714	366	175	191	52
Nawada	26,62,613	284	105	179	63
Patna	70,05,205	1,239	607	632	51
Purnia	39,17,010	191	79	112	59
Rohtas	35,51,419	351	129	222	63
Saharsa	22,80,483	191	67	124	65
Samastipur	51,13,184	402	135	267	66
Saran	47,41,589	282	129	153	54
Sheikhpura	7,63,507	96	45	51	53
Sheohar	7,87,388	95	39	56	59
Sitamarhi	41,07,730	314	110	204	65
Siwan	39,96,014	332	136	196	59
Supaul	26,74,527	249	85	164	66
Vaishali	41,93,455	289	140	149	52
West Champaran	47,21,408	339	156	183	54
Total	**12,49,02,356**	**11,298**	**4,741**	**6,557**	**58**

(Source: Records of healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Chart 2.4: District-wise vacancy of doctors (in *per cent*)



(Source: Records of healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Posts of the doctors were lying vacant against their sanctioned strength, in all the districts of the state. Vacancies (in absolute numbers) at the district level ranged from lowest 38 (Jamui) to highest 632 (Patna). In terms of percentage, it ranged from 27 *per cent* (Bhagalpur) to 68 *per cent* (Aurangabad). It shows a skewed distribution of available doctors across the districts in Bihar.

The shortage of doctors was mainly attributable to non/delayed requisitions for recruitment of doctors to the Bihar Public Service Commission (BPSC), and delayed/ short appointment of doctors recruited/selected through BPSC, by the Department, as discussed in ***Paragraph* 2.17**.

The Department replied (October 2023) that: (i) deployment had been made according to demand and requirement of districts and (ii) in future, appointment process would be adopted, as per the audit observation.

2.6.1 District-wise Doctor to population ratio

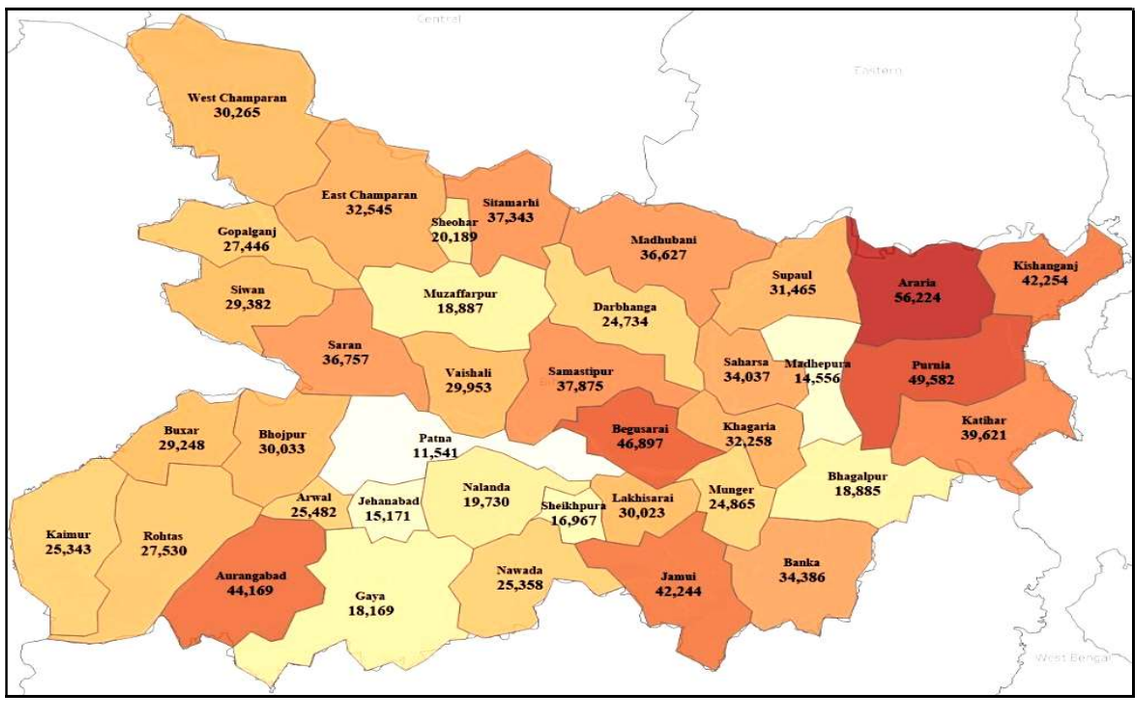
As per the estimated population of the State, allopathic doctors were available in 1:2,148 ratio (Public and Private), which was far below than WHO recommendation, as discussed in ***Paragraph 2.4***. District-wise doctor (Public) to population ratio is shown in **Table 2.4** and **Chart 2.5**.

Table 2.4: District-wise doctor to population ratio in Bihar (as of March 2023)

District	Projected Population (as of 2022)	Sanction Strength	Men-in-position	Vacant Posts	Doctor population ratio (Population/ Men-in-position)
Araria	33,73,424	160	60	100	56,224
Arwal	8,40,898	79	33	46	25,482
Aurangabad	30,47,673	218	69	149	44,169
Banka	24,41,383	123	71	52	34,386
Begusarai	35,64,165	230	76	154	46,897
Bhagalpur	36,44,823	263	193	70	18,885
Bhojpur	32,73,644	232	109	123	30,033
Buxar	20,47,344	167	70	97	29,248
Darbhanga	47,24,219	424	191	233	24,734
East Champaran	61,18,413	517	188	329	32,545
Gaya	52,68,985	781	290	491	18,169
Gopalganj	30,73,997	282	112	170	27,446
Jamui	21,12,199	88	50	38	42,244
Jehanabad	13,50,192	150	89	61	15,171
Kaimur	19,51,395	179	77	102	25,343
Katihar	36,84,733	269	93	176	39,621
Khagaria	19,99,991	159	62	97	32,258
Kishanganj	20,28,204	109	48	61	42,254
Lakhisarai	12,00,931	106	40	66	30,023
Madhepura	24,01,788	387	165	222	14,556
Madhubani	53,84,123	381	147	234	36,627
Munger	16,41,095	175	66	109	24,865
Muzaffarpur	57,60,491	799	305	494	18,887
Nalanda	34,52,714	366	175	191	19,730
Nawada	26,62,613	284	105	179	25,358
Patna	70,05,205	1,239	607	632	11,541
Purnia	39,17,010	191	79	112	49,582
Rohtas	35,51,419	351	129	222	27,530
Saharsa	22,80,483	191	67	124	34,037
Samastipur	51,13,184	402	135	267	37,875
Saran	47,41,589	282	129	153	36,757
Sheikhpura	7,63,507	96	45	51	16,967
Sheohar	7,87,388	95	39	56	20,189
Sitamarhi	41,07,730	314	110	204	37,343
Siwan	39,96,014	332	136	196	29,382
Supaul	26,74,527	249	85	164	31,465
Vaishali	41,93,455	289	140	149	29,953
West Champaran	47,21,408	339	156	183	30,265
Total	**12,49,02,356**	**11,298**	**4,741**	**6,557**	**26,345**

(Source: Records of the healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the ratio.

Chart 2.5: Doctor to Population Ratio



(Source: Records of healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vaccancies.

Further, the availability of public doctors at the district level was not uniform in all the districts, and it varied from as high as one public doctor for 11,541 people in Patna district to as low as one doctor for 56,224 people in Araria district, as shown in the **Table 2.4**. It shows that the availability of doctors was uneven in the districts of Bihar.

Also, as per the records of the Bihar Medical Council, the State had 58,144 registered doctors (Public & private), as of January 2022. Therefore, availability of one doctor for 2,148 people was very less than WHO's recommendation.

The State of Bihar had 4,741 public doctors (Allopathic) for primary and secondary healthcare under the Health Department. It made availability of one public doctor for 26,345 people in the State.

The Department replied (October 2023) that: (i) posting had been done, according to the demand and requirement of districts and (ii) appointment, as per population norms, is in process.

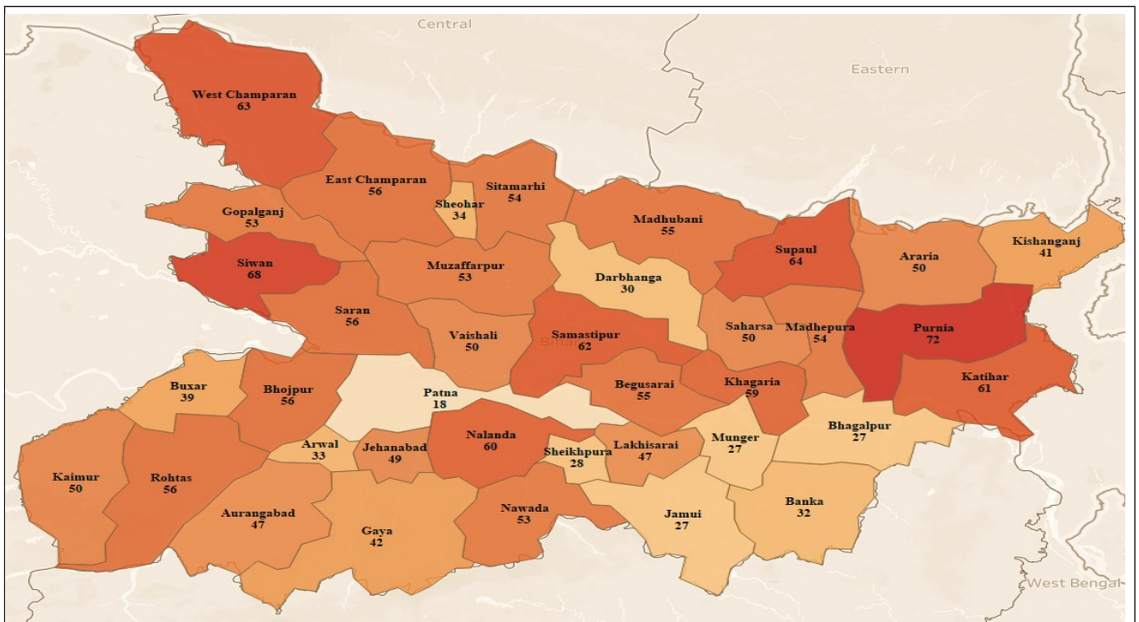
2.7 District-wise availability of Staff Nurse and Paramedics

The skewness in the availability of manpower categories was even more prominent when Audit analysed the vacancy position (as of March 2023), against particular posts. For instance:

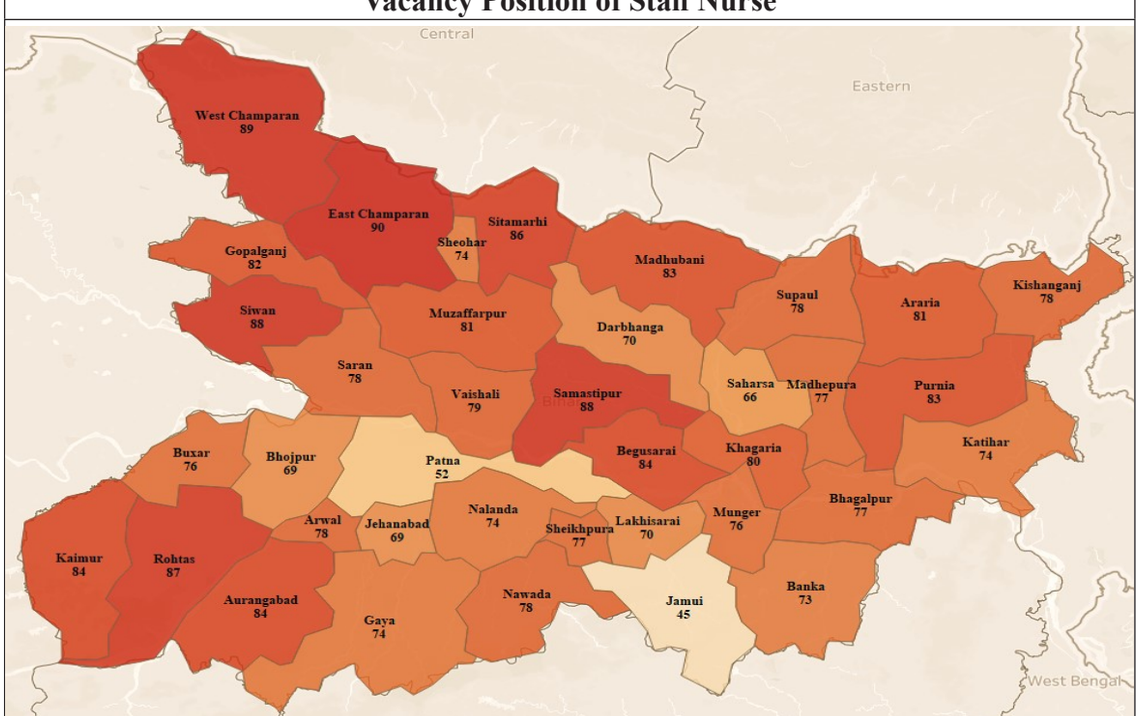
- Shortage of staff nurses against sanctioned strength ranged from 18 *per cent* (Patna) to 72 *per cent* (Purnea).
- Shortage of paramedics against the sanctioned strength ranged from 45 *per cent* (Jamui) to 90 *per cent* (East Champaran).

Shortage in the above two categories, across all the districts is shown in the **Chart 2.6**.

Chart 2.6: District-wise vacancy position in Staff Nurse and Paramedics
(in per cent)



Vacancy Position of Staff Nurse



Vacancy Position of Paramedics

(Source: Records of healthcare facilities)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Shortage of nurses and paramedics was due to non-completion of the recruitment process by the concerned HR agency, as discussed in ***Paragraph 2.17.2***.

The Department replied (December 2022) that recruitment of ANMs, Pharmacists, X-ray Technicians, OT Assistants and ECG Technicians, was in progress. The Department further replied (October 2023) that appointment for required posts, was in process.

2.8 Availability of staff in District Hospitals

Availability of Staff (regular), in each District Hospital (DH) against strength sanctioned by the State and requirement as per IPH Standards, is depicted in **Table 2.5 (A) and 2.5 (B)**.

Table 2.5 (A): Vacancy of Staff in various posts in District Hospitals (DHs) against Sanctioned Strength (as on March 2023)

Name of DH	Specialists/Doctors			Nurses			Paramedics			Other staff		
	Required as per SS	Person-in-position	Shortage (In *per cent*)	Required as per SS	Person-in-position	Shortage (In *per cent*)	Required as per SS	Person-in-position	Shortage (In *per cent*)	Required as per SS	Person-in-position	Shortage (In *per cent*)
Araria	30	18	40	52	39	25	20	12	40	24	16	33
Arwal	29	16	45	50	40	20	25	9	64	2	0	100
Aurangabad	58	25	57	100	76	24	24	10	58	57	44	23
Banka	34	24	29	55	55	0	28	9	68	20	11	45
Begusarai	30	17	43	52	43	17	21	6	71	5	22	-340
Bhagalpur	30	27	10	25	25	0	18	8	56	21	13	38
Bhojpur	60	39	35	119	71	40	57	22	61	86	37	57
Buxar	30	27	10	52	48	8	22	9	59	24	13	46
East Champaran	76	58	24	225	107	52	60	8	87	84	32	62
Gaya	31	20	35	50	48	4	35	14	60	56	33	41
Gopalganj	75	49	35	206	123	40	103	21	80	90	22	76
Jamui	27	19	30	52	42	19	12	10	17	6	12	-100
Jehanabad	58	43	26	126	68	46	79	31	61	59	9	85
Kaimur	57	23	60	100	66	34	69	12	83	96	13	86
Katihar	58	36	38	119	61	49	41	13	68	104	29	72
Khagaria	58	34	41	126	69	45	45	13	71	93	6	94
Kishanganj	37	19	49	62	41	34	37	10	73	52	44	15
Lakhisarai	34	20	41	55	49	11	28	12	57	20	4	80
Madhepura	66	45	32	128	51	60	50	13	74	84	50	40
Madhubani	74	45	39	225	117	48	54	14	74	142	18	87
Munger	29	22	24	50	47	6	25	10	60	4	0	100
Muzaffarpur	54	48	11	84	58	31	45	12	73	86	49	43
Nalanda	58	38	34	126	47	63	45	15	67	93	28	70
Nawada	74	41	45	145	92	37	45	17	62	128	51	60
Patna	31	21	32	52	46	12	19	11	42	6	4	33
Rohtas	93	30	68	172	80	53	94	14	85	93	35	62
Saharsa	58	30	48	126	66	48	79	38	52	59	16	73
Samastipur	70	31	56	200	72	64	139	13	91	98	13	87
Saran	66	39	41	210	72	66	53	16	70	146	20	86
Sheikhpura	38	19	50	56	44	21	36	11	69	23	6	74
Sheohar	50	28	44	52	39	25	19	7	63	14	5	64
Sitamarhi	75	32	57	216	128	41	54	12	78	124	17	86
Siwan	78	47	40	238	68	71	50	13	74	129	20	84
Supaul	38	21	45	55	32	42	28	8	71	29	15	48
Vaishali	85	47	45	236	128	46	55	16	71	171	36	79

(Source: Compiled from information furnished by individual healthcare institutions in May 2023)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

As can be seen from **Table 2.5 (A)**, against sanctioned strength, shortage of:

(a) doctors was maximum in DH, Rohtas (68 *per cent*) and minimum 10 *per cent* in DHs (Bhagalur and Buxar)

(b) nurses was maximum 71 *per cent* (DH, Siwan) and minimum in DH, Gaya (four *per cent*)

(c) paramedics was maximum (91 *per cent*) in DH, Samastipur and minimum (17 *per cent*) in DH, Jamui

(d) other staff was maximum 100 *per cent* in DHs (Munger and Arwal) and minimum 15 *per cent* in DH, Kishanganj.

Further, availability of surplus other staff ranging between 100 *per cent* (Jamui) and 340 *per cent* (Begusarai) was observed against the Sanctioned strength.

Table 2.5 (B): Vacancy of Staff in various posts in District Hospitals (DHs) against IPHS norms (as on March 2023)

Name of DH	Specialists/Doctors			Nurses			Paramedics			Other staff		
	Required as per IPHS	Person-in-position	Shortage (In per cent)	Required as per IPHS	Person-in-position	Shortage (In per cent)	Required as per IPHS	Person-in-position	Shortage (In per cent)	Required as per IPHS	Person-in-position	Shortage (In per cent)
Araria	51	18	65	139	39	72	66	12	82	22	16	27
Arwal	29	16	45	49	40	18	31	9	71	13	0	100
Aurangabad	51	25	51	139	76	45	66	10	85	22	44	-100
Banka	51	24	53	139	55	60	66	9	86	22	11	50
Begusarai	29	17	41	49	43	12	31	6	81	13	22	-69
Bhagalpur	29	27	7	49	25	49	31	8	74	13	13	0
Bhojpur	51	39	24	139	71	49	66	22	67	22	37	-68
Buxar	51	27	47	139	48	65	66	9	86	22	13	41
East Champaran	69	58	16	229	107	53	101	8	92	30	32	-7
Gaya	29	20	31	49	48	2	31	14	55	13	33	-154
Gopalganj	69	49	29	229	123	46	101	21	79	30	22	27
Jamui	51	19	63	139	42	70	66	10	85	22	12	45
Jehanabad	51	43	16	139	68	51	66	31	53	22	9	59
Kaimur	51	23	55	139	66	53	66	12	82	22	13	41
Katihar	51	36	29	139	61	56	66	13	80	22	29	-32
Khagaria	51	34	33	139	69	50	66	13	80	22	6	73
Kishanganj	51	19	63	139	41	71	66	10	85	22	44	-100
Lakhisarai	51	20	61	139	49	65	66	12	82	22	4	82
Madhepura	51	45	12	139	51	63	66	13	80	22	50	-127
Madhubani	69	45	35	229	117	49	101	14	86	30	18	40
Munger	29	22	24	49	47	4	31	10	68	13	0	100
Muzaffarpur	29	48	-66	49	58	-18	31	12	61	13	49	-277
Nalanda	51	38	25	139	47	66	66	15	77	22	28	-27
Nawada	51	41	20	139	92	34	66	17	74	22	51	-132
Patna	29	21	28	49	46	6	31	11	65	13	4	69
Rohtas	51	30	41	139	80	42	66	14	79	22	35	-59
Saharsa	51	30	41	139	66	53	66	38	42	22	16	27
Samastipur	69	31	55	229	72	69	101	13	87	30	13	57
Saran	69	39	43	229	72	69	101	16	84	30	20	33
Sheikhpura	29	19	34	49	44	10	31	11	65	13	6	54
Sheohar	29	28	3	49	39	20	31	7	77	13	5	62
Sitamarhi	69	32	54	229	128	44	101	12	88	30	17	43
Siwan	69	47	32	229	68	70	101	13	87	30	20	33
Supaul	29	21	28	49	32	35	31	8	74	13	15	-15
Vaishali	69	47	32	229	128	44	101	16	84	30	36	-20

(Source: Compiled from information furnished by individual healthcare institutions in May 2023)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies

As can be seen from **Table 2.5 (B)**, against IPHS norms, shortage of:

(a) doctors, was maximum in DH, Araria (65 *per cent*) and minimum in DH, Sheohar (three *per cent*)

(b) nurses was maximum 72 *per cent* (DH, Araria) and minimum two *per cent* (DH, Gaya)

(c) paramedics was maximum (92 *per cent*) in DH, East Champaran and minimum (17 *per cent*) in DH, Saharsa.

(d) other staff was maximum 100 *per cent* in DHs (Munger and Arwal) and minimum 15 *per cent* in DH, Kishanganj.

Availability of surplus other staff ranging between seven *per cent* (East Champaran) and 277 *per cent* (Muzaffarpur) was also observed against IPHS norms.

The Department replied (October 2023) that appointment process, wherever required was in progress.

2.9 Availability of staff in SDHs, CHCs and PHCs

Availability of staff in SDHs, CHCs and PHCs of the State against sanctioned strength and IPH Standards, is depicted in the **Tables 2.6 (A) and 2.6 (B)**.

Table 2.6 (A): Vacant posts in SDHs, CHCs and PHCs against Sanctioned Strength (as of March 2023)

Type of Healthcare facility	Specialists/ Doctors			Nurses			Paramedics			Other staff		
	S	P	%V	S	P	%V	S	P	%V	S	P	%V
SDH	1,583	609	62	2,762	1,202	56	1,010	247	76	572	280	51
CHC	3,255	1,097	66	3,971	1,369	66	5,301	755	86	2,811	1,368	51
PHC	2,174	908	58	818	587	28	1,180	399	66	3,063	1,424	54
Total	**7,012**	**2,614**	**63**	**7,551**	**3,158**	58	**7,491**	**1,401**	81	**6,446**	**3,072**	52

S= Sanction strength, P=In position, V=Vacancy

As can be seen from **Table 2.6 (A)**, the shortage of doctors in SDHs, CHCs and PHCs were 62 *per cent,* 66 *per cent* and 58 *per cent,* respectively. The shortage of Nurses in SDHs, CHCs, and PHCs were 56 *per cent,* 66 *per cent* and 28 *per cent,* respectively. Further, the shortage of Paramedics in SDHs, CHCs and PHCs were 76 *per cent,* 86 *per cent* and 66 *per cent,* respectively. Similarly, the shortage of other staff in SDHs, CHCs and PHCs were 51 *per cent,* 51 *per cent* and *54 per cent,* respectively against sanctioned strength.

Table 2.6 (B): Vacant posts in SDHs, CHCs and PHCs against IPHS norms (as of March 2023)

Type of Healthcare facility	Specialists/ Doctors			Nurses			Paramedics			Other staff		
	R	P	%V	R	P	%V	R	P	%V	R	P	%V
SDH	1,265	609	52	2,200	1,202	45	2,530	247	90	1,155	280	76
CHC	3,124	1,097	65	3,124	1,369	56	3,124	755	76	3,692	1,368	63
PHC	295	908	-208	1,180	587	50	1,475	399	73	1,180	1,424	-21
Total	**4,684**	**2,614**	**44**	**6,504**	**3,158**	**152**	**7,129**	**1,401**	**239**	**6,027**	**3,072**	**118**

R=Required as per IPH Standards, P=In position, V=Vacancy

(Source: Compiled from information furnished by individual health institutions in May 2023)

Colour Code: Scaled on light to dark colour. Darker the colour higher the vacancies.

As can be seen from **Table 2.6 (B)**, the shortage of doctors in SDHs and CHCs were 52 *per cent* and 65 *per cent,* respectively. The shortage of Nurses in SDHs, CHCs, and PHCs were 45 *per cent,* 56 *per cent* and 50 *per cent,* respectively. Further, the shortage of Paramedics in SDHs, CHCs and PHCs were 90 *per cent,* 76 *per cent* and 73 *per cent,* respectively. Similarly, the shortage of other staff in SDHs and CHCs were 76 *per cent and* 63 *per cent,* respectively.

The Department replied (October 2023) that appointment process, wherever required, was in progress. Reply is the in conformity with the audit observation.

2.10 Availability of Specialists in the State

Status of vacancies under the different categories of the sanctioned posts of Specialist Doctors in Primary, Secondary and Tertiary healthcare facilities is shown in **Table 2.7**.

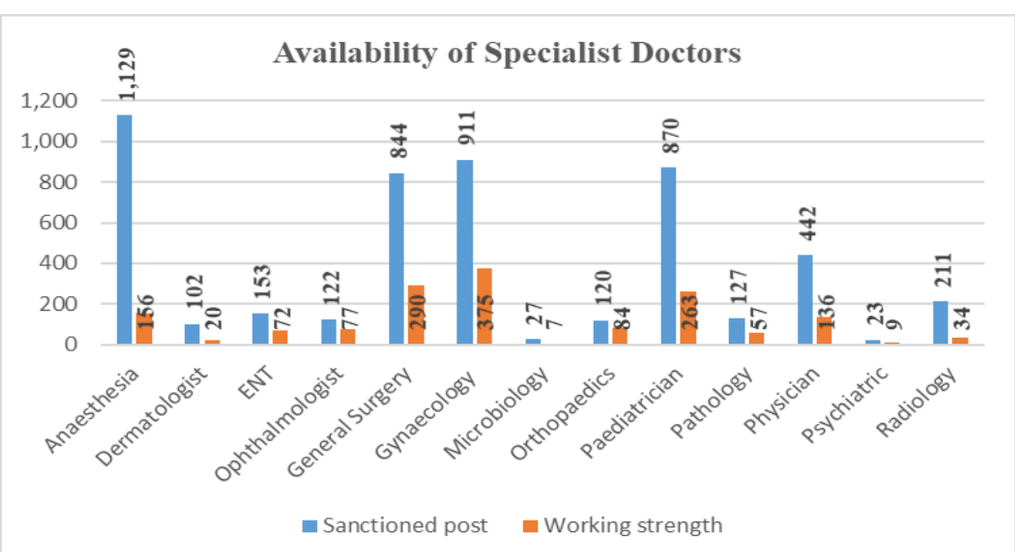
Table 2.7: Availability of Specialists (as of March 2023)

Category	Sanctioned post	Men-in-Position	Vacant posts	Percentage of vacant posts
Anaesthesia	1,129	156	973	86
Dermatologist	102	20	82	80
ENT	153	72	81	53
Ophthalmologist	122	77	45	37
General Surgery	844	290	554	66
Gynaecology	911	375	536	59
Microbiology	27	7	20	74
Orthopaedics	120	84	36	30
Paediatrician	870	263	607	70
Pathology	127	57	70	55
Physician	442	136	306	69
Psychiatric	23	9	14	61
Radiology	211	34	177	64
Total	**5,081**	**1,580**	**3,501**	**69**

(Source: Records of the Health Department, GoB)

Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Chart-2.7



(Source: Records of healthcare facilities)

From the **Table 2.7** and **Chart 2.7**, it can be seen that majority of posts of Specialist Doctors for example, Anaesthesia (86 *per cent),* Dermatologist (80 *per cent),* Microbiology (74 *per cent)* and Paediatrician (70 *per cent),* were vacant. Requirement of specialists in healthcare facilities with reference to IPHS is discussed in the succeeding paragraphs.

2.10.1 Availability of Specialists in DHs

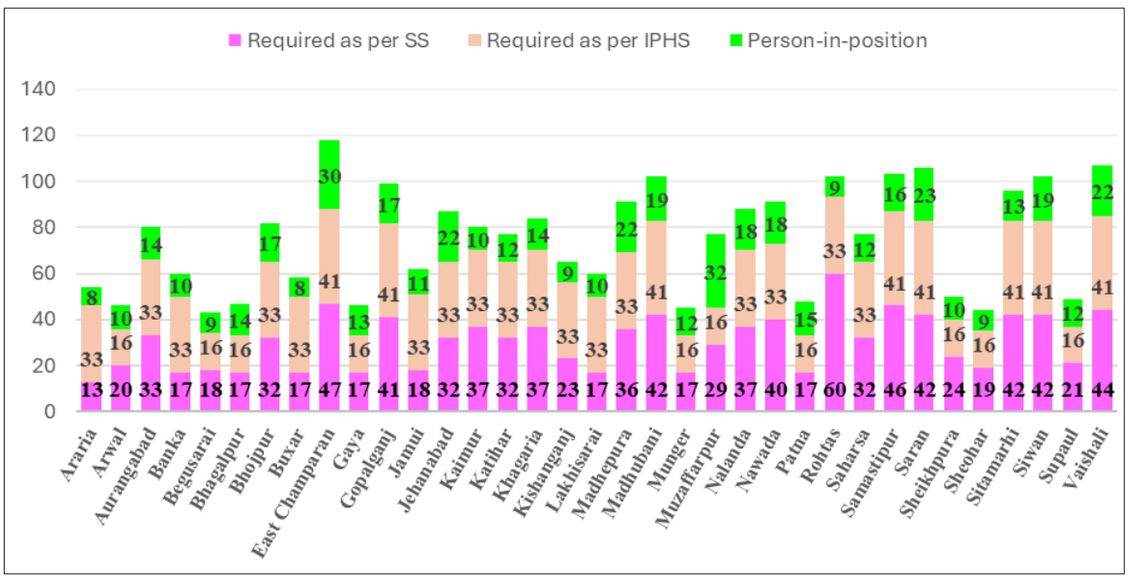
District-wise details of requirement and the availability of Specialists in DHs, as per sanctioned strength and IPH Standards, are given in **Table 2.8**.

Table 2.8: District-wise availability of Specialists in DHs (as of March 2023)

District	Specialists			Vacancy (In *per cent)*	
	Requirement as per SS	Required as per IPHS	Persons-in-position	As per SS	As per IPHS
Araria	13	33	8	38	76
Arwal	20	16	10	50	38
Aurangabad	33	33	14	58	58
Banka	17	33	10	41	70
Begusarai	18	16	9	50	44
Bhagalpur	17	16	14	18	13
Bhojpur	32	33	17	47	48
Buxar	17	33	8	53	76
East Champaran	47	41	30	36	27
Gaya	17	16	13	24	19
Gopalganj	41	41	17	59	59
Jamui	18	33	11	39	67
Jehanabad	32	33	22	31	33
Kaimur	37	33	10	73	70
Katihar	32	33	12	63	64
Khagaria	37	33	14	62	58
Kishanganj	23	33	9	61	73
Lakhisarai	17	33	10	41	70
Madhepura	36	33	22	39	33
Madhubani	42	41	19	55	54
Munger	17	16	12	29	25
Muzaffarpur	29	16	32	-10	-100
Nalanda	37	33	18	51	45
Nawada	40	33	18	55	45
Patna	17	16	15	12	6
Rohtas	60	33	9	85	73
Saharsa	32	33	12	63	64
Samastipur	46	41	16	65	61
Saran	42	41	23	45	44
Sheikhpura	24	16	10	58	38
Sheohar	19	16	9	53	44
Sitamarhi	42	41	13	69	68
Siwan	42	41	19	55	54
Supaul	21	16	12	43	25
Vaishali	44	41	22	50	46
Total	**1,058**	**1,049**	**519**	**51**	**51**

(Source: Compiled from information furnished by the individual healthcare facility in May 2023)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the percentage of vacancies.

Chart-2.8: District-wise availability of specialists in DHs (as of March 2023)



(Source: Records of healthcare facilities)

As can be seen from the **Table 2.8** and **Chart 2.8**, the maximum shortage of 85 *per cent* in DH, Rohtas, against sanctioned strength. Whereas, against IPHS norms shortage was 76 *per cent* in DHs Araria and Buxar. Further, 10 *per cent* and 100 *per cent* specialists more than requirement against the Sanctioned Strength and IPHS norms, respectively, were found posted in DH, Muzaffarpur.

2.10.2 Availability of Specialists in SDHs

SDH-wise availability of Specialists, in all the districts of the State, against the sanctioned strength and IPH Standards, is given in **Table 2.9**.

Table 2.9: Availability of Specialists in SDHs (as of March 2023)

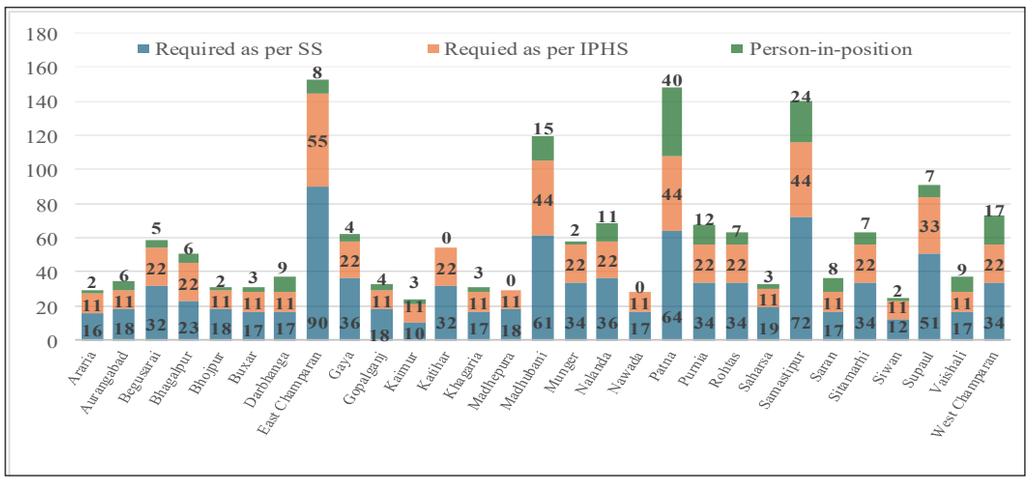
District	Name of SDH	Specialists				
		Requirement as per SS	Required as per IPHS	Person-in-position	Shortage (in percentage)	
					SS	IPHS
Araria	Farbisganj	16	11	2	88	82
Aurangabad	Daudnagar	18	11	6	67	45
Begusarai	Balia	16	11	3	81	73
	Teghra	16	11	2	88	82
Bhagalpur	Kahalgaaon	7	11	2	71	82
	Navgachhia	16	11	4	75	64
Bhojpur	Jagdishpur	18	11	2	89	82
Buxar	Dumraon	17	11	3	82	73
Darbhanga	Benipur	17	11	9	47	18
East Champaran	Chakia	18	11	4	78	64
	Areraj	18	11	0	100	100
	Pakridayal	18	11	3	83	73
	Raxaul	18	11	0	100	100
	Dhakha	18	11	1	94	91
Gaya	Sherghati	18	11	2	89	82
	Tekari	18	11	2	89	82

District	Name of SDH	Specialists				
		Requirement as per SS	Required as per IPHS	Person-in-position	Shortage (in percentage)	
					SS	IPHS
Gopalganj	Hathua	18	11	4	78	64
Kaimur	Mohania	10	11	3	70	73
Katihar	Manihari	16	11	0	100	100
	Barsoi	16	11	0	100	100
Khagaria	Gogari	17	11	3	82	73
Madhepura	Udakishanganj	18	11	0	100	100
Madhubani	Jainagar	16	11	4	75	64
	Jhanjharpur	17	11	4	76	64
	Phulparas	15	11	4	73	64
	Benipatti	13	11	3	77	73
Munger	Tarapur	17	11	1	94	91
	Haveli Kharagpur	17	11	1	94	91
Nalanda	Hilsa	18	11	6	67	45
	Rajgir	18	11	5	72	55
Nawada	Rajouli	17	11	0	100	100
Patna	Barh	16	11	13	19	-18
	Danapur	16	11	12	25	-9
	Masaurhi	16	11	7	56	36
	Paliganj	16	11	8	50	27
Purnia	Banmankhi	17	11	7	59	36
	Dhamdaha	17	11	5	71	55
Rohtas	Bikramganj	17	11	6	65	45
	Dihri	17	11	1	94	91
Saharsa	Simari Bakhtiyarpur	19	11	3	84	73
Samastipur	Shahpur Patori	18	11	10	44	9
	Dalsinghsarai	18	11	5	72	55
	Rosera	18	11	3	83	73
	Pusa	18	11	6	67	45
Saran	Sonepur	17	11	8	53	27
Sitamarhi	Belsand	17	11	2	88	82
	Pupri	17	11	5	71	55
Siwan	Maharjganj	12	11	2	83	82
Supaul	Birpur	17	11	3	82	73
	Triveniganj	17	11	1	94	91
	Nirmali	17	11	3	82	73
Vaishali	Mahua	17	11	9	47	18
West Champaran	Narkatiaganj	17	11	9	47	18
	Bagha	17	11	8	53	27
Total		**898**	**594**	**219**	**76**	**63**

(Source: Compiled from information furnished by individual healthcare institutions in May 2023)

Colour Code: Scaled on light to dark colour. Darker the colour, higher the vacancies.

Chart-2.9:District-wise availability of Specialist in SDHs



(Source: Records of healthcare facilities)

As can be seen from the **Table 2.9** and **Chart 2.9**, all SDHs (54) had shortages of Specialists. Six SDHs[5] did not have any Specialist Doctor. Five SDHs[6] had shortage of maximum 94 *per cent* and 91 *per cent* Specialists, against sanctioned strength and IPH standards. Whereas, Shahpur Patori (Samastipur) had minimum shortage of 44 *per cent* and nine *per cent* specialists against sanctioned strength and IPH standards, respectively. Further, availability of surplus Specialists at SDHs Barh (18) and Danapur (9), were also noticed against IPH Standards.

2.10.3 Status of four specialities (Paediatrics, Obstetrics & Gynaecology, Medicine and Surgery) in DHs and SDHs

IPH Standards provided requirement of Specialist doctors *i.e.*, General Medicine (two), General Surgery (two), Paediatrics (two) and OBGY[7] (two) for 100 bedded hospitals; General Medicine (two), General Surgery (two), Paediatrics (three) and OBGY (three) for 200 and General Medicine (three), General Surgery (three), Paediatrics (four) and OBGY (four) for 300 bedded hospitals.

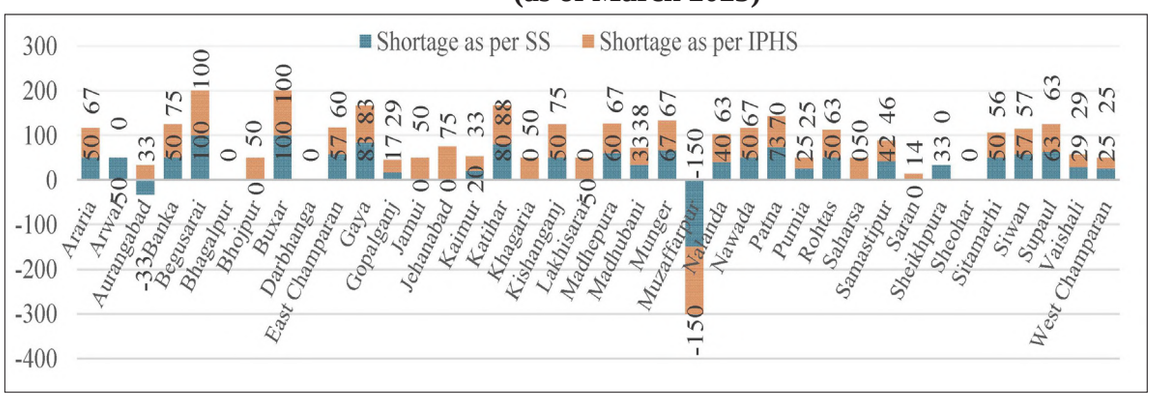
Shortages of specialists (district-wise) in DHs and SDHs (regular and contractual), under Pediatrics, OBGY, General Medicine and General Surgery, against Sanctioned Strength and IPHS norms is given in **Charts 2.10, 2.11, 2.12** and **2.13** respectively.

[5] *Areraj and Raxaul (East Champaran); Manihari and Barsoi (Katihar); Udakishunganj (Madhepura) and Rajouli (Nawada).*

[6] *Tarapur and Haveli Kharagpur (Munger), Dihri (Rohtas), Triveniganj (Supaul) and Dhakha (East Champaran).*

[7] *An OBGY is an obstetrician gynecologist. Gynecology is the care of a woman's reproductive organs and health. And Obstetrics involves the treatment of pregnant women, including the delivery of babies.*

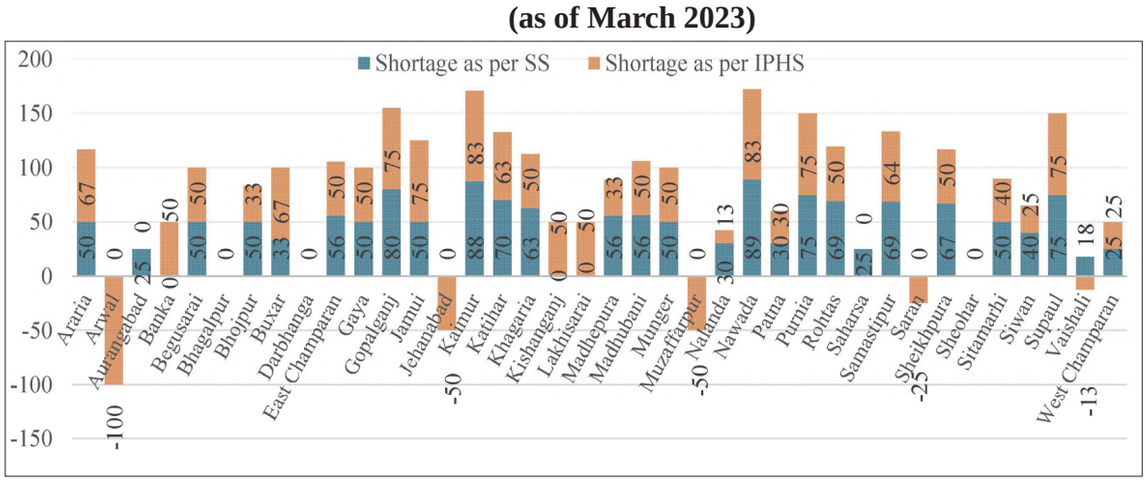
Chart 2.10: **District-wise shortage (in *per cent*) of specialists in Pediatrics (as of March 2023)**



(*Source: Compiled from information furnished by individual health institutions in May 2023)*

From **Chart 2.10**, it is clear that vacancy of Peaditrics was minimum 17 *per cent* (Gopalganj) and maximum 100 *per cent (*Begusarai and Buxar) against Sanctioned strength. Further, vacancy of Paediatrics was minimum 14 *per cent* (Saran) and maximum 100 *per cent (*Begusarai and Buxar) against IPH Statndards. Besides, surplus Paediatrics 150 *per cent* (Muzaffarpur*)* against sanctioned strength and 33 *per cent* (Aurangabad) against IPH Standards were also observed.

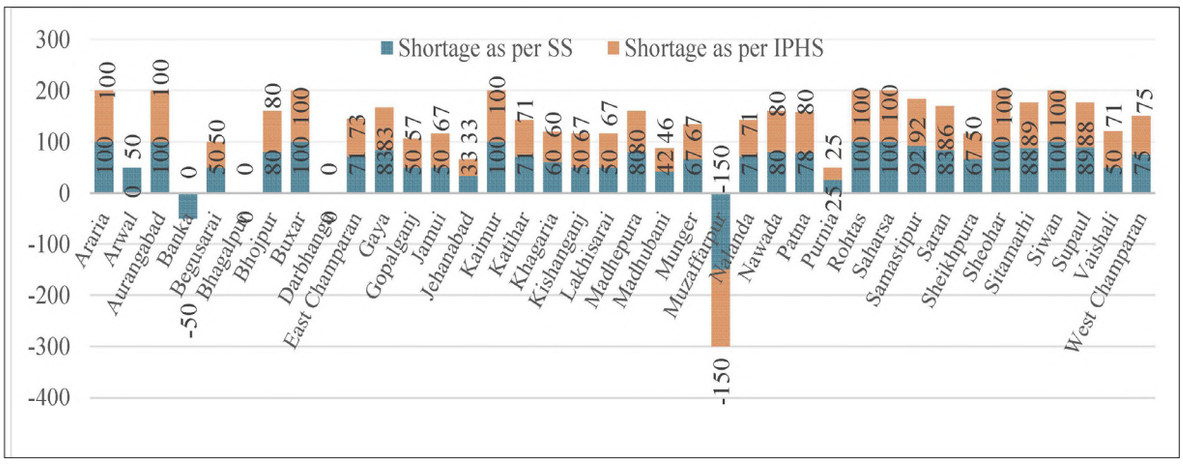
Chart 2.11: **District-wise shortage (in *per cent*) of specialists in OBGY (as of March 2023)**



(*Source: Compiled from information furnished by individual health institutions in May 2023)*

From **Chart 2.11**, it is clear that vacancy of OBGY was minimum 18 *per cent* (Vaishali) and maximum 89 *per cent (*Nawada) against Sanctioned strength. Further, vacancy of OBGY were minimum 13 *per cent* (Nalanda) and maximum 83 *per cent (*Kaimur and Nawada) against IPH Statndards. Besides, surplus OBGY 100 *per cent (*Arwal*), 50 per cent* (Jehanbad and Muzaffarpur) 25 *per cent* (Saran) and 13 *per cent* (Vaishali) against IPH Standards were also observed.

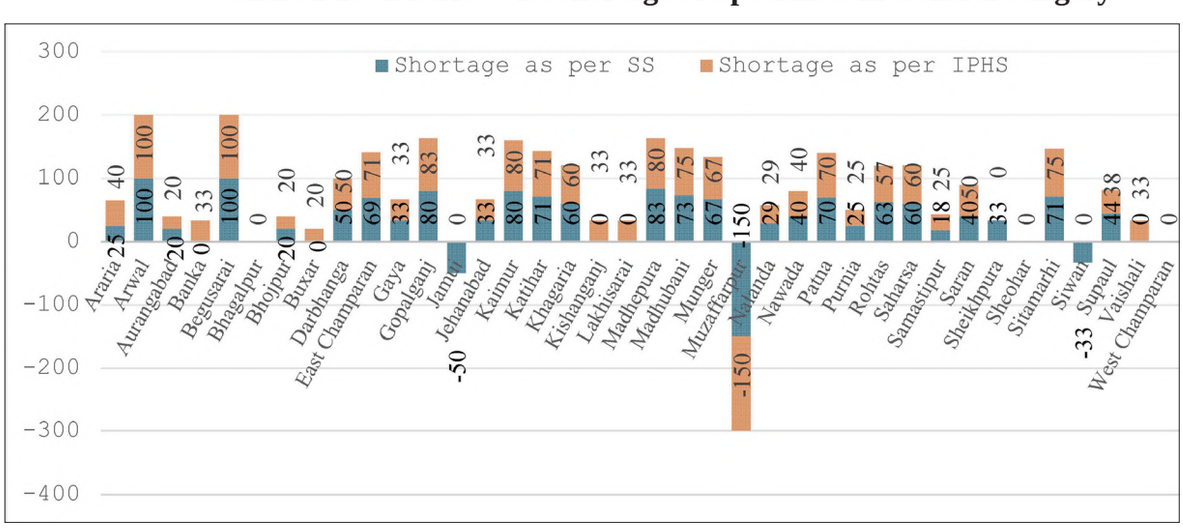
Chart 2.12: District-wise shortage of Specialists in General Medicine



(*Source: Compiled from information furnished by individual health institutions in May 2023)*

From **Chart 2.12**, it is clear that vacancy of General Medicine was minimum 25 *per cent* (Purnea) and maximum 100 *per cent (*Araria, Aurngabad, Buxar, Kaimur, Rohtas, Saharsa, Sheohar and Siwan) against Sanctioned strength. Further, vacancy of General Medicine was minimum 25 *per cent* (Purnea) and maximum 100 *per cent (*Araria, Aurngabad, Buxar, Kaimur, Rohtas, Saharsa, Sheohar and Siwan) against IPH Statndards. Besides, surplus General Medicine 150 *per cent (*Muzaffarpur*)* and 50 *per cent (*Banka) against sanctioned strength and 150 *per cent (*Muzaffarpur) against IPH Standards were also observed.

Chart 2.13: District-wise shortage of Specialists in General Surgery



(*Source: Compiled from information furnished by individual health institutions in May 2023)*

From **Chart 2.13**, it is clear that vacancy of General Surgery was minimum 18 *per cent* (Samastipur) and maximum 100 *per cent (*Arwal and Begusarai) against Sanctioned strength. Further, vacancy in General Surgery was minimum 20 *per cent* (Aurangabad, Bhojpur and Buxar) and maximum 100 *per cent (*Arwal and Begusarai) against IPH Statndards. Besides, surplus General Surgery 150 *per cent (*Muzaffarpur*), 50 per cent* (Jamaui) and 33 *per cent* (Siwan) against sanctioned strength and 150 *per cent* (Muzaffarpur) against IPH Standards were also observed.

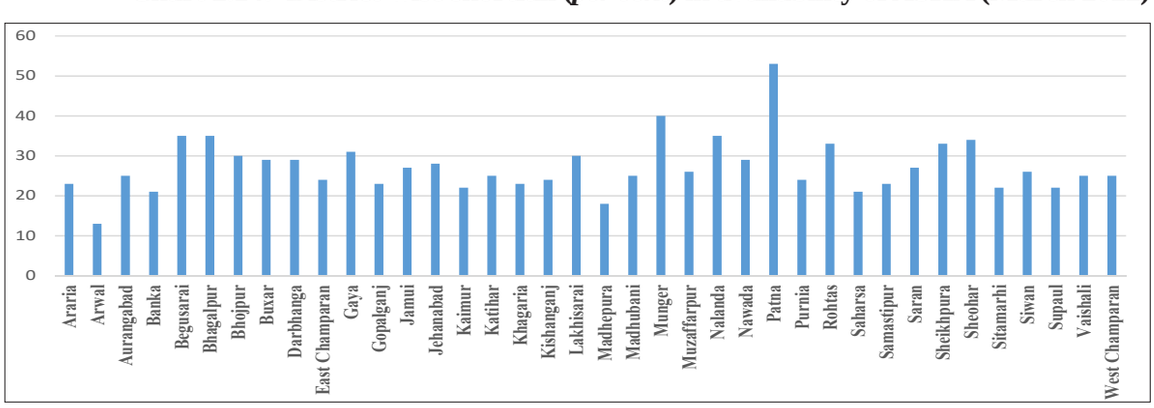
The Department replied (October 2023) that process of appointment for vacant posts was in progress.

2.11 Availability of Accredited Social Health Activists (ASHA)

One of the key components of the National Rural Health Mission is to provide every village, a trained female community health activist *viz*. Accredited Social Health Activist (ASHA). Her roles and responsibilities in the society included to: (i) create awareness and to provide information to the community on determinants of health such as nutrition, basic sanitation and hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilisation of health and family welfare services (ii) counsel women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding, immunization, contraception, prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs) and care of the young child (iii) facilitate Ante Natal Check-ups (ANC), Post Natal Check-ups (PNC) and to escort/accompany pregnant women and children requiring treatment/ admission to the nearest PHC/CHC/FRU and (iv) act as a depot holder for essential provisions being made available to every habitation like Oral Rehydration Therapy, Iron Folic Acid Tablet (IFA), Chloroquine, Disposable Delivery Kits, Oral Pills & Condoms *etc*.

As per guidelines issued by the Central Government, one ASHA is required per thousand population. As per estimated population (12,49,02,355) of Bihar (in 2022), there was a requirement of 1,24,902 ASHAs. However, against this only 89,105 (shortfall of 29 *per cent*) ASHAs were there in the State. District-wise shortfall (in percentage) in the availability of ASHAs, as on March 2022, is given in **Chart 2.14**.

Chart 2.14: District-wise shortfall (*per cent*) in availability of ASHA (March 2022)



(Source: Information furnished by the Health Department)

Chart 2.14, shows that the availability of ASHAs was uneven for all the districts. The shortage of ASHAs was ranging between 14 *per cent* (Arwal) to 55 *per cent* (Patna).

The Department replied (December 2022 and October 2023) that the target for selection of ASHAs had been set as per the 2011 census. The reply of the Department was not acceptable, as the target for recruitment of ASHA had not been revised for more than 10 years.

2.12 Availability of Human Resources in Tertiary healthcare facilities

Data relating to 16 tertiary healthcare facilities (11[8] Medical College and Hospitals and four[9] Super Speciality Hospitals and Bihar College of Physiotherapy and Occupational Therapy Hospital, Patna) were collected and shortage of manpower in these healthcare facilities is given in **Table 2.10.** Facility-wise details of manpower is detailed in ***Appendix 2.1***.

Table 2.10: Category-wise position of manpower in tertiary healthcare facilities (as of March 2023)

Sanction Strength					Men-in-position (*per cent*)				
Specialist	Medical Officer	Nurses	Paramedics	Others	Specialist	Medical Officer	Nurses	Paramedics	Others
1,436	1,001	7,211	1,939	4,423	691 (48)	338 (34)	4,707 (65)	598 (31)	1,851 (42)

(Source: Compiled from information furnished by the healthcare institutions)

It is evident from **Table 2.10** that in Medical College and Hospitals, as well as Super Speciality Hospitals, posts of Specialist, Medical Officers, Nurses, Paramedics and Others had vacancies of 52, 66, 35, 69 and 58 *per cent,* respectively.

2.13 Vacancy position in test-checked tertiary healthcare facilities

The hospital-wise overall sanctioned strength and persons-in-position, in three test-checked Medical College and Hospitals, as on March 2017 and March 2022, are as indicted in **Table 2.11**.

Table 2.11: Availability of human resources in test-checked Medical College and Hospitals

Medical College and Hospital	Status as of March 2017			Status as of March 2022		
	SS	PIP	Vacancy *(per cent)*	SS	PIP	Vacancy *(per cent)*
PMCH	2,727	1,830	897 (33)	2,727	1,749	978 (36)
DMCH	1,920	749	1,171 (61)	1,920	1,258	662 (34)
GMCH	NA*	NA	NA	959	301	658 (69)

*(Source: Test-checked hospitals) (SS: Sanctioned strength; PIP: Persons-in-position) *NA:- Records were not available.*

Table 2.11 indicates that, as of March 2022, the overall vacancy position, in the test-checked hospitals, ranged between 34 *per cent* and 69 *per cent.* Availability of human resources in these hospitals has been detailed in ***Appendix 2.2***.

[8] *Jawahar Lal Nehru Medical College & Hospital, Bhagalpur; Darbhanga medical College & Hospital, Darbhanga; Anugrah Narayan Magadh Medical College & Hospital, Gaya; Government Medical College & Hospital, Madhepura; Srikrishna Memorial Medical College & Hospital, Muzaffarpur; Vardhaman Institute of Medical Sciences & Hospital Pawapuri, Nalanda; Government Medical College & Hospital, Bettiah; Government Medical College & Hospital, Purnea; Patna Dental College & Hospital, Patna; Nalanda Medical College & Hospital Patna and Patna Medical College & hospital, Patna.*

[9] *New Gardiner Road Super Specialty Hospital, Patna; Loknayak Jaiprakash Narayan Hospital, Patna; Rajendra Nagar Hospital; Patna and Indira Gandhi Institute of Cardiology, Patna.*

- Audit scrutiny in regard to post-wise vacancies showed that: (i) there were acute shortages in regard to different categories of doctors (i.e. Sr. Residents, Specialists, Medical Officers *etc.*), ranging between 52 *per cent* and 56 *per cent* (ii) In DMCH, Audit noticed improvement in overall availability of manpower, as of March 2022, in comparison to March 2017. This was mainly due to appointments in the cadre of Nurse Grade 'A' (August 2020). In PMCH, the availability of Grade 'A' Nurses had improved from March 2017 to March 2022, though overall vacancies, in the PMCH, increased during this period.

Audit further noticed that: (i) the sanctioned strength of GMCH had been revised in the year 2020 although staff had not been recruited in any of the categories, as of May 2022 (ii) the sanctioned strength of DMCH and PMCH had not been revised during FYs 2016-17 to 2021-22 (iii) timeframe had not been fixed for filling up the vacant posts in these hospitals (iv) in DMCH, technicians had not been posted in any of its departments (v) the trauma centre of DMCH was non-functional for want of specialists and technicians and (vi) In PMCH, 41, out of 1,100 Grade 'A' nurses, deputed to other establishments (including establishments located at other stations) were shown as being posted in PMCH, despite these deputations having been made more than four years ago. The Department replied (October 2023) that appointment for vacant posts, was in progress.

2.14 Human Resources in Indira Gandhi Institute of Cardiology

Although the Department revised the sanctioned strength of the hospital and created some new posts in January 2020, Audit, however, observed substantive shortage of human resources, as given in **Table 2.12**.

Table 2.12: Sanctioned strength and Persons-in-Position in IGIC (as of March 2022)

Financial Year	Post	Sanctioned Strength	Persons-in-Position		Vacancy
			Regular	Contractual	(*per cent*)
2019-20	Doctor	166	66	7	93 (56)
	ANM and GNM	308	96	0	212 (69)
	Total	**474**	**162**	**7**	**305 (64)**
2020-21	Doctor	166	66	6	95 (57)
	ANM and GNM*	308	211	1	96 (31)
	Total	**474**	**277**	**7**	**190 (40)**
2021-22	Doctor	166	66	9	91 (55)
	ANM and GNM*	308	260	1	47 (15)
	Total	**474**	**326**	**10**	**138 (29)**

*(Source: Records of IGIC) * Auxiliary Nurse and Midwife (ANM) and General Nursing and Midwifery (GNM)*

It can be seen from the **Table 2.12** that the institution was running with acute shortage of human resources ranging from 29 *per cent* to 64 *per cent*, during 2019-20 to 2021-22. This resulted in poor performance of the hospital, as shown in the succeeding ***Paragraph 3.3.5***.

The Department stated (December 2022) that correspondence, in this regard, had been made. The reply was not tenable, as persistent shortage of human resources showed the lack of planning in appointing the key HR for running the institution.

2.15 Availability of human resources in AYUSH

Significant staff shortages, in all cadres, ranging from 65 *per cent* to 81 *per cent*, were noticed in AYUSH healthcare facilities, as detailed in **Table 2.13**.

Table 2.13: Sanctioned Strength and Persons-in-Position in AYUSH units (including the Directorate), as on March 2021

Sl. No.	Unit	Sanctioned Strength	Persons-in-Position	Vacancy	Percentage of vacancy
1	Directorate (AYUSH)	21	6	15	71
2	Joint Dispensaries (26)	345	223	122	35
3	Ayurvedic Dispensaries	211	128	83	39
4	Homoeopathy Dispensary	98	47	51	52
5	Unani Dispensary	90	43	47	52
6	Ayurvedic Pharmacy	27	13	14	52
7	Government Ayurvedic College & Hospital, Patna*	104	36	68	65
8	Tibbi College and Hospital, Patna*	235	78	157	67
9	RBTS, College and Hospital, Muzaffarpur*	206	39	167	81
10	Govt. Ayurvedic College and Hospital, Begusarai*	183	60	123	67
11	MRB Medical Science Institute, Darbhanga	61	16	45	74
Total		**1,581**	**689**	**892**	**56**

*(Source: Records of State AYUSH Society) *Colleges where education of AYUSH is being imparted*

Table 2.13 indicates that the State was implementing the AYUSH system, with only 44 *per cent* overall manpower, against the sanctioned strength.

The Department stated (December 2022) that the process of appointment of 3,270 AYUSH doctors was *sub judice* and, after disposal of the same, the appointments would be done.

The reply was in acceptance of the audit observation that the AYUSH system in the State was running with significant shortage of manpower ***(Paragraph 3.1.2 and 8.2.7)***.

2.16 Vacancy position of doctors under AYUSH

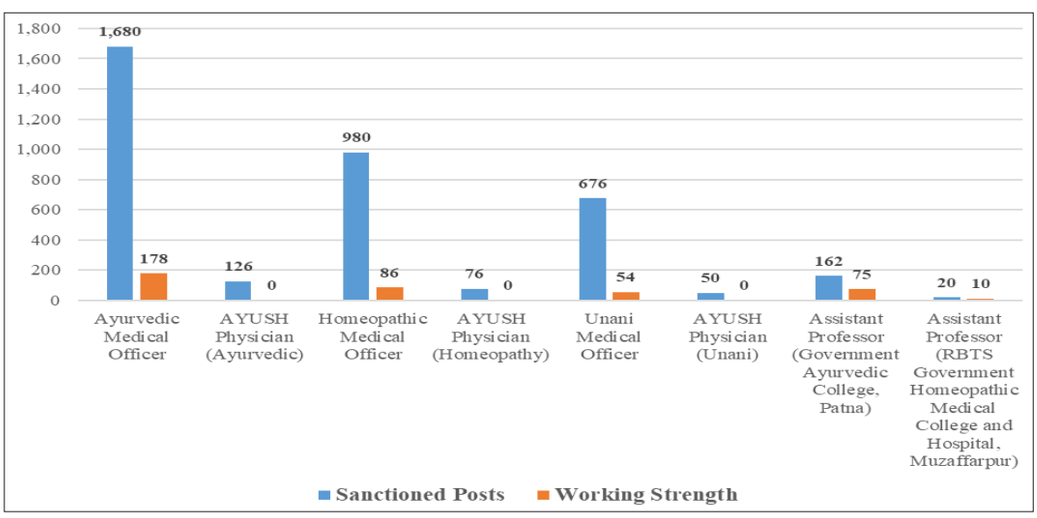
Sanctioned strength for AYUSH Doctors was 3,770 (four *per cent* of the total sanctioned strength of healthcare institutions under GoB). It has been observed that 3,367 (89 *per cent*) posts under various categories of AYUSH doctors were vacant in this department. Category-wise position of manpower is shown in **Table 2.14**.

Table 2.14: Position of doctors under AYUSH (as of March 2023)

Category	Sanctioned Posts	Working Strength	Vacant Posts	Percentage of vacant posts
Medical Officer (Ayurvedic)	1,680	178	1,502	89
AYUSH Physician (Ayurvedic)	126	0	126	100
Medical Officer (Homoeopathic)	980	86	894	91
AYUSH Physician (Homoeopathy)	76	0	76	100
Medical Officer (Unani)	676	54	622	92
AYUSH Physician (Unani)	50	0	50	100
Assistant Professor (Government Ayurvedic College, Patna)	162	75	87	54
Assistant Professor (RBTS Government Homoeopathic Medical College and Hospital, Muzaffarpur)	20	10	10	50
Total	**3,770**	**403**	**3,367**	**89**

(Source: Information provided by the Health Department, GoB)
Colour Code: Scaled on light to dark colour. Darker the colour higher the vacancies.

Chart 2.15: Position of doctors under AYUSH



(Source: Information provided by the Health Department, GoB)

Shortage of doctors in AYUSH department ranged from 54 *per cent* to 100 *per cent* under Ayurvedic, Homeopathic and Unani, as shown in **Table 2.14.** The Department did not have AYUSH Physicians in all three streams. Further, Medical Officers in Ayurvedic, Homoeopathic and Unani had shortage of 89, 91 and 92 *per cent*, respectively.

2.17 Appointments/ recruitments of Human Resources

2.17.1 Delay in appointment of doctors

The General Administrative Department (GAD), GoB, directed (January 2006) all the departments to assess their vacancies every year and project requisition for recruitment to the recruitment agency up to 30th April every year.

➢ During scrutiny of records relating to the appointment of Specialist Doctors in the Department, it was observed that the Department had sent requisition (November 2011 to March 2014), to the BPSC through GAD, for appointment of

2,597 Specialist Doctors. BPSC published advertisement in the year 2014 and 706 doctors were selected between December 2015 and March 2016. The Department had, however, appointed only 635 Specialist Doctors (24 *per cent* of the 2,597 posts of Specialist Doctors), between March 2016 and June 2016 ***(Appendix 2.3)***.

The Department again submitted (May 2019) a requisition, for appointment of 2,150 Specialist Doctors to the GAD. The GAD approved the requisitions (May 2019) and forwarded (June 2019) it to the BPSC, for further processing. The BPSC completed the selection procedure and forwarded a list of 1,007 selected candidates, between April and June 2020. However, appointment letters were issued (July 2020) to 834 candidates (39 *per cent* of the 2,150 posts of Specialist Doctors) only ***(Appendix 2.3)***.

➢ The Department sent (November 2013) requisition to BPSC through GAD for the appointment of 2,301 GMOs. BPSC published (August 2014) an advertisement and recommended (December 2015) the recruitment of 1,949 GMOs. The Department appointed (May 2016) 1,715 doctors, out of the 1,949 doctors recommended by the BPSC.

The above indicates that, against the vacant sanctioned posts of specialist doctors and GMOs, the Department had been able to appoint only 1,469 specialist doctors and 1,715 GMOs and the post of 3,278 specialist doctors and 586 GMOs remained vacant. Further, due to the delayed recruitment process[10], the objective of achieving and maintaining an acceptable standard of availability medical officers in healthcare facilities could not be achieved.

The Department replied (December 2022) that continuous efforts had been made for appointment against sanctioned strength of Specialists and General Doctors, but BPSC had recommended less number of candidates.

The reply of the Department was partially correct, as the Department, itself, had not sent the requisitions to BPSC, during the years 2012, 2015 to 2018 and 2020 to 2021, for recruitment of Doctors, despite persistent vacancies. Further, the requisitions for appointment of doctors were submitted to the BPSC in November 2011 and November 2013, against the prescribed cut-off date of 30th April each year.

In October 2023, the Department replied that: (i) Bihar Health Services (Revised Recruitment and Service Condition) Rules, 2023, had been issued (August 2023) and (ii) requisition would be sent to Bihar Technical Service Commission, for appointment of 3,523 Specialist Doctors and 238 General Doctors.

2.17.2 Recruitment by outsourced Human Resources (HR) agency

SHS decided (November 2018) to select an HR agency, to ensure availability of the required manpower, for different levels of healthcare services. For this purpose, it executed (May 2019) an agreement with Merit Trac Services Pvt. Ltd., for two years, under which the agency was provided tentative timelines for recruitment process as mentioned in **Table 2.15**.

[10] *Delayed/non-submission of requirement of appointment, by the Department, to BPSC, and delayed appointment by the BPSC.*

Table 2.15: Details of the tentative timelines for the recruitment process

Sl. No.	Activity	Time required in days (Cumulative time line)
1	Discussion/clarification with SHSB on approved HR recruitment	5 (5)
2	Discussion and finalisation of the process for recruitment-Preliminary screening to include online test/interview/or both, prioritisation for recruitment	5 (10)
3	After release of advertisement, screening and short listing of candidates and publishing of results online	25 (35)
4	Based on responses of candidates, shortlisting of online centers for online tests i.e. registration, CCTV, earmarking of seats *etc*.	10 (45)
5	Preparing question banks for online MCQ tests	15 (60)
6	Preparation of merit lists based on the online tests and publication of results	5 (65)
7	Line-up of candidates, for interview and document verification	15 (80)
8	Submission of complete process documents, till selection of candidates, to SHSB, and document verification of the selected candidates	15 (95)

(Source: Records of SHS)

- It was noticed, during audit, that, as of January 2022, the agency had published advertisements for 82 types of 24,496 posts and recruitment of 35 types of 13,340 posts was still pending. The advertisements had been published between the years 2019 and 2021 and examinations had also been conducted. However, as on 31 March 2022, the agency had not completed the recruitments, even after a lapse of 274 to 888 days from the dates of the advertisements ***(Appendix 2.4)***. It was also noticed that the HR agency had not conducted background verification of any of the candidates.

- As per the agreement, in case candidates did not turn up for joining after selection, the HR agency would not be considered as having completed the task assigned to it. It was, however, observed that, against the recruitment process of 13 types of 8,780 posts as detailed in ***Appendix 2.5***, only 5,788 candidates (66 *per cent*) had been recruited against the advertised number of posts. Hence, the agency had not achieved the terms of its agreement in totality.

  However, despite the fact that the HR agency had failed to perform as per the agreement, SHS did not take any action[11] against the agency and, instead, granted (June 2021) it an extension for one year, in order to complete the employment process, in a timely manner.

  Further, the recruitment process of many important posts, such as Counsellor, Community Health Officer (CHO), Block Health Manager, Block Community Mobiliser, Hospital Manager, Lab Technician, Auxiliary Nurse Midwife (ANM) *etc*., was pending. Thus, the purpose of carrying out recruitment by utilising the services of the outsourced agency, could not be fulfilled. In view of the significant shortages in all cadres, it was bound to affect adversely the proper functioning of the healthcare system.

[11] *In case of any delay in the recruitment process milestones, beyond the timeline of 95 days, SHSB may penalize, at the rate of one per cent of the contracted fees, for every month of inordinate delay.*

The Department replied (December 2022) that the lesser recruitment of number of candidates, in comparison to the requirement required, was due to the COVID-19 pandemic in the years 2021 and 2022 and implications of the prevailing government reservation rules. The Department did not offer any further specific reply on this issue, in October 2023.

2.18 Impact of shortage of staff on delivery of healthcare services in the test-checked districts

Due to shortage of staff, the delivery of healthcare services in the test-checked healthcare institutions/facilities under test-checked districts were hampered, as several such cases showing impact of shortage of staff have been highlighted in this report, as detailed in **Table 2.16.**

Table 2.16: Details of services hampered due to shortage of Staff

Sl. No.	Impact on healthcare services	Para reference
1.	Equipment lying idle due to non-availability of manpower	4.3.4
2.	Non-availability of diagnostic services beyond OPD hours	3.5.1
3.	Idle machines	4.3.6
4.	Non-availability of Diagnostic services in Tertiary healthcare facilities	3.5.2
5.	Unutilised equipment and ambulance in RBTS, Muzaffarpur	4.3.8
6.	Lack of inspections of selling/ manufacturing establishments	8.2.1

Recommendation 1: State government may ensure that adequate number of healthcare personnel are deployed in healthcare facilities, according to relevant norms/benchmarks.

Chapter-III
Healthcare Services

Chapter-III

Healthcare Services

Delivery of services in healthcare facilities was deficient, as Specialist OPD and IPD services were not being provided in the test-checked healthcare facilities, due to non-posting of specialist doctors. Operation Theatre and Emergency Services in the test-checked Sub-Divisional Hospitals, Referral Hospitals, and Community Health Centres were deficient due to shortages of required equipment.

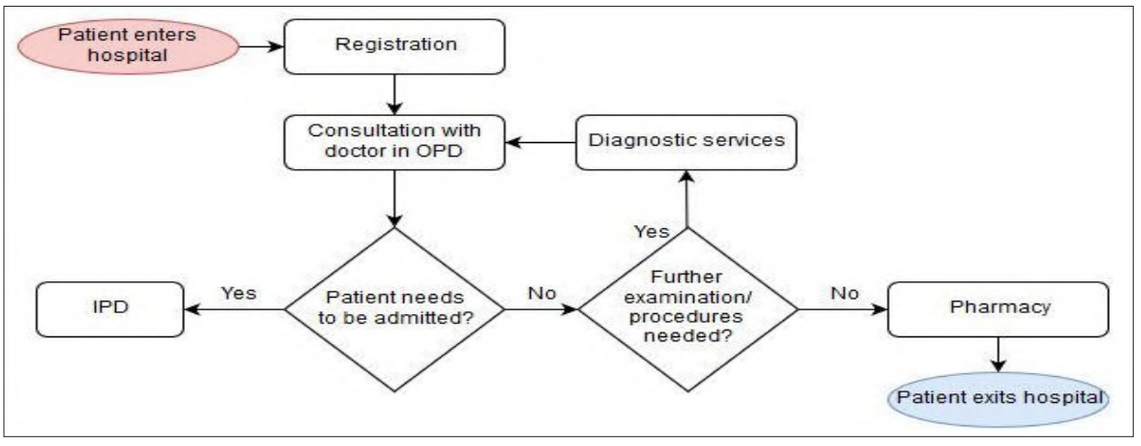
Delivery of health services consists of three components, namely 'Line services', 'Support services' and 'Auxiliary services'. 'Line services' mainly deal with Out-Patient Department (OPD), In-patient Department (IPD), Diagnostic and Maternity services. 'Support services' mainly deal with Oxygen, Dietary, Blood Bank and Ambulance services, while 'Auxiliary services' mainly deal with Patient Safety, patient registration as well as Grievance/ complaint redressal.

Indian Public Health Standards (IPHS) envisage that specialist services related to OPD, IPD and maternity services be provided through SDHs, either by direct reporting to them or through referred cases from neighboring CHCs, PHCs and HSCs. CHCs constitute the secondary level of healthcare and designed to provide referral, as well as specialised healthcare, to the rural population. The Primary Health Centre is the cornerstone of rural health services- the first port of call in rural areas for the sick, who either directly report or get referred from Health Sub-Centres, for curative, preventive and promotive healthcare. Audit observations on delivery of services are discussed below.

3.1. Out Patient Department (OPD)

To avail OPD services in any healthcare facility, a patient first undergoes registration at OPD registration counter, followed by examination by the doctor and prescription of further diagnostic tests and medicines. Subsequently, the doctor follows up with the patient or gets the patient admitted in hospital, if required, as shown in **Chart 3.1**.

Chart 3.1: Flow of out-patient services

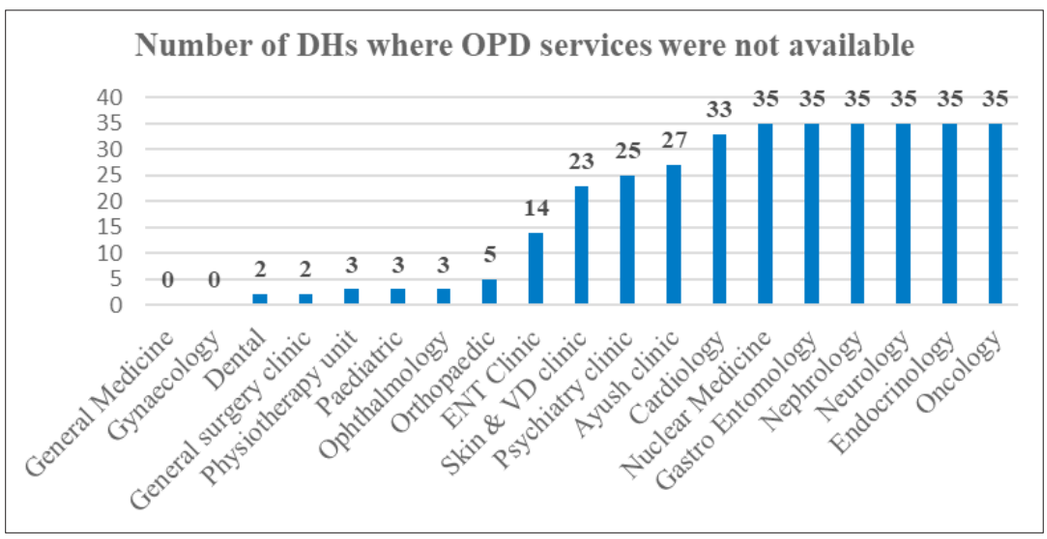


(Source: Records of Health Department, Government of Bihar)

3.1.1 Availability of OPD services in DHs

IPH Standards prescribed 19 types of curative OPD services in DHs. Audit, however, observed that all the 35 DHs had not provided significant OPD curative services, as depicted in **Chart 3.2.**

Chart 3.2: District Hospitals without OPD services (as of March 2023)



(Source: Records of Healthcare facilities)

It can be seen from **Chart 3.2** that the DHs did not provide many significant OPD curative services like Gastro Entomology, Nephrology, Neurology, Endocrinology, Oncology and Nuclear Medicine.

3.1.2 Availability of OPD services in SDHs/RHs/CHCs

IPH Standards prescribed nine[1] types of essential OPD clinical services in SDHs and prescribed seven OPD services, namely General Medicine, General Surgery, Obstetrics and Gynaecology, Paediatrics, Ophtalmology, Dental and AYUSH, in RHs and CHCs. PHCs were to provide OPD treatment of common ailments, such as common cold, fever, diarrhoea, bronchial asthma, foreign body in conjunctival sac *etc*.

Audit observed that, in 10 test-checked healthcare facilities including four SDHs, two RHs and four CHCs, significant OPD consultation services were not being provided, as shown in **Table 3.1**.

[1] *General Medicine, General Surgery, General Orthopaedic, Obstetrics & Gynaecology, Paediatrics, Ophthalmology, ENT, Dental and AYUSH.*

Table 3.1: OPD consultation services in test-checked healthcare facilities during FY 2021-22

Level of healthcare facility	Types of OPD Services not available in SDHs and RHs/CHCs (No. of services not available)
SDH	General Surgery, General Orthopaedics, Obstetrics & Gynaecology[2], Paediatrics, Ophthalmology, ENT and AYUSH **(7)**
RH/CHC	General Surgery, Obstetrics and Gynaecology, Paediatrics, and AYUSH (4)

(Source: Records of test-checked healthcare facilities)

It can be seen from **Table 3.1** that a majority of OPD consultation services were not available in SDHs, RHs and CHCs. Only two types of OPD consultation services, related to General Medicine and Dental, were being provided in the test-checked SDHs, RHs and CHCs.

It was further observed that during FY 2021-22, specialist OPD consultation services were not being provided in the test-checked healthcare facilities, due to non-posting of specialist doctors. Instances were also noticed where specialist doctors were posted but specialist OPD services related to them were not provided by the concerned healthcare facilities, as their services were not placed in OPD roster. Examples include SDH, Barh (General Surgeon, Obstetrics & Gynaecology, Ophthalmologist and ENT), SDH, Mahua (Paediatrics), CHC, Bhagwanpur (Obstetrics and Gynaecology) and CHC, Bakhtiyarpur (Obstetrics & Gynaecology and Paediatrics).

The Department replied (December 2022) that Government had planned to provide phase-wise specialist OPD consultation services, in SDHs/RHs/CHCs. The Department further stated that specialist OPD consultation services were provided, wherever specialist doctors were available. But, specialist OPD consultation services were not mentioned in the OPD roster. The reply of the Department was not tenable, as the duties of doctors, for OPD consultation, were to be defined separately in the roster and separate OPD consultation services were to be provided accordingly. The reply given by the Department in August and October 2023, was not specific.

3.1.3 Patient load in OPD

Out-patient services, in SDHs, RHs/CHCs and PHCs, were to be provided through OPD clinics, on daily basis, except on Sundays and holidays. The number of the out-patients attended to, in 18[3] test-checked healthcare facilities, during FYs 2016-17 to 2021-22, is shown in **Table 3.2**.

[2] Services delivered in SDH, Mahua.

[3] *Except SDH, Udaikishunganj and PHC, Bihta wherein OPD facilities were not available during FYs from 2016-17 to 2021-22.*

Table 3.2: Number of out-patients in test-checked healthcare facilities during 2016-17 to 2021-22

(No. in lakh)

Year	No. of out-patients in SDHs[4]	Increase/ decrease (-) (YoY)* (in *per cent*)	No. of out-patients in RHs/CHCs[5]	Increase/ decrease (-) (YoY)** (in *per cent*)	No. of out-patients in PHCs[6]	Increase/ decrease (-) (YoY)** (in *per cent*)
2016-17	2.53	NA*	4.08	NA	2.62	NA
2017-18	2.38	-6	6.2	52	3.34	27
2018-19	2.27	-5	5.01	-19	4.86	46
2019-20	2.21	-3	5.12	2	4.17	-14
2020-21	1.31	-41	2.76	-46	1.9	-54
2021-22	1.33	2	2.7	-2	2.42	28
Percentage decrease during FY 2021-22, as compared to FY 2016-17		**-47**		**-34**		**-8**

*(Source: Test-checked healthcare facilities) * Records were not available. **Year over Year*

Table 3.2 shows that there was significant decrease of 47 *per cent*, 34 *per cent* and eight *per cent* of out-patients, in the test-checked SDHs, RHs, CHCs and PHCs, respectively, during FY 2021-22, as compared to FY 2016-17. It was also observed that the number of out-patients had showed an overall decreasing trend in the test-checked healthcare facilities. The position of out-patients, in the test-checked SDHs, was worse, in terms of the decreasing number of patients, year over year.

Due to the nationwide lockdown to contain COVID-19 pandemic, OPD clinics were not running regularly during the FYs 2020-21 and 2021-22. Thus, the number of out-patients in healthcare facilities were significantly low in these years. The decreasing number of out-patients was also due to the fact that specialised services were not available in the test-checked healthcare facilities, as discussed in ***Paragraph 3.1.2***.

Decrease in out-patients in sub-divisional hospitals might have impacted the patient load in District Hospitals. ***Paragraph 2.2.2*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that: (i) the number of out-patients had increased during FYs 2016-17 to 2018-19, ranging from four to 29 *per cent,* in the test-checked five DHs and (ii) the out-patient load had increased in DH, Jehanabad (17 *per cent*), DH, Madhepura (22 *per cent*) and DH, Patna (one *per cent*), during FY 2019-20, as compared to FY 2014-15. This had resulted in the DHs having a much higher number of OPD cases per doctor and less consultation time per patient, as discussed as ***Paragraphs 2.2.3.1*** and ***2.2.3.2***,

[4] *Data of out-patients for the period from FYs 2016-17 to 2020-21 was not made available by SDH, Udakishunganj (Madhepura), as OPD facility was not running continuously there, due to non-availability of medical staff and ongoing building construction work.*

[5] *Data of out-patients for FY 2016-17 was not made available by RH, Makhdumpur (Jehanabad).*

[6] *Data of out-patients for FY 2016-17 was not made available by PHC Goraul (Vaishali).*

in the Performance Audit of "Functioning of District Hospitals". Further, patients might had to opt for private healthcare facilities which ultimately can cause burden on their health care expenses.

The Department accepted (December 2022) the significant decrease in the number of patients under OPD, year over year.

3.1.4 OPD cases per doctor

OPD cases per doctor is an indicator for measuring efficiency of OPD services in healthcare facilities. OPD cases per doctor per day are shown in **Table 3.3**.

Table 3.3: Average OPD cases per doctor per day during 2022-23

Type of healthcare facility (1)	No. of OPD cases (2)	Available Specialist/ Medical Officer (3)	Average OPD cases per doctor per day (4=Col. 2/Col. 3/311[7])
DH	65,61,029	1,098	19
SDH	32,10,312	609	17
RH/CHC	1,63,96,873	1,097	48
PHC	1,01,27,269	908	36

(Source: Information furnished by the concerned healthcare facility)

As can be seen from **Table 3.3** average OPD cases per doctor per day in 2022-23, had ranged from 17 to 48, at different level health care facilities.

3.1.5 Waiting time for consultation with a doctor

The NHM Assessor's Guidebook has graded 'waiting time' in the following manner: immediate- excellent; one to five minutes- very good; six to 10 minutes- good; 11 to 30 minutes- fair and above 30 minutes- poor. The 'waiting time' between registration and consultation, as responded by 534 patients, during the Patient Survey conducted by Audit, in 20 test-checked healthcare facilities, is given in **Table 3.4**.

Table 3.4: Waiting time between registration and consultation with the doctor (as of March 2022)

Type of Healthcare facility	No. of patients surveyed	Waiting time range (in minutes)				
		0-5	6-10	11-30	Above 30	No response
SDH	95	9	51	32	3	0
RH/CHC	143	24	29	57	33	0
PHC	296	186	38	51	20	1
Total	**534**	**219**	**118**	**140**	**56**	**1**

(Source: Patient's Satisfaction Survey conducted by Audit in the test-checked healthcare facilities)

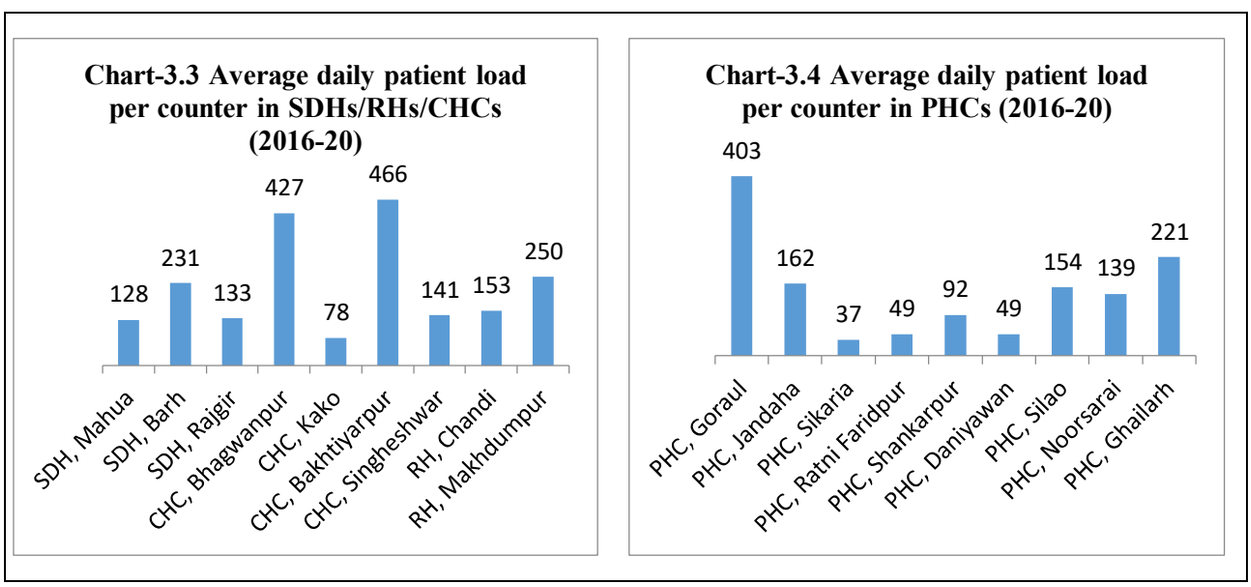
As can be seen from **Table 3.4**, overall 26 *per cent* and 10 *per cent* patients had 'fair' and 'poor' waiting time, respectively. However, in two units i.e. RH, Makhdumpur and CHC, Bakhtiyarpur (surveyed 25 patients each), the waiting time was above 30 minutes in 23 and 16 cases, respectively.

[7] *Average OPD days in a year (excluding Sunday and Holidays).*

3.1.6 Patient load on the registration counter

NHM Assessor's Guidebook estimates the average time required for registration to be 3 to 5 minutes per patient and the registration counter opens for six hours a day. As such, the number of counters required was to be estimated on the basis of 20 patients per hour per counter and registration of 120 patients a day.

Audit examined the average number of patients registered during FYs 2016-17 to 2019-20[8], in 18 test-checked healthcare facilities, along with the availability of registration counter(s) and observed that the available registration counter(s) were significantly less, *vis-a vis* the patient load, in six test-checked healthcare facilities, as shown in ***Appendix 3.1***. Further, per counter patient load is shown in ***Charts 3.3*** and ***Charts* 3.4**



(Source: Test-checked healthcare facilities)

As observed in ***Charts 3.3*** and **3.4,** the average daily patient load on the registration counter was significantly high in CHC, Bakhtiyarpur (466); CHC, Bhagwanpur (427); RH, Makhdumpur (250); SDH, Barh (231); PHC, Goraul (403) and PHC, Ghailarh (221), against the norms of 120 patients. Due to heavy load at the registration counters, long queues of patients were noticed, resulting in increased waiting time of patients.

Further, audit observation related to daily patient load on the registration counters in the test-checked DHs has been pointed out in ***Paragraph 2.2.6*** of the Performance Audit of "Functioning of District Hospitals", which featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020.

The Department stated (December 2022) that queue management and announcing system had been started in hospitals, to decrease the waiting time. Further, hospitals were in the process of digitising the process of registration. The Department further stated (August 2023 and October 2023) that, in Vaishali

[8] *As the number of patients had significantly decreased during the COVID-19 pandemic, the patient load has been taken only for FYs 2016-17 to 2019-20.*

district, basic facilities in OPD and registration area had not been provided, due to lack of space.

3.1.7 Waiting time for registration

The NHM Assessor's Guidebook graded the waiting time at the registration counter in the manner as mentioned in **Paragraph 3.1.5**. The 'waiting time' for registration at the registration counters, as responded by 534 patients, during the Patient Survey conducted by Audit, in the test-checked healthcare facilities, is given in **Table 3.5**.

Table 3.5: Waiting time for registration in the test-checked healthcare facilities (as of March 2022)

Level of healthcare facility	No. of patients surveyed	Waiting time (in minutes)			
		1-5	6-10	11-30	Above 30
SDH	95	37	32	23	3
RH/CHC	143	44	30	59	10
PHC	296	216	32	33	15
Total	**534**	**297**	**94**	**115**	**28**

(Source: Test-checked healthcare facilities)

As can be seen from **Table 3.5**:

- Out of responses of 534 patients, only 297 (56 *per cent*) patients had the standard (very good) waiting time (one to five minutes) but 18 *per cent*, 22 *per cent* and five *per cent* patients had responded that their waiting time was six to 10 minutes (good), 11 to 30 minutes (fair) and above 30 minutes (poor), respectively.
- In CHC, Bakhtiyarpur, where the average daily patient load per counter was very high (466), out of 25 surveyed patients, 68 *per cent* had responded that their waiting time was 11 to 30 minutes (fair) and 28 *per cent* had responded that their waiting time was above 30 minutes (poor).
- In RH, Makhdumpur, where the average daily patient load per counter was second highest (250), all 25 patients had responded that their waiting time was high[9].
- Further, 76 *per cent* patients in SDH, Barh and 80 *per cent* patients in PHC, Ghailarh, had responded that their waiting time was high[10].

Further, none of the test-checked healthcare facilities had an online registration system. Therefore, all surveyed patients could register only at OPD counters.

The Department replied (December 2022) that work to increase registration counters, for reducing the waiting time in OPD registration, was under progress. The Department further replied (August 2023 and October 2023) that efforts were being made, to minimise the waiting time.

Recommendation 2: State government may ensure that waiting time for registration is reduced, by adding registration counters and registration staff etc.

[9] *Ranging between 30 and 45 minutes.*

[10] *SDH, Barh: ranging between 12 and 45 minutes; PHC, Ghailarh: ranging between 20 and 40 minutes.*

3.1.8 Inadequate basic amenities in OPD and registration area

As per IPH Standards: (i) healthcare facilities are to be planned keeping in mind the maximum peak hour load (ii) they should have scope for future expansion (iii) registration, assistance and enquiry counter facilities are to be made available in all OPD clinics, along with proper sitting arrangement, drinking water, ceiling fans and separate toilet facilities for males and females and (iv) a main entrance, general waiting space and subsidiary waiting spaces, are required, adjacent to each consultation and treatment room, in all OPD clinics.

In 20 test-checked healthcare facilities (four SDHs, two RHs, four CHCs and 10 PHCs), basic amenities, such as drinking water, fan, separate toilets for males and females, chairs *etc.*, were deficient in the OPD and registration areas, as shown in **Table 3.6**.

Table 3.6: Deficient basic amenities in OPD (as of March 2022)

Name of basic amenity	Registration area of				OPD area of			
	SDH	RH	CHC	PHC	SDH	RH	CHC	PHC
Drinking water	3	1	2	6	3	2	2	2
Ceiling Fan	2	1	3	4	2	0	2	4
Toilet (Female)	3	2	3	5	3	2	2	9
Toilet (Male)	1	2	3	6	1	1	1	2
Sitting facility	1	1	2	4	2	0	1	3
Separate counter for females in registration area and at Reception/ Enquiry/ 'May I' Help Desk for OPD area	1	2	4	8	2	2	3	8

(*Source: Information provided by test-checked healthcare facilities*)

As can be seen in **Table 3.6**, a majority of the PHCs did not have basic amenities at the registration, as well as the OPD areas (detailed in ***Appendix 3.2)***. These deficiencies were also noticed during joint physical verification also and some of them have been depicted through ***Images 3.1*** and ***3.2***.

Image 3.1: Registration counter at SDH Barh (Patna), without having basic amenities (07.04.2022)

Image 3.2: Patients in PHC- Noorsarai (Nalanda), for OPD consultation without basic amenities (12.04.2022)

The deficiency of basic amenities at the registration and OPD areas was attributable to the absence of gap analysis by the healthcare facilities and corresponding corrective measures by the Department.

Further, audit observation related to inadequate basic amenities in in OPD and registration area of the test-checked DHs has been mentioned in ***Paragraph 2.2.7*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020.

The Department replied (December 2022, August 2023 and October 2023) that under 'Mission 60 days', the basic amenities were being improved at the district hospital level and that it had planned to improve basic amenities, at the community and block level healthcare facilities, in a phased manner.

3.1.9 OPD Prescription and issue of drugs to OPD patients

The Department's, resolutions (May 2006 and August 2014), stipulated for providing drugs, free of cost, to patients. As per the NHM Assessor's Guidebook, patient records, such as OPD prescriptions and OPD registers, are to be kept in safe custody and the prescriptions should include patient history, complaint and examination diagnosis, on the OPD slip. Indian Medical Council Regulations, 2002, regulate that every physician should prescribe drugs with generic names, legibly and preferably in capital letters. Illegible handwriting or incomplete writing of a prescription can lead to mis-interpretation, thus leading to errors in dispensing and administration of medicine.

- Audit observed that during FYs 2016-17 to 2020-21, there was no system of retention of a copy of the OPD prescriptions, in any of the 18 test-checked healthcare facilities, wherein OPD facilities were available. Audit obtained 673[11] OPD prescriptions from patients and compared the prescriptions with the drugs provided by the SDHs, RHs/CHCs and PHCs, to the patients, during months of March-June 2022. Audit observed that only 67 *per cent* patients had been able to get all the prescribed drugs in the test-checked healthcare facilities, as shown in **Table 3.7**.

Table 3.7: Distribution of drugs to OPD Patients (as of March 2022)

Level of healthcare facility	No. of patients test-checked	No. of OPD patients who received all the prescribed medicines
SDH	125	53
RH/CHC	195	127
PHC	353	271
Total	**673**	**451 (67 *per cent*)**

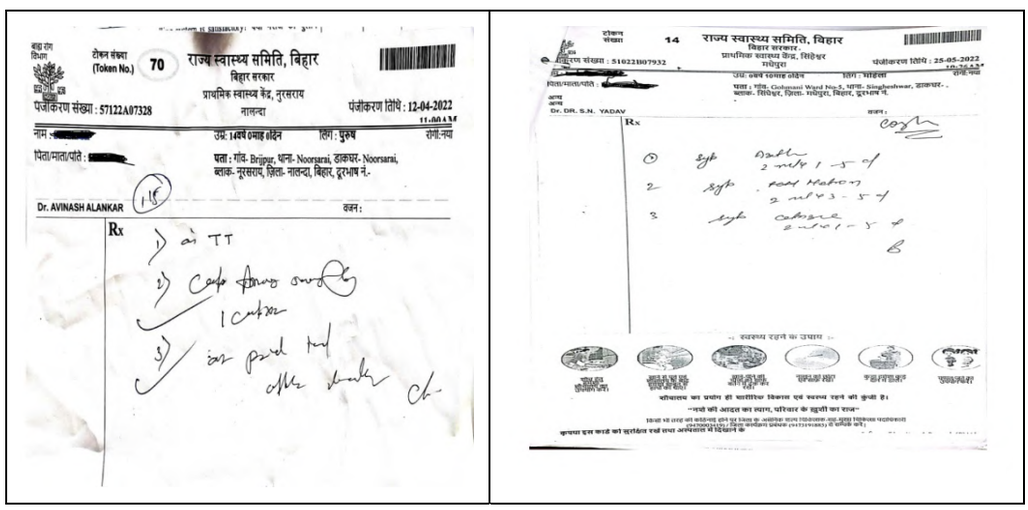
(Source: Test-checked healthcare facilities)

Out of 673 test-checked patients, 79 (12 *per cent*) patients, were prescribed five and above drugs and 172 (26 *per cent*) patients were prescribed four drugs. However, only 42 (53 *per cent*) and 105 (61 *per cent*) patients could get the prescribed number of drugs.

[11] *SDHs: 125 (Barh 50, Mahua 25, Rajgir 25 and Udakishunganj 25); RHs/CHCs: 195; (RHs: Chandi 28 and Makhdumpur 25; CHCs: Bakhtiyarpur 50, Bhagwanpur25, Kako 17 and Sigheshwar 50) and PHCs: 353 (Bihta 50, Daniyawan 53, Ghailarh 50, Goraul 25, Jandaha 21, Noorsarai 29, Ratni Faridpur 20, Shankarpur 25, Sikaria 25 and Silao 55).*

Further, out of 534 patients, those were surveyed during audit, 148[12] (28 *per cent*) patients had not received the full range of drugs. This indicated that, the objective of providing drugs free of cost to patients could not be ensured in the test-checked healthcare facilities, as OPD patients would have to purchase remaining drugs from their own pocket.

While scrutinising the above mentioned 673 OPD prescriptions, in the test-checked SDHs, RHs/CHCs and PHCs, it was observed that the prescriptions lacked the following: (i) brief history of patients (40 *per cent* to 75 *per cent)* (ii) feature of clinical examination (74 *per cent* to 99 *per cent*) (iii) date of next visit/follow up instruction (80 *per cent* to 100 *per cent*) and (iv) clean and legible hand writing on the prescription slips as shown in ***Images 3.3*** and ***3.4***.



Images 3.3 and 3.4: Sample prescription slips from PHC, Noorsarai (12.04.2022) and CHC, Sigheshwar (25.05.2022), depicting lack of clean and legible handwriting preferably in capital letters

Further, ***Paragraph 2.2.4*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, has also indicated that in the test-checked DHs, the OPD patients had to purchased drugs from their own pocket.

The Department replied (August 2023) that: (i) in the Madhepura district, the prescriptions were being issued through the Bihar Health Application Visionary Yojana (BHAVYA) portal[13] and related data was being saved in the portal and (ii) directions, in this regard, had been issued to PHC, Noorsarai (Nalanda).

3.1.10 Lack of basic facilities in OPD in tertiary healthcare facilities

As per MCI norms, every Medical College and Hospital should have patient waiting area, sitting arrangement for patients as well as visitors, *etc.* in OPD area. These facilities were not available in the OPD areas of any of the test-checked MCHs.

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[12] SDHs- 36; CHCs-61 and PHCs-51.

[13] *The BHAVYA portal is being used for implementation of the Hospital Information Management System (HIMS), across all the healthcare facilities, in the State.*

While agreeing with the audit observation regarding lack of basic facilities in the GMCH, Bettiah, the Department attributed (December 2022, August 2023 and October 2023) it to the ongoing construction work of the building and assured that the position would improve after completion of the new building. The reply of the Department itself indicated that these hospitals were still lacking basic facilities, like waiting area, seating arrangement *etc*.

3.1.11 Delayed deposit of registration fee

In two test-checked hospitals (DMCH and PMCH), the work of registration of patients had been outsourced[14] by the respective Medical Superintendents. As per the agreements, entered into with these agencies, the agencies were to collect ₹ 5 from each OPD patient, visiting the hospitals and to deposit the registration fee, so collected, in the office of the Medical Superintendent (in the case of DMCH) and into the bank account of RKS (in the case of PMCH), on a daily basis.

Audit noticed that neither had the agencies adhered to this clause, nor had the hospitals insisted upon the enforcement of the clause.

In DMCH: (i) there had been delays, of up to 11 months, in depositing the amounts ***(Appendix 3.3*** and ***Appendix 3.4)*** (ii) registration fee, for the period from April 2017 to December 2021, amounting to ₹ 90.57[15] lakh, had been deposited with delays and (iii) the concerned agency, i.e. RG software & System, had not deposited registration fee after July 2021, till the date of audit (May 2022).

Similarly, in PMCH, the said work was being executed by an external agency since June 2020 and it was noticed that the agency had deposited an amount of ₹ 41.00 lakh, collected towards registration fee from patients, into the concerned bank account, with delays of up to more than four months, as detailed in ***Appendix 3.5***.

The Department replied (August 2023) that regular monitoring would be ensured, in future, by the concerned hospital manager, but did not explain the reason for delayed deposit of registration fee by the service providing agencies.

3.1.12 Patient Satisfaction Survey not conducted by healthcare facilities

The NHM Assessor's Guidebook envisages that healthcare facilities must establish a system for patient's satisfaction. For this purpose, healthcare facilities are required to conduct patient satisfaction surveys, on monthly basis.

Audit observed that none of the test-checked healthcare facilities (except for CHC, Singheshwar) had conducted patient satisfaction survey.

Thus, in the absence of any patient satisfaction survey, the lowest performing attributes would not be analysed, for planning further corrective actions, in healthcare facilities.

Further, ***Paragraph 2.4.23*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and

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[14] *DMCH: BalaJee Enterprises and R G Software & system; PMCH: Aditya and Arnav Associates.*

[15] *Appendix 3.3: ₹ 82.65 lakh and Appendix 3.4: ₹ 7.92 lakh.*

Compliance Audit) for the year ended March 2020, indicated that none of the test-checked DHs (except DH Jehanabad), conducted the patient satisfaction survey, to take feedback on quality of services.

The Department replied (December 2022) that in the Madhepura district, hospitals had been directed to conduct patient satisfaction surveys and take corrective action accordingly. The Department further replied (October 2023) that healthcare facilities had taken corrective and preventive action, as a result of which DH, Madhepura, had scored 94 *per cent* in 'Patient Satisfaction', in the recent LaQshya National Assessment. The Department, however, did not provide information regarding other districts.

3.2 In-Patient Department (IPD)

In-Patient Department (IPD) refers to the areas of a healthcare facility where patients are accommodated after being admitted, based on the doctor's/specialist's assessment from the Out-Patient Departments, Emergency Services and Ambulatory Care, on account of their medical condition. In-patients require a higher level of care through nursing services, drugs/diagnostic facilities, observation by doctors *etc*.

Diagnostic care, Dietary Services and Infection Control Practices, are discussed in the succeeding paragraphs of this Chapter; availability of Drugs have been discussed in ***Chapter IV***, and availability of Doctors, Nurses and Para Medical Staff, is discussed in ***Chapter II*** of this Report. Issued related to maternity services are discussed in ***Paragraph* 3.4** of this chapter.

3.2.1 Non-availability of IPD services in District Hospitals

During audit, it was observed that beds were not available in the DHs as per IPH Standards, for the following services, as mentioned in **Table 3.8**.

Table 3.8: Non-availability of beds in services provided by DHs (as on March 2023)

Name of service	No. of DHs where beds were available (out of 35 DHs)	No. of DHs where beds were not available (out of 35 DHs)
Maternity	35	0
Emergency	35	0
OT	34	1
Accident and Trauma Ward	13	22
Burn ward	19	16
Dialysis	20	15
General Medicine	29	6
General Surgery	34	1
Ophthalmology	28	7
Orthopaedics	21	14

(Source: records of Healthcare facilities)

Table 3.8 indicates that beds for all the services were not available in all 35 the DHs.

Besides, information collected (May 2023) from all the DHs showed availability of total 4,435 beds (as of March 2023) in these healthcare facilities, out of which, 909 beds were earmarked for maternity service, as detailed in ***Appendix 3.6***.

3.2.2 Availability of IPD services in SDHs/RHs/CHCs

IPH Standards prescribed seven[16] types of essential IPD services in SDHs, while CHCs are designed to provide IPD services, namely General Medicine, General Surgery and Paediatrics. IPH Standards also prescribe that PHCs should have at least six beds under IPD services. Further, NHM Assessor's Guidebook envisaged that PHCs should provide indoor treatment for common illnesses like Fever, Dehydration, Bronchial Asthma, Pneumonia *etc*.

Audit observed that indoor treatment facilities for common illnesses, were available in all the test-checked PHCs, as of March 2022. Details of IPD services required and available in test-checked SDHs and RHs/CHCs, as of March 2022, is shown in **Table 3.9**.

Table 3.9: In-patient services in SDHs and RHs/CHCs (March 2022)

Type of In-patient service	Services available in the four[17] test-checked SDHs	Services available in the six[18] test-checked RHs/ CHCs
Accident and Trauma care	Only in SDH, Mahua (Vaishali)	Not applicable
ENT	Not available	Not applicable
General Medicine	Only SDH, Rajgir and SDH, Barh *(not available in SDHs Udakishunganj and Mahua)*	In RH, Chandi and CHC, Kako only
General Surgery	Only in SDH, Mahua	In CHC, Bhagwanpur only
General Orthopaedics	Not available	Not applicable
Ophthalmology	Not available	Not applicable
Paediatrics	Not available	Not available

(Source: Test-checked healthcare facilities)

As shown in **Table 3.9**, the test-checked SDHs and RHs/CHCs were not providing a majority of IPD services, specified in the IPHS. Audit observed that the mandated IPD services were not available, mainly due to shortage of specialist doctors.

Non-availability of IPD services was observed in the test-checked DHs also and has been summarised in ***Sl. No. 4 of Appendix 1.2***.

In the absence of required IPD facilities, patients were bound to get themselves treated outside privately, which ultimately increased their out-of-pocket expenditure on healthcare. This is also corroborated by the fact that in the State, monthly per capita out-of-pocket expenditure on health, during FY 2020-21, was higher than the country's average (***Table 9.1 of Chapter-IX)***.

The Department replied (August 2023) that, at SDH, Mahua (Vaishali), pediatrics IPD services were being provided through the Nutrition Rehabilitation Centre and, in CHC, Bhagwanpur, the required IPD services had not been provided, due to non-availability of specialist doctors. However, it did not furnish a reply in regard to other districts.

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[16] *Accident and Trauma care, Ear, Nose and Throat (ENT), General Medicine, General Surgery, General Orthopaedics, Ophthalmology and Paediatrics.*

[17] *SDHs: Barh, Mahua, Rajgir and Udakishunganj.*

[18] *CHCs: Bakhtiyarpur, Bhagwanpur, Kako and Singheshwar and RHs: Chandi and Makhdumpur.*

3.2.3 Non-availability of peripherals of IPD beds, space and non-availability of basic amenities in IPD

IPH Standards and NHM Assessor's Guidebook prescribed that every bed in IPD must be supported with intravenous (IV) stand, bedside locker, stool for attendant and screen for privacy.

Audit observed that IPD beds of three (Barh, Mahua and Rajgir), out of four test-checked SDHs, did not have these peripherals with the beds. Further, IPD beds of three (CHCs Bhagwanpur and Bakhtiyarpur and RH, Makhdumpur), out of the six test-checked RHs/CHCs, did not have these peripherals. Only IV stand and bedside locker were available in RH, Chandi and CHC, Kako, whereas only IV stand was available in CHC, Sigheshwar. Audit also observed that, these peripherals were not available in nine[19] out of ten test-checked PHCs. Deficiencies of these peripherals might defer administration of drugs to them, as well as violate their privacy.

The Department replied (December 2022) that peripherals were being provided in the Patna and Vaishali districts. However, during cross-verification (January 2023) of the reply, the required peripherals were not found available in SDH, Barh.

➢ NHM Assessor's Guidebook envisages that to prevent cross-infection and allow bedside nursing care, a distance of 2.25 metres was to be maintained between the centres of two beds. Audit, however, observed that the distance between beds were not maintained in any of the test-checked SDHs/RHs/CHCs/PHCs. An example of SDH, Mahua, has been shown in ***Image 3.5***.

Image 3.5: Close setting beds in SDH Mahua (06.04.2022)

The Department accepted (December 2022) that, in the Vaishali district, due to lack of space, standard distance between two beds had not been maintained and distance was being maintained in the Patna district. Specific reply in the context of test-checked healthcare facilities, was not provided by the Department.

➢ Audit also noticed that dedicated toilets for males and females, with running water facility for each ward of IPD were not available in SDHs Barh and Rajgir;

[19] *IPD facility was not available in PHC, Bihta.*

CHCs Sigheshwar, Kako and Bakhtiyarpur and RH, Makhdumpur. Audit noticed that this facility was not available in the six[20] test-checked PHCs, as well.

No specific reply, on this audit observation, was provided (August 2023 and October 2023) by the Department.

3.2.4 Non-evaluation of IPD services

As per IPH Standards, IPD services provided in the healthcare facilities were to be evaluated on a monthly basis, through certain outcome indicators *viz*. Bed Occupancy Rate (BOR), Leave Against Medical Advice (LAMA) Rate, Patient Satisfaction Score (PSS), Average Length of Stay (ALOS), Adverse Event Rate (AER), Absconding Rate, Discharge Rate (DR) and Bed Turnover Rate (BTR). These evaluations were to be carried out by the healthcare facilities, by using their data. Result of the outcome indicators indicate level of productivity, efficiency, clinical care and safety and service quality of healthcare facilities (e.g. Bed Occupancy Rate measures the productivity of the hospital services and is a measure of verifying whether the available infrastructure and processes are adequate for the delivery of health services.)

Audit observed that the test-checked healthcare facilities had not assessed outcome indicators for IPD services during FYs 2016-17 to 2021-22. Thus, the test-checked healthcare facilities were not measuring productivity, efficiency, clinical care and safety and service quality. This was indicative of the lack of effective monitoring, which was a pre-requisite for subsequent improvement in IPD services.

Specific reply, in the context of the audit observation, was not provided (August 2023 and October 2023) by the Department.

3.2.5 Lack of completeness of medical records

The Indian Medical Council Regulations, 2002, require that every physician shall maintain Bed Head Tickets (BHTs)[21], pertaining to his/her indoor patients, for a period of three years from the date of commencement of the treatment, in a standard proforma.

Scrutiny of 45 BHTs of two test-checked SDHs[22], pertaining to the sampled months *i.e.* February 2020, May 2020 and August 2021, showed that the required details (such as occupation of patient, investigation advised, follow up *etc*.) were not being filled in a complete manner.

Scrutiny of 176 BHTs of four test-checked RH/CHCs[23], pertaining to the sampled months *i.e.* February 2020, May 2020 and August 2021, disclosed that the required details[24] were not being filled in a complete manner.

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[20] *Daniyanwan, Ghailarh, Jandaha, Shankarpur, Sikaria and Silao.*

[21] *Details of medical history of a patient, from the date of admission till discharge.*

[22] *SDH, Barh (30) only for FYs 2019-20 and 2020-21 and SDH, Mahua (15) for FY 2019-22.*

[23] *CHC, Kako (46) for FYs 2019-20 and 2020-21, CHC, Bakhtiyarpur (45) for FYs 2019-20 to 2021-22; RH, Chandi (65) for FYs 2019-20 to 2021-22 and CHC Bhagwanpur (20) for FYs 2020-21 and 2021-22.*

[24] *Occupation of patient (100 per cent), investigation advised (59 per cent) and follow up (100 per cent).*

Further, systematic maintenance and record keeping of BHTs was not observed in the test-checked PHCs. Improperly filled BHTs can potentially impact the continuity and efficiency of medical care provided to the patients, especially in case of follow-up or referral to higher healthcare facilities.

Also, ***Paragraph 2.4.23.1*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, has indicated that the required details related to the patients were not filled completely in BHTs, in the five test-checked DHs, for the sampled months of February 2018, May 2018 and August 2019.

Department did not provide any response to this audit observation.

3.2.6 Non-availability of OTs

IPH Standards prescribed that: (i) OTs for elective major surgery should be available in SDHs having bed strength of 51 to 100 and (ii) an emergency OT is to be available in every SDH, for providing emergency services. The NHM Assessor's Guidebook provided for 24x7 OT services for General[25], Obstetrics and Gynaecology related surgeries and Accident and Emergency Services must be available in CHCs.

OTs, required for emergency surgeries[26], were not available in any of the test-checked SDHs, RHs and CHCs, although a minor OT[27] was available in three SDHs (Mahua, Rajgir and Barh), two RHs (Chandi and Makhdumpur) and two CHCs (Bakhtiyarpur and Kako).

Non-availability of OTs lead to denial of surgical operations as part of the treatment process, thereby driving patients to private healthcare institutions, or resulting in referral to other government hospitals.

Further, ***Paragraph 2.4.6*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, indicated that none, three (Jehnabad, Madhepura and Patna) and two (Jehnabad and Patna) of the five test-checked DHs had OTs for emergency surgeries, elective major surgeries and ophthalmology/ENT surgeries, respectively.

The Department replied (December 2022) that, in the Patna district emergency and minor OTs were available in SDHs. However, during cross-verification (January 2023), it was noticed that only minor OT was available in SDH, Barh. The Department further replied (February 2023, August 2023 and October 2023) that minor and major OTs were available in SDH, Barh. However, no reply was furnished in regard to the other test-checked districts, except Patna.

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[25] *Incision and drainage, Hernia, Hydrocele, Appendicitis, Haemorrhoids, Fistula and stitching of injuries.*

[26] *Include accident and emergency surgeries.*

[27] *Provides services for minor surgical procedures like dressing of wounds, suture removal, abscess drainage etc.*

3.2.7 *Non-availability of essential equipment for OT*

IPH Standards prescribe 25 and 13 equipment for OT in SDHs and RHs/CHCs respectively (***Appendix 3.7***). Availability of essential equipment, in OTs of the test-checked SDHs/RHs/CHCs[28], is shown in **Table 3.10**.

Table 3.10: Availability of essential equipment in OTs (during FY 2016-17 to 2021-22)

Healthcare facility	No. of essential equipment not available (*per cent*)					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
SDH, Mahua	NA*	NA	NA	NA	NA	17 (68)
SDH, Barh	21 (84)	21 (84)	21 (84)	21 (84)	21 (84)	21 (84)
RH, Chandi	8 (61)	8 (61)	8 (61)	8 (61)	8 (61)	8 (61)
RH, Makhdumpur	6 (46)	6 (46)	6 (46)	6 (46)	6 (46)	6 (46)
CHC, Bhagwanpur	NA	NA	NA	NA	NA	9 (69)
CHC, Bakhtiyarpur	NA	NA	NA	NA	NA	8 (61)
CHC, Kako	7 (54)	4 (31)	2 (15)	2 (15)	2 (15)	2 (15)

*(Source: Test-checked healthcare facilities) *Records were not available.*

It can be seen from the **Table 3.10** that equipment available in the OTs of test-checked healthcare facilities were insufficient, implying that surgical treatment was sub-optimal in the test-checked SDHs/RHs/CHCs.

Non-availability of the equipment in OTs was observed in the test-checked DHs also and has been summarised in ***Sl. No. 5 of Appendix 1.2.***

The Department replied (December 2022) that, in the Vaishali district, availability of equipment in OTs would be ensured, as per standards, and, in Patna district, OTs had been strengthened and all OT equipment had been provided. During cross-verification (January 2023), in SDH, Barh, only those equipment were found available in the OT, as already mentioned in **Table 3.10**. The Department further replied (August 2023 and October 2023) that, in SDH, Barh, essential equipment were available in the OT and, in Vaishali district, standards and availability of equipment would be ensured in the future, as well. The Department, however, did not furnish reply in regard to the Jehanabad and Nalanda districts.

3.2.8 Average number of surgeries performed by Surgeons

As per NHM Assessor's Guidebook, surgeries performed per surgeon are an indicator to measure the efficiency of the hospitals. Details of the surgeries performed by the surgeons in all the DHs (May 2023), during FY 2021-22, are shown in **Table 3.11.**

Table 3.11: Surgeries per surgeon during FY 2021-22 in all DHs

Particulars	General	ENT	Ortho	Eye
Number of major surgeries performed	4,682	19	244	2,528
Number of Surgeons	122	5	11	31
Surgeries performed per surgeon	38	4	22	82

(Source: Records of healthcare facilities)

[28] *Records not made available by SDH, Rajgir, CHC, Singheshwar and SDH, Udakishunganj.*

3.2.9 Lack of basic facilities in IPD in tertiary healthcare facilities

In all the three test-checked tertiary hospitals, the IPDs did not have positive air pressure isolation rooms[29], separate casualty wards, to manage the patient load in the event of disaster.

The Department attributed the shortcomings to the ongoing construction in PMCH, Patna and GMCH, Bettiah and stated that after completion of the construction and renovation work of the hospitals, quality services would be provided to the patients. The reply was in acceptance of the audit observation regarding lack of basic facilities in the hospitals.

3.3 Emergency Services

3.3.1 Availability of emergency services in SDHs

IPH Standards envisage that: (i) SDHs must have emergency services on 24x7 basis (ii) entry in the emergency services section should preferably be distinct and independent of the OPD main entry, so that minimum time is lost in providing immediate treatment to patients arriving in the hospital (iii) emergency services should include separate X-ray facility, basic laboratory facilities, mobile X-ray, plaster room, minor OT facilities and separate emergency beds and (iv) there should be sufficient waiting area for relatives located in such a manner that it does not disturb the functioning of emergency services.

Further, as per IPH Standards, an emergency OT is required to be available in each SDH. However, as discussed in ***Paragraph 3.2.6***, it was not available in all the four test-checked SDHs. Audit, also observed that accident and trauma care services were not available in any of the test-checked SDHs.

As such, emergency services were not being delivered according to IPH Standards in test-checked SDHs. Test-check of records[30] of emergency department in SDH, Mahua revealed that 21 (31 *per cent*), out of 67 patients, were referred to higher centres for better treatment. The number of emergency patients referred to higher centers, from the other test-checked SDHs, could not be assessed, for want of proper record keeping by them.

The Department replied (December 2022) that availability of equipment in the emergency department would be ensured as per standard, in the Vaishali and Patna districts. The Department further replied (August 2023) that emergency services had been started in SDH, Udakishunganj.

3.3.2 Availability of emergency services in RHs/CHCs

IPH Standards for RHs/CHCs provide that: (i) emergency cases be attended to in OPD during OPD hours and in in-patient units afterwards (ii) a separate earmarked emergency area be located near the entrance of hospital, preferably having four rooms-one for doctor, one for minor OT, one for plaster/dressing and one for patient's observation.

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[29] *Positive air pressure room, where an immune compromised patient is protected from airborne transmission of any infection.*

[30] *1st week of May 2020.*

Audit observed that: (i) emergency services were being provided on 24x7 basis, in all test-checked RHs/CHCs (ii) separate earmarked emergency area was available in CHCs Bakhtiyarpur, Bhagwanpur and Sigheshwar and RH, Chandi (iii) Minor OT and plaster services were not available in these RHs/CHCs.

As such, emergency services were not being delivered according to IPH Standards in these test-checked healthcare facilities. Emergency patients were generally being referred to higher government healthcare facilities after first-aid, but the number of emergency patients, referred to higher centres, could not be assessed, for want of proper record keeping by them.

3.3.3 Availability of emergency services in PHCs

IPH Standards for PHCs provide that 24 hours' emergency services have to be provided in PHCs. For this purpose, injuries and accidents were to be managed appropriately, through first aid; stitching of wounds; incision and drainage of abscesses; and stabilisation of the condition of the patient, before referral. These services were to be provided primarily by the nursing staff.

Audit observed that 24x7 emergency services such as first aid and stitching of wounds were being provided in all the test-checked PHCs before referral.

The Department replied (December 2022) that emergency services, in SDH, Udakishunganj have now been started. During cross-check (January 2023) of the reply, it was found that, though the emergency services had been started in the SDH, but OT facility, mobile X-ray, plaster room and distinct entry independent of the OPD main entry, were not available in the emergency department. Besides, ECG, Defibrillator, Laryngoscope and Laryngeal Mask Airway machine, were also not available in the emergency department and serious patients were being referred out of the hospital.

Further, ***Paragraph 2.4.13.1*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that emergency OT was not available in the test-checked DHs, thereby, patients in these healthcare units had been deprived of the required emergency surgeries and services despite availability of beds.

3.3.4 Availability of equipment for Emergency Services, Intensive Care Units (ICU)

NHM Assessor's Guidebook prescribed 14 and 20 (***Appendix 3.7***) essential equipment for emergency services, in SDHs and RHs/CHCs, respectively. Audit observed (May 2023) that out of total 35 DHs, ICU services were not available in 17 DHs[31]. Further, in seven test-checked SDHs/RHs/CHCs (no significant shortage was noticed in two SDHs, *viz*., Udakishunganj and Rajgir and RH, Chandi) significant shortages of prescribed equipment, during FY 2021-22 are shown in **Table 3.12.**

[31] *Services were not available in Araria, Arwal, Banka, Bhagalpur, Buxar, Jamui, Jehanabad, Khagaria, Kishanganj, Madhubani, Nalanda, Nawada, Patna, Samastipur, Sitamarhi, Supaul, Vaishali. Whereas information with respect to DH, Rohtas was not provided.*

Table 3.12: Availability of essential equipment in the Emergency Department

Healthcare facility	No. of essential equipment available	No. of essential equipment not available *(per cent)*
SDH, Barh	4	10 (71)
SDH, Mahua	9	5 (36)
RH, Makhdumpur	6	14 (70)
CHC, Bhagwanpur	6	14 (70)
CHC, Bakhtiyarpur	6	14 (70)
CHC, Kako	7	13 (65)
CHC, Singheshwar	8	12 (60)

(Source: Test-checked healthcare facilities)

Audit observed that these healthcare facilities had not carried out any gap-analysis for addressing the shortages during FYs from 2016-17 to 2021-22. Insufficient availability of equipment would have affected adversely, treatment in the emergency department of the healthcare facilities.

The Department replied (December 2022) that availability of equipment in the emergency department would be ensured, as per standard, in the Vaishali and Patna districts. Efforts were being made for the availability of ICU in SDHs. The Department further replied (August 2023 and October 2023) that, in SDH, Udakishanganj and CHC, Singheshwar, necessary equipment, as per recommendation of Specialised Doctors, had been provided and equipment for emergency services would be provided, as per standards. The Department, however, did neither provide any reply in regard to Jehanabad district, nor did it provide supporting documents regarding the availability of equipment in the test-checked SDHs and CHCs/RHs.

3.3.5 Non-availability of treatment facilities in Indira Gandhi Institute of Cardiology (IGIC)

IGIC provided treatment for different types of heart related ailments. The status of treatment, provided in different departments of the IGIC, during the calendar years 2017 to June 2022, is mentioned in **Table 3.13**.

Table 3.13: Treatment provided to patients in the different departments of IGIC (during the calendar years 2017 to June 2022)

(No. of patients)

Sl. No.	Department	Year					
		2017	2018	2019	2020	2021	Up to 06/2022
1.	**OPD**	75,834	80,228	78,371	39,618	49,665	22,954
2.	**IPD**	11,963	10,670	11,410	5,629	5,296	5,125
3.	**TEE**	50	97	62	0	0	0
4.	**PTCA**	136	177	166	131	156	201
5.	**BMV**	10	15	0	0	0	0
6.	**Open Heart Surgery**	3	34	47	0	0	0
7.	**Closed + Other Surgery**	26	36	70	64	63	10

(Source: Records of various departments in IGIC)

As evident from **Table 3.13**, treatment facilities had not been provided in cases of TEE, BMV and Open-Heart Surgery during 2020 to 2022 (i.e. for three years). There had been a sharp decline in the number of patients of OPD, IPD, Open heart and closed and other surgery, in comparison to 2017.

Scrutiny of records further disclosed that against sanctioned strength of 32 only six (19 *per cent*) Cardiac Surgeon were posted in IGIC. Further, against sanctioned strength of 24 only three (13 *per cent*) Anesthetist were posted in IGIC. These severe shortages resulted in sub-optimal outcomes, in so far as the objective of establishing a super specialty institution for Cardiology, was concerned.

The Department stated (December 2022) that the decline in the number of treated patients was mainly attributable to the COVID-19 pandemic and shortage of doctors, as well as surgeons in the healthcare facility. The reply itself corroborates the audit observation.

3.3.6 Treatment of pediatric heart diseases in IGIC

As per the Department's resolution (January 2021), Congenital Heart Disease (CHD) in children is a serious problem and in Bihar, 9 out of 1,000 babies were born with CHD. Almost 25 *per cent* of newborns with CHD requires surgery in the first year.

With a view to addressing this issue, GoB sanctioned (January 2021), a scheme (*Bal Hriday Yojana*), for providing free treatment to children born with CHD. It also declared (January 2021) IGIC, as a dedicated hospital for screening, identification and treatment of CHD, with IGIC being required to ensure screening, identification and quality treatment, free of cost, to ailing newborn children.

Audit noticed that, although IGIC was declared a dedicated hospital for CHD, GoB signed an MoU with a Gujrat based institute[32] for treatment of children diagnosed with CHD, as per their resolution. As such, IGIC was being used only for screening and referral of identified cases of CHD. During FY 2021-22, 1,142 CHD patients were screened and referred to other institute, for further treatment.

In response to this observation, the Director of the hospital stated that correspondence was being made with the Health department, for providing additional manpower, as well the required infrastructure.

As such, the objective of providing treatment for CHD, in the institute itself, could not be achieved.

The Department admitted the audit observation and stated (December 2022) that post of Pediatric Surgeon had not been sanctioned in the hospital and the cases were referred out of the State, as per the order of the State government.

[32] *Sri Sathya Sai Heart Hospital, Ahmedabad.*

3.4 Maternity Services

Maternal Mortality Rate (MMR-per lakh live births), Neonatal Mortality Rate (NMR - per 1,000 live births) and Under 5 Mortality Rate (U5MR- per 1,000 live births), are important indicators of the quality of maternity services. MMR, NMR and U5MR were higher for Bihar, as compared to the national average, as illustrated in ***Table 9.1* of *Paragraph 9.2*** of this Report. Major causes of maternal deaths included Anaemia, Haemorrhage (both *Ante* and Post Partum), Toxemia (Hypertension during pregnancy), Obstructed Labour, Puerperal Sepsis (Infections after delivery) and unsafe abortions. To improve these indicators, adequate maternity services were to be provided. These services mainly include Antenatal care (ANC)[33], Intra-partum care or delivery care (IPC)[34] and Post-natal care (PNC)[35]. Deficiencies noticed in maternity services are discussed in the succeeding paragraphs.

3.4.1 Antenatal Care

Guidelines issued by NHM on Antenatal Care (ANC) stipulated that, every pregnant woman should be provided with at least four antenatal check-ups, including first visit/registration. In order to reduce the maternal mortality ratio to less than 70 per 100,000 live births, the State Government had adopted[36] the following strategy:

- Percentage of pregnant women, with antenatal check-ups in the first trimester, to be increased progressively, from 34.6 *per cent* in 2015-16 to 90 *per cent* by 2030.
- Percentage of pregnant women, with at least four antenatal care visits, to be increased progressively, from 14.4 *per cent* in 2014-15 (NFHS) to 80 *per cent* by 2030.

Audit observed that ANC service was not available in three (SDH, Udakishunganj and PHCs Bihta and Noorsarai), out of 20 test-checked SDHs/CHCs/RHs/PHCs. In the remaining 17 healthcare facilities ANC records were not being maintained properly. A new number was being allotted to the registered pregnant woman, every time she turned up for ANC, in each trimester. Hence, it could not be ascertained whether the required number of ANC check-ups had been conducted.

Further, audit observation related to the *Ante natal* care to be provided to the registered pregnant women in the test-checked DHs has been pointed out in ***Paragraph 2.5.1*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020.

The fifth round of National Family Health Survey[37] (NFHS–5) 2019-20, had reported that only 52.9 *per cent* pregnant women had been given antenatal care check-ups in

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33 *Systemic supervision of women during pregnancy, to monitor the progress of foetal growth and wellbeing of the mother.*

34 *Interventions carried out for safe delivery in the labour room and operation theatre.*

35 *Medical care of the mother and newborn, after delivery of the child, especially during the critical 48 hours post-delivery.*

36 *Bihar SDG Vision Document, 2017.*

37 *NFHS is conducted by Ministry of Health and Family Welfare, GoI, on various health parameters, using Computer Assisted Personal Interviewing (CAPI).*

the first trimester and only 25.2 *per cent* pregnant women had been given all four antenatal check-ups, in the State. Out of the five test-checked districts, Jehanabad (17.4 *per cent*), Patna (17.9 *per cent*) and Madhepura (20.9 *per cent*) were the lowest performing districts, in terms of all four essential ANCs. Audit observed that, although the figures had increased in NFHS-5, as compared to NFHS-4[38] (2015-16), the MMR of the State was 118 per 1,00,000 live births, during 2019, against the national average of 97.

The Department replied (December 2022) that, in the Madhepura district, ANC had been effected due to COVID-19 pandemic and this had been rectified. Further, in the Patna district, quality ANC was being provided to all pregnant women. The Department further replied (October 2023) that: (i) ANC was being provided at SDH, Barh (ii) ANC had been started on daily basis in SDH, Udakishanganj (Madhepura) and (iii) no body had been denied ANC services in any healthcare facilities.

The Department, however, did not provide a reply in regard to Jehanabad district and also did not provide supporting documents regarding the availability of ANC services.

3.4.2 Pathological investigations

ANC Guidelines, 2010, prescribe availability of six[39] pathological investigations at SDHs/RHs/CHCs/PHCs/, under ANC service, to identify pregnancy related complications.

Scrutiny of records revealed that these pathological investigations were available only in five[40], out of 12 test-checked healthcare facilities during sample months. Basic investigations, such as Blood Group, VDRL/RPR, HBsAg and Rapid Malaria test, were not available in a majority of healthcare facilities ***(Appendix 3.8)***. Thus, pregnant women, visiting healthcare facilities for ANC remained deprived of prompt diagnosis and evidence based treatment.

The Department replied (December 2022) that, in the Jehanabad district, only four types of tests were being carried out. However, the reply of the Department was not specific to any of the test-checked healthcare facilities.

The Department further replied (October 2023) that the State Government had been continuously working towards strengthening of diagnostics services.

3.4.3 Iron and Folic Acid (IFA) supplement to pregnant women

As per ANC guidelines, all registered pregnant women were to be given IFA (100 mg elemental iron and 0.5 mg folic acid) every day, for at least 100 days, starting after the first trimester, as a preventive measure and two IFA tablets per day, for three months, as a therapeutic dose, to check anaemia.

Only 11, out of 20 test-checked healthcare facilities, provided records related to supplementation of IFA tablets. Audit observed that supplementation of IFA tablets

[38] *34.6 per cent mothers had been given antenatal check-ups in the first trimester and only 14.4 per cent mothers had been given all four antenatal check-ups, in the State.*

[39] *Blood group including Rh factor, Venereal disease research laboratory (VDRL)/ Rapid Plasma Reagin (RPR), HIV testing, Rapid malaria test, Blood sugar testing and Hepatitis B Surface Antigen (HBsAg).*

[40] *RH, Chandi; PHCs, Daniyawan, Silao, Jandaha and Shankarpur.*

to registered pregnant women and anaemic pregnant women was not ensured in all the cases, in all of the test-checked healthcare facilities. A summarised view of the supplementation of IFA tablets is given in **Table 3.14**.

Table 3.14: Details of supplementation of IFA tablets, in test-checked healthcare facilities, during FYs 2016-17 to 2021-22 (as on March 2022)

Healthcare facility	Total no. of pregnant women registered for ANC	Number of pregnant women provided full course of IFA tablets *(per cent)*
SDH, Barh	6,329	6,240 *(99)*
SDH, Mahua	6,536	4,200 (64)
RH, Chandi	26,599	18,113 (68)
CHC, Bakhtiyarpur	34,265	22,655 *(66)*
CHC, Singheshwar	28,417	25,552 (90)
CHC, Bhagwanpur	36,623	27,978 (76)
PHC, Ghailarh	16,231	14,579 *(90)*
PHC, Goraul	29,530	25,290 (86)
PHC, Noorsarai	23,343	7,700 (33)
PHC, Daniyawan	10,226	6,761 (66)
PHC, Silao	23,986	8,267 (34)
Total	**2,42,085**	**1,67,335 (69)**

(Source: Test-checked healthcare facilities)

As evident from **Table 3.14**, one *per cent* to 67 *per cent* of the registered pregnant women were not supplemented with the full course of IFA tablets, during FYs 2016-17 to 2021-22. Thus, preventive and therapeutic doses, to check anaemia, were not ensured in 31 *per cent* cases (on an average), in the test-checked healthcare facilities. NFHS–5 had also reported that, in Bihar, only 18 *per cent* mothers had consumed Iron Folic Acid for 100 days or more, when they were pregnant.

The Department replied (December 2022) that, in the Madhepura district, ANMs of CHC, Singheshwar, had been directed to provide IFA tablets to all pregnant women. The Department further replied (October 2023) that sufficient stock of IFA tablets was available in the districts and they had been directed to provide 180 IFA tablets to all pregnant women, at all levels of ANC sites.

3.4.4 Non-Administering of Tetanus Toxoid (TT) injection to all pregnant women

Guidelines of ANC provide for administering Tetanus Toxoid (TT) injection[41], to all pregnant women, for prevention of maternal and neonatal tetanus. The first dose should be administered immediately, preferably when women register for ANC.

Audit observed that TT injections had not been administered to all pregnant women registered under ANC, as only 3,793 (39 *per cent*), out of the 9,692 pregnant women registered, had been administered TT injections, in the test-checked SDHs[42], during FYs 2017-18 to 2021-22. Only 67 *per cent* pregnant

[41] *One or two doses, as the case may be.*

[42] *SDHs: Barh and Mahua (data not available for SDH, Udakishunganj and Rajgir).*

women had been administered TT injections in the test-checked RHs/CHCs[43]. In the test-checked PHCs[44], however, almost 100 *per cent* pregnant women had been administered TT injections. Non-administration of TT injections, in the test-checked healthcare facilities, indicates lapses in providing ANC services.

The Department replied (December 2022 and October 2023) that, in the Madhepura and Patna districts, TT injections were being administered to all pregnant women. The Department, however did not furnish a reply in regard to the other districts.

3.4.5 Comprehensive Abortion Care

Unsafe abortions, due to complications during pregnancy, contribute to maternal morbidity and mortality. Availability of safe, effective and acceptable abortion care services, is one of the most important aspects of maternity services. The Maternal and Newborn Health (MNH) Toolkit issued by the Ministry of Health and Family Welfare, GoI, prescribes the availability of Comprehensive Abortion Care (CAC) services at SDH/RH/CHC and PHC level healthcare facilities, with deployment of an MTP trained[45] medical officer.

Audit observed that, out of 20 test-checked healthcare facilities, CAC facility was available in SDH, Mahua only. The facility was not available in remaining 19 healthcare facilities, for want of trained medical officers. Further, in SDH, Mahua, 17 abortions had been carried out during FY 2021-22[46], which reaffirms the necessity of such facilities in healthcare facilities.

The Department replied (December 2022 and October 2023) that, in the Patna district, the CAC services were being provided at SDH, Barh and PHC, Daniyawan and report of the same was being reported on HMIS portal. The Department, however, not replied for other districts.

3.4.6 Intra-partum care and institutional deliveries

Intra-partum Care (IPC) relates to care of pregnant woman during the intra-partum period (the time period spanning from the onset of labour to childbirth). Proper care during labour is expected to save not only mother and her newborn baby, but also to prevent stillbirths, neonatal deaths and other complications.

For providing effective intra partum care and ensuring institutional deliveries, the *Janani Shishu Suraksha Karyakaram* (JSSK) had been implemented in government healthcare facilities. It envisaged timely access to quality services, both essential and emergency, to reduce maternal and infant deaths, without any burden of out-of-pocket expenses. Under the Scheme, pregnant women were entitled for free drugs and consumables, diagnostics, blood and diet, during their stay in government public healthcare facilities.

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43 *RH: Chandi (data not available for RH, Makhdumpur), CHCs: Bakhtiyarpur, Singheshwar and Bhagwanpur (data not available for CHC, Kako).*

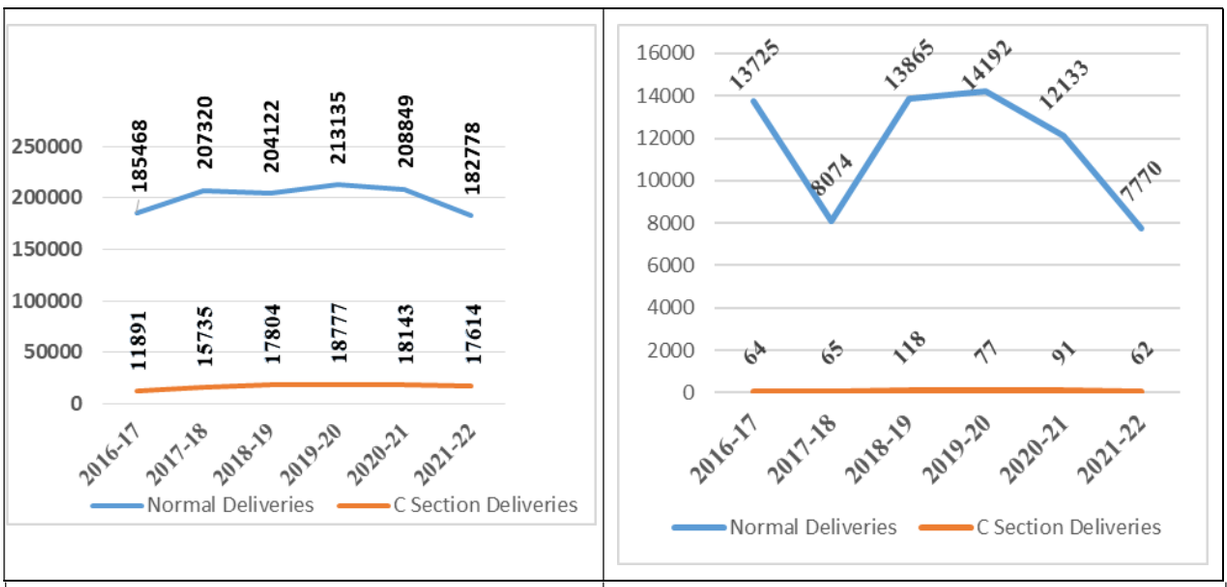
44 *PHCs: Ghailarh, Goraul, Noorsarai, Daniyawan and Silao (data was not available for PHCs Bihta, Jandaha, Ratni Faridpur, Shankarpu and Sikaria).*

45 *MTP: Medical Termination of Pregnancy.*

46 *Data was available only from February 2022 to March 2022.*

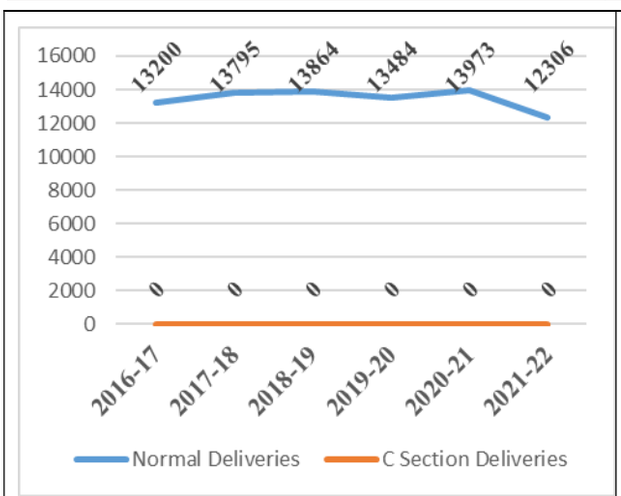
Details of institutional deliveries, in all the DHs of the state (March 2022) and in the 20 test-checked healthcare facilities, are shown in **Chart 3.5**.

Chart 3.5: Deliveries in DHs and in the test-checked healthcare facilities

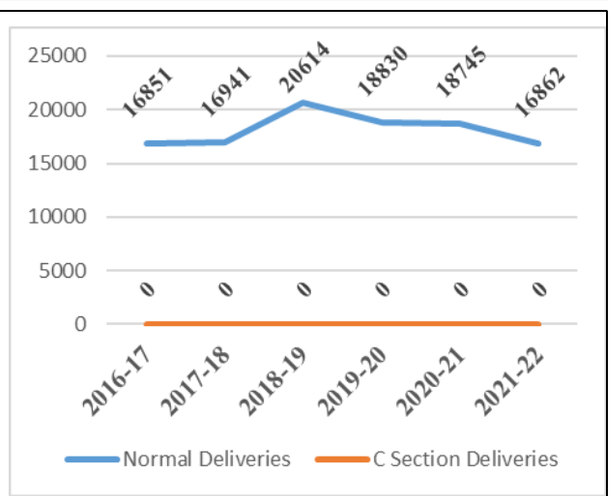


Institutional Deliveries in all DHs

Institutional Deliveries in test-checked SDHs



Institutional Deliveries in RHs/CHCs



Institutional Deliveries in PHCs

(Source: Records of the test-checked healthcare facilities)

Chart 3.5 indicates that the institutional deliveries in the test-checked SDHs/ RHs/ CHCs and PHCs were not in increasing trend during FYs 2016-17 to 2021-22. It also indicates increase in normal and C-section deliveries in 2019-20, by 15 *per cent* and 58 *per cent*, respectively from 2016-17 and decrease by 14 *per cent* and six *per cent*, respectively in 2021-22, in all DHs.

Audit also observed that the C (caesarean) section delivery facility was available only in SDHs, Mahua and Rajgir (out of test-checked SDHs and RHs/CHCs and PHCs). In these test-checked SDHs, normal deliveries and C-section deliveries

decreased by 43 *per cent* and three *per cent,* respectively from 2016-17 to 2021-22. Absence of C-section deliveries, in the test-checked SDHs, was mainly due to the shortage of Specialist Doctors (Obstetrics and Gynaecologist), non-availability of OTs, shortage of essential equipment in maternity department and non-availability of blood storage units, as discussed in ***Paragraphs* 2.10.2, 3.2.6, 3.4.9** and **3.6.7.2**, respectively. In the absence of C-section delivery service, maternity cases requiring C-section delivery were either being referred to DHs or possibility of patients approaching private clinics (which would have entailed out-of-pocket expenses, contrary to the stipulations made in the JSSK) on their own, could not be ruled out.

The Department replied (December 2022) that, in the Patna district, delivery facility was available in all PHCs/CHCs/RHs/SDHs. The reply was not specific to the audit observation. Further, during cross-verification (January 2023) of the reply in SDH, Barh, it was noticed that facility for C-section delivery was not available in the hospital. The Department further replied (October 2023) that renovation of the OT at SDH, Barh, was under process and C-section deliveries would be started after renovation of the OT.

3.4.7 Availability of drugs for maternity services

The Maternal and Newborn Health Toolkit (MNH Toolkit) prescribes availability of 28 **(*Appendix-3.9*)** drugs for maternity services in PHC and above level healthcare facilities.

Audit scrutiny revealed that the average non-availability of essential drugs, during the sampled months[47], varied between 64 *per cent* to 75 *per cent* in SDHs; 39 *per cent* to 93 *per cent* in RHs/CHCs and 32 *per cent* to 86 *per cent* in PHCs. Major shortfalls (more than 50 *per cent*) were in SDHs: Barh, Mahua and Rajgir; CHCs: Bhagwanpur and Bakhtiyarpur and PHCs: Goraul, Noorsarai and Sikaria. Audit further observed that Injection Oxytocin 10 IU, Injection Hydrazaline, Injection Carboprost and Injection Fortwin, required for maternity services, were not available in any of the test-checked healthcare facilities, during the sampled months.

Further, ***Paragraph 2.5.3.1*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had pointed out non-availability of maternity related drugs in the test-checked DHs.

Non-availability/shortage of drugs had affected the ability of the healthcare facilities to provide maternity care. This was evident from the fact that institutional deliveries had decreased in SDHs and C-section delivery facility was not being provided in any of the test-checked healthcare facilities (except SDHs Rajgir and Mahua).

The Department replied (December 2022) that, in the Jehanabad district, all required drugs, related to maternal health, were available and were being provided to patients. In Patna district, drugs were being provided by the BMSICL and, if

[47] *February 2020, May 2020 and August 2021.*

required, being purchased locally. During cross-check (January 2023) of the reply, in SDH, Barh and PHC, Daniyawan, it was noticed that the required drugs, related to maternity services, were partially available. The Department further replied (October 2023) that: (i) drugs related to maternal health were available and were being provided to the patients and (ii) the districts had been directed to indent the drugs related to maternal health, in time, and also ensure availability of stock, at all levels of hospitals.

3.4.8 Shortage of consumables in Maternity Services

Shortage of consumables affects adversely, the safety in the delivery of a child. The MNH Toolkit prescribes 20 ***(Appendix 3.9)*** consumables for maternity services at healthcare facilities. Audit observed that the average shortage of required consumables, during the sampled months of the FYs from 2019-20 to 2021-22, ranged between 40 *per cent and* 80 *per cent,* in 13[48] test-checked healthcare facilities, as detailed in **Table 3.15**.

Table 3.15: Shortage of consumables in test-checked healthcare facilities during sampled months of FYs 2019-20 to 2021-22

Healthcare facility	No. of non-available consumables			
	February 2020	May 2020	August 2021	Average shortage (in *per cent*)
SDH, Barh	16	17	RNA*	16 (80)
SDH, Mahua	11	10	10	10 (50)
SDH, Rajgir	16	13	RNA	14 (70)
RH, Chandi	10	10	10	10 (50)
RH, Makhdumpur	13	13	RNA	13 (65)
CHC, Bhagwanpur	16	18	14	16 (80)
CHC, Bakhtiyarpur	10	12	11	11 (55)
CHC, Kako	8	9	RNA	8 (40)
CHC, Sigheshwar	13	13	6	11 (55)
PHC, Goraul	13	12	12	12 (60)
PHC, Sikaria	10	11	11	11 (55)
PHC, Noorsarai	13	14	RNA	13 (65)
PHC, Shankarpur	9	9	RNA	9 (45)

(Source: Test-checked healthcare facilities) **RNA: Record and data not made available*

As can be seen in **Table 3.15**, all the test-checked healthcare facilities had significant shortfalls of consumables required for maternity services. More than 50 *per cent* shortage was noticed, in nine, out of these 13 test-checked healthcare facilities. Scrutiny of records further revealed that consumables, required for delivery and other maternity services, including draw sheets, baby wrapping sheets, thread for suture, nasogastric tubes (disposable) and identification tags *etc*. were not available in any of the test-checked healthcare facilities, during the sampled months.

Non-availability of consumables in maternity services was observed in the test-checked DHs also and has been summarised in ***Sl. No. 8*** of ***Appendix 1.2***.

[48] *Data not available for SDH, Udakishanganj; PHCs, Bihta, Daniyawan, Ghailarh, Jandaha, Ratni Faridpur and Silao.*

The Department replied (October 2023) that maternity consumables were available and districts had been directed to indent the maternity consumables, in time, and ensure availability of their stock, at all levels of hospitals.

3.4.9 Shortage of essential equipment in maternity services

IPH Standards prescribe 27 ***(Appendix 3.9)*** items of equipment, for examination and monitoring of patients, under the Maternity Department, in SDHs. Audit observed significant shortages of essential equipment ranging between 37 *per cent* to 48 *per cent,* in the maternity department of the test- checked SDHs[49]. Short availability of equipment was mainly attributable to non-preparation of annual procurement plans and non-finalisation of essential equipment list for the functioning of the hospitals, as discussed in ***Paragraph 4.3.1*** and ***4.3.2***. Shortage of essential equipment might have adversely affected, the ability of hospitals, in examination and monitoring of maternity cases.

The Department replied (October 2023) that: (i) districts have been directed to indent the required essential equipment (ii) the Procurement Cell has conducted gap assessment and (iii) there would be no shortage of essential equipment in maternity services, in future.

3.4.10 Preparation of Partographs

As envisaged in the Guidelines[50] issued by Ministry of Health and Family Welfare, GoI, a 'Partograph' is a graphic recording of the progress of labour and salient conditions of the mother and the foetus. It assesses the need for timely action and referral to higher medical facilities, if required, for further management. The Partograph is to be recorded when a woman reaches active labour.

During scrutiny of records, Audit noticed cases of non-maintenance or partial maintenance of Partographs. Out of 12 test-checked healthcare facilities, where records (BHT/Case sheets) were made available to Audit, only two healthcare facilities had plotted Partographs, in 100 *per cent* test-checked (109[51] BHTs) cases, during the sampled months of FYs 2019-20 to 2021-22. Cases of partially maintained (139 out of 233[52] BHTs) Partographs were found in eight healthcare facilities, while cases of non-maintenance of records were found in two[53] healthcare facilities. Reason(s) for non-maintenance of Partographs were not found available on record. Partial maintenance/non-maintenance of Partographs exposes patients, as well as newborns to the risk of adverse delivery outcomes.

Further, ***Paragraph 2.5.4.1*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had pointed out audit

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49 *Barh: 13 (48 per cent); Mahua: 10 (37 per cent) and Rajgir: 11 (41 per cent) (data not available for SDH, Udakishanganj).*

50 *Guidelines for antenatal care and skilled attendance at birth, by ANMs and Lady Health Visitors.*

51 *CHC: Bakhtiyarpur (45) and RH: Chandi (64).*

52 *SDH Rajgir (four out of 10); CHCs: Bhagwanpur (27 out of 38); Kako (41 out of 46); Singheshwar (eigh out of nine); PHCs: Sikaria (one out of two); Ratni Faridpur (22 out of 37); Ghailarh (10 out of 31) and Daniyawan (26 out of 60).*

53 *SDH, Barh and PHC, Shankarpur.*

observation related to non-maintenance/plotting of Partographs in the test-checked DHs.

The Department replied (October 2023) that: (i) Partographs were being maintained and districts had been directed to ensure their proper use and (ii) training also been provided to the concerned staff. Supporting documents, in this regard, were, however, not provided.

3.4.11 Post partum Care

Guidelines for Antenatal Care and Skilled Attendance at Birth, issued by Ministry of Health and Family Welfare, GoI, envisage: (i) the first six weeks after delivery, as the postpartum period and (ii) 48 hours after delivery, as being the most critical, in the entire post-partum period. Therefore, the stay of the mother, at the healthcare facility, is necessary for at least 48 hours after delivery and she should be discharged thereafter, in normal cases.

During 2016-17 to 2022-23, Audit observed (May 2023) that in the DHs of the state, stay of the mother at the healthcare facility, for 48 hours after delivery, could not be ensured in 73 *per cent* (during 2020-21) to 83 *per cent* (during 2016-17) of the cases. Further, ***Paragraph 2.5.5*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that stayal of mother for 48 hours after delivery could not be ensured in 89 *per cent* of the cases during 2014-20 in the test-checked DHs.

Further, in 16, out of 20 test-checked healthcare facilities[54], stay of the mother at the healthcare facility, for 48 hours after delivery, could not be ensured in 97 *per cent* to 100 *per cent* of the cases, during FYs 2016-17 to 2021-22. In these healthcare facilities, mothers had left healthcare facilities themselves, within six to eight hours after the delivery, at their own risk and against doctor's advice. This implied that the mother and child had not been monitored after delivery, in the post-partum period, which was risky for the lives of the mothers, as well as the newborn.

The Department replied (October 2023) that, at least 48 hours stay, after delivery, was being ensured and the Department was trying to improve the post-partum care.

3.4.12 Maternal Death[55] Review

Maternal Death Review (MDR) is a process to reduce maternal mortality, by exploring the lacunae in the health system. As per the Maternal Death Review guidebook of NHM: (i) all maternal deaths should be investigated within 24 hours, using the prescribed Facility Based Maternal Death Review (FBMDR) format (ii) a copy of the reviewed format should be sent to the District Nodal Officer (DNO)

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[54] *Data was not available for RH, Makhdumpur and PHC, Jandaha, for the entire test-checked period; data was not made available for CHC, Kako, for FYs 2016-17 and 2017-18 and PHC, Daniyawan for FY 2021-22.*

[55] *Death of a woman while pregnant or within 42 days of the termination of pregnancy/delivery, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.*

and Facility Based Maternal Death Review Committee (FBMDRC), headed by in-charge of the concerned healthcare facility, along with the case sheet and (iii) the healthcare facility should keep a record of all maternal deaths, in a register maintained for this purpose.

Audit observed that 24 cases of maternal deaths had been reported in the 16 test-checked healthcare facilities, during FYs 2016-17 to 2021-22, but maternal death review had been conducted in the prescribed time limit in only one case, in PHC, Goraul (***Appendix 3.10***).

Audit further observed that: (i) maternal death registers had not been maintained in any of the test-checked healthcare facilities and (ii) Facility Based Maternal Death Review Committee (FBMDRC), had not been constituted in the test-checked healthcare facilities (except for SDH, Barh, CHC, Kako, RH, Makhdumpur and PHC, Ratni Faridpur).

The State Health Society had also sought monthly reports on maternal deaths and their review through the concerned District Health Societies (DHSs). Monthly reports were, however, not found available on records, indicating deficient monitoring by the Department.

Thus, maternal death reviews were not conducted in most of the cases and the healthcare facilities had not carried out any analysis of the deaths, for taking subsequent corrective action.

The Department replied (October 2023) that 38 and 2, out of 43 and 4 facility based maternal death reviews (FBMDR), had been conducted in Patna and Nalanda, respectively. The Department, however, did not provide reasons for not conducting MDR in other test-checked districts.

Recommendation 3: State government may ensure availability of maternity services (Antenatal Care, Intra-partum care and Post-partum care) to every pregnant woman/mother.

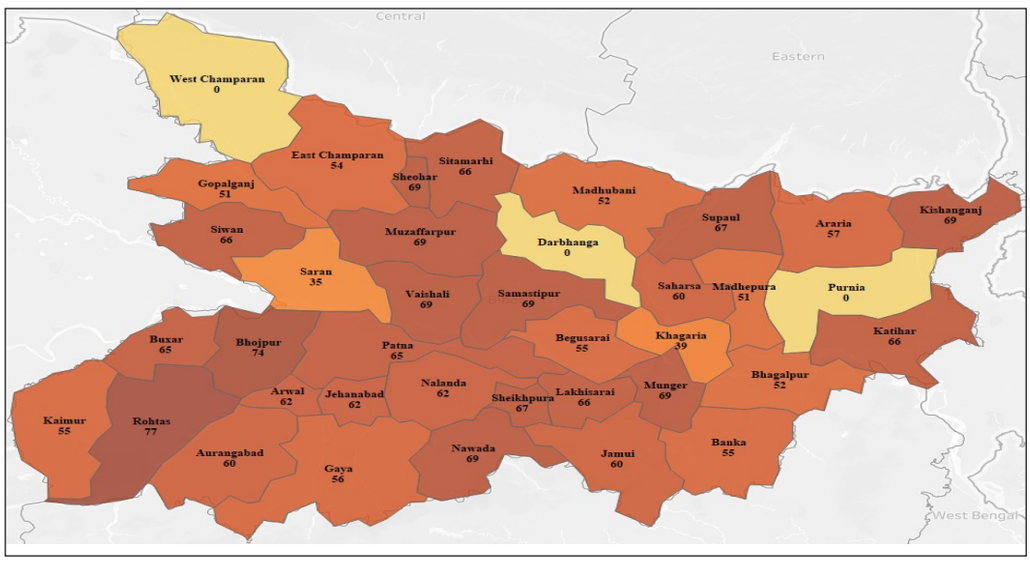
3.5 Diagnostic Services

Diagnostics are an integral part of the healthcare system and provide information needed by service providers, for making informed decisions related to prevention, screening, detection, treatment and management.

3.5.1 Diagnostic Services in DHs

As per IPH Standards, laboratory of a District Hospital was to be able to perform 121 tests. Further, GoB, committed (August 2010) to provide pathological and radiological test services, free of cost in government hospitals. The status of diagnostic services being provided in all the DHs is shown in **Chart 3.6**.

Chart 3.6: Shortages (in *per cent*) of diagnostic services in the DHs



(Source: Information collected from all the DHs)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the shortages.

Audit observed that none of the DHs had provided all the required diagnostic facilities. It was also observed that against required 121 diagnostic testing facilities, unavailability of diagnostic services ranged between 34.71 *per cent* (Saran) and 76.86 *per cent* (Rohtas). Non-availability of specific diagnostic services (Pathology, Radiology, Biochemistry, Endoscopy *etc*.) in all the DHs are detailed in ***Appendix 3.11***.

Further, ***Paragraph 2.3*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated shortage of diagnostic services ranging from 66 *per cent* to 73 *per cent.*

For test-checked healthcare facilities, Audit observed that none of them had provided all the required diagnostic services as per the IPHS/NHM Assessor's Guidebook/ NHM Free Diagnostic Service Initiative, during FYs 2016-17 to 2021-22, as detailed in **Table 3.16**.

Table 3.16: Details of range of diagnostic tests, provided during FYs 2016-17 to 2021-22, in the test-checked healthcare facilities

Type of the healthcare facility	No. of test-checked healthcare facilities	Requirement		Range of non-availability of tests (*per cent*)
		Norms details	No. of tests required to be available	
SDH	4	IPHS/ NHM Free Diagnostic Service Initiative	111	56 to 106 *(50 to 95)*
RH/CHC	6	IPHS/ NHM Assessor's Guidebook/NHM Free Diagnostic Service Initiative	85	32 to 76 *(38 to 89)*
PHC	10		31	6 to 31 *(19 to 100)*
APHC	17		25	15 to 25 *(60 to 100)*
HSC	31		14	9 to 14 *(64 to 100)*
Total	**68**			

(Source: Information provided by test-checked healthcare facilities)

Table 3.16 includes PHC, Bihta, seven[56] APHCs and 12[57] HSCs, wherein diagnostic facilities were not available, thus indicates the ineffective diagnostic test facilities available in the test-checked healthcare facilities.

Audit further observed that diagnostic facilities were not available beyond OPD hours in the test-checked healthcare facilities (except in CHC, Kako and PHCs Ratni Faridpur, Sikariya and Shankarpur), though required as per the NHM Assessor's Guidebook.

Non-availability of diagnostic services beyond OPD hours was mainly attributable to shortage of manpower, as details in ***Appendix 3.12***.

Non-availability of diagnostic services was observed in the test-checked DHs also and has been summarised in ***Sl. No. 3 of Appendix 1.2***.

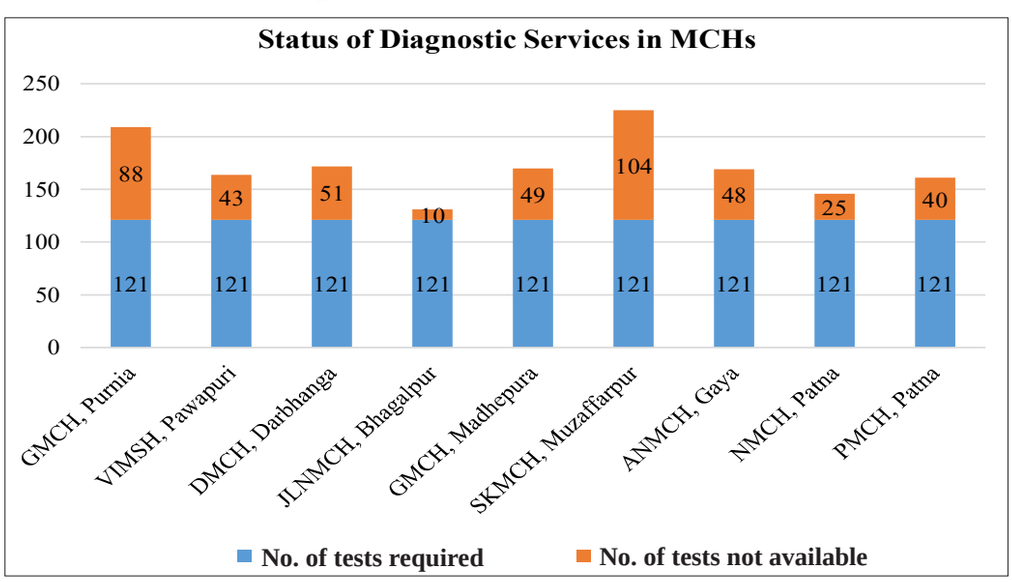
The Department replied (October 2023) that: (i) the Department of Health had issued "Essential Diagnostics List (EDgL)" (ii) in-house or referral basis tests to be conducted by healthcare facility had been listed and (iii) SHSB and BMSICL were working towards gap assessment of diagnostics equipment, for strengthening and availability of pathology services at district hospitals.

3.5.2 Non-availability of Diagnostic Services in tertiary healthcare facilities

As per MCI norms, every Medical College and Hospital should have separate departments of pathology, microbiology and biochemistry, for providing diagnostic services.

The information furnished (May 2023) by nine (except Government Medical College and Hospital, Bettiah) medical college and hospitals, showed the status of diagnostic services, as given in **Chart 3.7**.

Chart 3.7: Diagnostic Services in MCHs (as of March 2023)



(Source: Data collected from MCHs)

[56] APHCs: *Dahpar, Derhsaiya, Mahkar, Maura Kabiyahi, Shahjanhapur, Sithora and Utrapatti.*

[57] HSCs: *Asoi, Daughra, Dhanadihri, Gonwan, Jagatpur, Kabiyahi, May, Rajanbigha, Rupas Mahaji, Sahor, Salarpuri and Sarta.*

Chart 3.7 shows that out of the required 121[58] diagnostic services, 10 to 104 services/ tests were not available in the these MCHs.

In regard to diagnostic services, Audit noticed that: (i) DMCH, Darbhanga and GMCH, Bettiah did not have facility for carrying out hematology and urine (Ketone bodies, pH reaction *etc*.) tests (ii) diagnostic services, relating to Endoscopy, Respiratory diseases and Microbiology, were absent all the three test-checked hospitals (iii) the estimation of hemoglobin was not being carried out by using the approved haemoglobin colour scale, in all the three test-checked hospitals.

In this regard, the test-checked hospitals responded that these services had been affected due to the lack of specialist doctors, as well as lack of requisite manpower. These responses indicated the need for improvement of diagnostic services, in the tertiary healthcare institutions.

The Department replied (February 2023 and October 2023) that Pathology testing services were available in the Clinical Pathology and Microbiology Departments.

3.5.3 Availability of Equipment and Technicians for Diagnostic Services in test-checked healthcare facilities

IPH Standards envisage that healthcare facilities should have all equipment required for diagnostic services being provided by them. However, Audit observed that none of the test-checked healthcare facilities had all the equipment (including kits) required for diagnostic services, as detailed in **Table 3.17.**

Table 3.17: Availability of diagnostic equipment in test-checked healthcare facilities (as on 31 March 2022)

Type of the healthcare facility	No. of test-checked healthcare facilities	Requirement		Range of non-availability of equipment (*per cent)*
		Norms details	No. of diagnostic equipment required to be available	
SDH	4	IPHS/ NHM Free Diagnostic Service Initiative	70	52 to 56 *(74 to 80)*
CHC/RH	6	IPHS/ NHM Assessor's Guidebook/NHM Free Diagnostic Service Initiative	41	07 to 33 *(17 to 80)*
PHC	10		10	02 to 10 *(20 to 100)*
APHC	17		10	07 to 10 *(70 to 100)*
HSC	31		14 (including Kit)	9 to 14 *(64 to 100)*
Total	**68**[59]			

(Source: Information provided by the test-checked healthcare facilities)

As can be seen in **Table 3.17**, as of March 2022, non-availability of diagnostic equipment ranged between 17 *per cent* to 100 *per cent*. Consequently, all diagnostic and radiology services could not be ensured, at the test-checked healthcare facilities.

There were shortages of Lab Technicians (LTs), ranging from nil to 100 *per cent* (SDH, Udakishunganj and RH, Chandi), against the sanctioned strength, during

[58] *As requirement of diagnostic services for MCHs is not mentioned in MCI norms, hence minimum requirement for DH, as per IPH standards has been considered.*

[59] *Test-checked healthcare facilities are same as in Paragraph 3.5.1.*

FYs 2016-17 to 2021-22[60] ***(Appendix 3.12)***, in the test-checked healthcare facilities. Further, LT was not posted in any of the 17 test-checked APHCs.

Paragraphs 2.3.2.1 and 2.3.2.2 of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that shortage of essential equipment/ machines and Lab Technicians for diagnostic services ranged from 62 to 82 *per cent* and 58 to 100 *per cent*.

Thus, the required diagnostic services were either deficient or not available in most of the healthcare facilities. Non-availability of quality laboratory services might have led to delayed or inappropriate responses to disease control and patient management, as well as increased out-of-pocket expenditure for getting these tests conducted through private healthcare facilities, which had been substantiated in the patient survey undertaken by Audit.

Other significant shortcomings

Contrary to IPH Standards and NHM norms, following shortcomings were also noticed in the test-checked healthcare facilities:

- Size of the laboratories was small, at nine[61] test-checked healthcare facilities, in comparison to the prescribed norms[62].
- Thirteen[63] (65 *per cent*), out of 20 test-checked healthcare facilities had no demarcated area in the laboratory, for sample collection, testing, washing and waste disposal.
- Thirteen[64] out of 20 test-checked healthcare facilities had not arranged any kind of training to the Lab Technicians.

The Department stated (December 2022) that there was a proposal for construction of a 1,500 Sq. metre Block Public Health Units in all SDHs and CHCs, under the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission and the laboratory facility would be provided in those units. For availability of equipment in healthcare facilities, necessary action would be taken. In regard to the Madhepura district, it was stated that, after deploying Lab Technician in SDH, Udakishunganj, diagnostic services were operating smoothly.

But during cross-verification (January 2023), it was observed that only one against five Lab Technicians had been posted and, against 111 required diagnostic services, only seven (*i.e.* Hb, HIV, HBSag, Blood Sugar, Sputum for AFB, Pregnancy test and Urine routine) were available.

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60 *Information pertaining to CHC, Kako and PHC, Jandaha was available only for FY 2016-21.*

61 *RHs: Chandi (14 sq m) and Makhdumpur (9.3 sq m); CHCs: Kako (13.9 sq m), Singheshwar (27.9 sq m), Bakhtiyarpur (10.5 sq m) and Bhagwanpur (13.9 sq m); PHCs: Sikariya (3.3 sq m), Daniyawan (8.9 sq m) and Silao (5.6 sq m).*

62 *As per IPHS, in RH/CHC and PHC, size of the laboratory should be 162 sq metre and 10.3 sq metre, respectively.*

63 *SDHs: Mahua and Barh; CHCs: Singheshwar, Bakhtiyarpur and Bhagwanpur; RHs: Chandi and Makhdumpur; PHCs: Sikariya, Ghailarh, Noorsarai, Goraul, Daniyawan and Silao.*

64 *SDHs: Mahua and Barh; CHCs: Singheshwar, Bakhtiyarpur and Bhagwanpur; RH Chandi; PHCs: Ratni Faridpur, Sikariya, Ghailarh, Goraul, Noorsarai, Daniyawan and Silao.*

The Department stated (August 2023) that lab technicians had been posted in SDH, Udakishunganj (Madhepura) and PHCs Harnaut (Nalanda), Sikariya and Ratni Faridpur (Jehanabad). The Department further replied (October 2023) that development of an Integrated Public Health Laboratory, at the district hospital level and Block Public Health Units, inclusive of Block Public health Laboratories, at the block level, had been proposed.

3.5.4 Diagnostic services in HWCs

NHM Operational guidelines for HWCs prescribed for 14 diagnostic services (such as Haemoglobin Estimation, Urine Pregnancy test, Blood Glucose *etc*.) and availability of 31 diagnostic kits/disposables, in HWCs.

Details of requirement and availability of diagnostic services and Diagnostic Kit/ Disposables in the test-checked HWCs are given in **Table 3.18**.

Table 3.18: Requirement and availability of diagnostic services and Diagnostic Kits/ Disposables in the sampled months in test-checked HWCs

Name of HWC	Diagnostic services		Diagnostic Kit/Disposables			
	Requirement	Availability (March 2022)	Requirement	Availability		
				February 2021	May 2021	August 2021
Prataptand, Bhagwanpur (Vaishali)	14	2	31	11	11	11
Sondho, Goraul, (Vaishali)	14	7	31	12	11	11
Nawada, Kako, (Jehanabad)	14	5	31	13	13	13
Derhsaiya, Kako, (Jehanabad)	14	2	31	16	16	16
Chainpura, Sikariya, (Jehanabad)	14	3	31	11	11	11
Gonwan, Sikariya, (Jehanabad)	14	0	31	3	4	4
Bhawanichak, Sikariya, (Jehanabad)	14	0	31	4	5	5
Sirsi, Bakhtiyarpur, (Patna)	14	5	31	NA*	NA*	8
Sadisopur, Bihta, (Patna)	14	1	31	0	0	0

*(Source: Records of the concerned healthcare facilities) *NA: Records were not available*

Table 3.18 shows that: (i) in two (Bhawanichak and Gonawan), out of the nine test-checked HWCs, diagnostic services were not available, while, in the remaining seven HWCs, only one to seven services were available (ii) during the sampled months of February 2021 and May 2021 diagnostic kits/disposables were not available in HWC, Sadisopur, while, in the remaining HWCs, only three to 16 diagnostic kit/disposables were available (iii) in August 2021, diagnostic kits/ disposables were not available in HWC, Sadisopur while, in the remaining HWCs, four to 16 HWCs diagnostic kits/disposables were available.

The Department stated (December 2022) that, in all the HWCs of the Madhepura and Patna districts, seven types of diagnostic facilities had been provided. The reply was not acceptable, as the guidelines envisaged that 14 types of diagnostic facilities

were to be provided in HWCs. Further, replies regarding Jehanabad and Vaishali were not provided. Besides, during cross-verification (January 2023) of the Patna district healthcare facilities, it was observed that only BP, Sugar and Hb tests, that too through Kits, were being conducted in HWC, Shahjahanpur.

3.5.5 Availability of Radiology services

The role of radiology is central to disease management, for the detection and treatment of diseases. Adequate availability of functional radiology equipment, skilled human resources and consumables are key requirements for the delivery of quality radiology services.

IPH Standards prescribe that: (i) radiology services (X-ray for Chest, Skull, Spine, Abdomen, Spines and Bones) and Dental X-ray, should be available in the SDHs, RHs and CHCs (ii) Ultrasonography with colour Doppler, was to be available in SDHs. Further, the Health Department, GoB decided (July 2017) to provide X-ray services in all PHCs.

Audit observed that none of the test-checked healthcare facilities had ensured the required radiology services. Status of availability of radiology services, in four SDHs and two RHs and four CHCs, is given in **Table 3.19**.

Table 3.19: Availability of radiology services in test-checked healthcare facilities (as of March 2022)

Radiology service	No. (Name) of SDHs		No. (Name) of RHs/CHCs	
	Service Available	Service not Available	Services Available	Service not Available
X-ray for chest	3 (Mahua, Barh and Udakishunganj)	0	5 (CHC Kako, Bakhtiyarpur and Bhagwanpur; RH Chandi and Makhdumpur)	1(CHC, Singheswar)
X-ray for skull	2 (Barh and Udakishunganj)	1 (Mahua)	4 (CHC Kako and Bakhtiyarpur; RH Chandi and Makhdumpur)	2 (CHC, Singheshwar and Bhagwanpur)
X-ray for spine	3 (Mahua, Barh and Udakishunganj)	0	4 (CHC Kako and Bakhtiyarpur; RH Chandi and Makhdumpur)	2 (CHC, Singheshwar and Bhagwanpur)
X-ray for abdomen	2 (Barh and Udakishunganj)	1 (Mahua)	3 (CHC Kako; RH Chandi and Makhdumpur)	3 (CHC Singheshwar, Bakhtiyarpur and Bhagwanpur)
X-ray for bones	3 (Mahua, Barh and Udakishunganj)	0	5 (CHC Kako, Bakhtiyarpur and Bhagwanpur; RH Chandi and Makhdumpur)	1(CHC Singheshwar)
Dental X-ray	0	3 (Mahua, Barh and Udakishunganj)	0	6 (CHC Kako, Singheshwar, Bakhtiyarpur, and Bhagwanpur; RH Chandi and Makhdumpur)
Ultrasonography	1 (Mahua)	2 (Barh and Udakishunganj)	NA*	NA*

*(Source: Test-checked healthcare facilities) Note: Information pertaining to SDH, Rajgir was not made available. *NA: Not applicable*

Further, at CHC, Singheshwar, two X-ray machines were lying idle (since September 2020 and July 2021), due to non-availability of technician. Eight[65], out of 10 test-checked PHCs, did not have X-ray facility. Hence, patients were deprived from X-ray services in these healthcare facilities and would have had to avail of this service privately, from their own funds.

The Department replied (December 2022) that, in the Patna district, radiology services, such as X-ray facility were available, under the PPP mode. However, during cross-verification (January 2023), it was found that X-ray services were still not available in PHC, Daniyawan (Patna). The Department further replied (October 2023) that radiology services, such as X-rays and Ultrasound, were being provided by the State.

3.5.6 Non-adherence to the safety and regulating norms

Healthcare facilities, while providing radiological diagnostic services, need to adhere to relevant safety and regulatory norms, in order to protect healthcare professionals and patients from the detrimental effects of radiation. Audit observations in this regard, based on the test-checked healthcare facilities, are as under:

- ***Non-obtaining of license from Atomic Energy Regulatory Board (AERB)*:** Although required, four[66], out of 20 test-checked healthcare facilities, had not obtained license from AERB. In SDH, Mahua and CHC, Bhagwanpur, records were not available to corroborate that license from AERB, had been obtained.

Image 3.6: *X-ray test being conducted (01.04.2022) without necessary safety measures (not wearing the lead apron and lead shield) by staff, at CHC, Kako (Jehanabad)*

- ***Non-adhering to safety measures during conducting Radiology tests***: The NHM Assessor's Guidebook and IPH Standards provide for safety measures for healthcare workers while conducting radiology services. Audit observed that these safety measures were not being adhered to in five[67], out of 20 test-checked healthcare facilities. ***Image 3.6*** depicts non-adherence to safety measures, while conducting Radiology test by the staff of CHC, Kako (Jehanabad).

Further, ***Paragraph 2.3.2.3*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had pointed out the deficiencies in the observance of safety norms in the test-checked DHs.

The Department replied (December 2022 and August 2023) that X-ray machines were being operated in SDH, Mahua and CHC, Bhagwanpur, of Vaishali district, after

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65 *Except PHCs Goraul and Jandaha.*

66 *SDHs: Barh and Udakishunganj; CHC: Bakhtiyarpur and PHC: Goraul.*

67 *CHCs: Bakhtiyarpur and Kako, RHs: Chandi and Makhdumpur and SDH: Barh.*

receiving of AERB license. The Department further replied (October 2023) that steps were being taken to ensure availability of Thermoluminescent Dosimeter[68] (TLD) badges to all X-ray technicians working under the in-house mode.

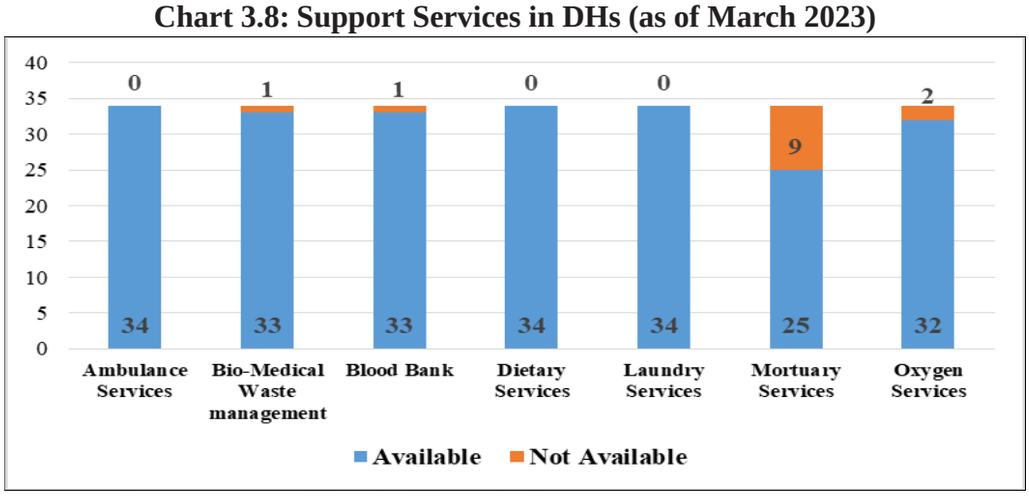
3.6 Delivery of Support and Auxiliary Services

As per IPH Standards, it is essential to every healthcare facility, to provide support services such as Ambulance service, Bio-Medical waste management, Blood Bank, Dietary service *etc*., as the expected clinical outcomes cannot be envisaged in the absence of robust support services.

In a healthcare facility, Auxiliary Services include Patient safety, Patient registration and Grievance redressal etc. Since these services are required to ensure a comfortable and nurturing environment, thereby contributing to effective care and treatment of patients.

Keeping in view the importance of support services for providing quality healthcare services, their status has been assessed through collection (May 2023) of respective data in all 34 DHs (information was not provided in DH, Rohtas). This data is shown in **Chart 3.8**.

Chart 3.8: Support Services in DHs (as of March 2023)



(*Source: Information received from healthcare facilities)*

Audit observations on deficiencies in extending these support services, are discussed in the succeeding paragraphs.

3.6.1 Ambulance services

As per IPH Standards, SDHs/CHCs should have round the clock ambulance services, with basic life support to transport the patients, for timely and assured referral to First Referral Units (FRUs), in case of complications during pregnancy and child birth. For statutory compliances, the vehicle used for ambulance services should be registered with transport department.

Information collected (May 2023) from all the districts, showed that ambulance services were available only on call facility at 102 in the state. The status of Advanced Life Supporting Ambulance (ALSA) and Basic Life Supporting Ambulance (BLSA) in the various healthcare facilities is mentioned in the **Table 3.20**.

[68] *A radiation dose measuring device, to know whether one is working within the safe dose limits of radiation, prescribed by AERB.*

Table 3.20: Availability of ambulance service in healthcare facilities (as of March 2023)

Type of healthcare facilities (No.)	No. of ambulances available	No. of functional ambulances	No. of non-functional ambulances
DHs (35)	244	234	10
SDHs (54)	134	133	1
CHCs/RHs (285)	649	629	20
Total (374)	**1,027**	**996**	**31**

(Source: Records of Healthcare facilities)

Table 3.20 indicates that 1,027 ambulances were available in 374 healthcare facilities, out of which, 31 ambulances were non-functional.

3.6.2 Shortage of drivers/ Emergency Medical Technician (EMT) for Ambulance Services

The SHS executed an agreement for implementation of Referral Transport Scheme stipulating that three drivers and three EMTs were to be posted on each Advance Life Support Ambulance (ALSA) and Basis Life Support Ambulance (BLSA), for 24x7 operation of these ambulances.

Details of shortage of drivers/EMTs on ambulances in the test-checked districts is given in **Table 3.21**.

Table 3.21: Shortage of man-power under driver and Emergency Medical Team (as of March 2023)

Number of functional ambulances	Drivers			EMTs		
	Required	Available	Shortage (*per cent*)	Required	Available	Shortage (*per cent*)
1,415	4,245	2,835	1,410 (33)	4,245	2,807	1,438 (34)

(Source: Information furnished by the District Health Societies)

As can be seen from **Table 3.21**, 4,245 drivers (1,415 ambulances × 3 drivers) were to be posted on these ambulances, against which only 2,835 drivers (67 *per cent)* were posted. Further, against required 4,245 EMTs (1,415 ambulances × 3 EMTs), only 2,807 EMTs (66 *per cent*) were available.

The Department replied (August 2023) that, in Jehanabad, presently two drivers and two EMTs, were deployed with each ambulance and the concerned agency had been directed to deploy three drivers and three EMTs with each ambulance. The Department, however, did not furnish a reply in regard to districts other than Jehanabad.

3.6.3 Ambulance services in test-checked health facilities

To ensure availability of ambulance services in healthcare facilities, the SHS, at the state level, executed (April 2017) a master agreement with agencies[69]. Accordingly, all the DHSs at the district level executed (April 2017) agreements with the agency. As per the agreement, emergency use instruments/ equipment, medicines and consumables, should be available in an ambulance.

[69] *Consortium of M/s Pashupatinath Distributors Pvt. Ltd. & M/s Sammaan Foundation.*

In this regard, Audit observed that:

(i) As per agreement at SHS level, 1,191 ambulances were made available for 2,342 healthcare facilities[70], as of March 2022. It was noticed that ambulance services were not available at two (SDH, Udakishunganj and PHC, Bihta), out of 20 test-checked healthcare facilities.

(ii) The SHS instructed (April 2018) all District Magistrates and CS-cum-CMOs that ambulances which had been operated for over 1.50 lakh kms or had registrations more than eight years old, should be declared condemned and auctioned. Audit, however, observed that 15, out of 34 running ambulances had been operated beyond 1.50 lakh kms (up to 3.12 lakh kms) in the test-checked 20 healthcare facilities.

(iii) Further, as per the agreement executed for operating ambulances 24X7 in these 20 test-checked health care facilities, the agency was required to deploy three drivers and three Emergency Medical Technicians (EMTs) in each eight hours' shift. However, the agency had deployed only 52 drivers (against 102 drivers) and 51 EMTs (against 102 EMTs), for 34 available ambulances. During Joint Physical Verification of 25 ambulances, it was observed that none of the test-checked ambulances had the equipment/drugs/consumables that were required in terms of the agreement. Also, there was shortage in the availability of minimum Ambulance Rescue Equipment (40 *per cent* to 100 *per cent*), other equipment (14 *per cent* to 95 *per cent*), drugs (26 *per cent* to 100 *per cent*) and consumables (20 *per cent* to 100 *per cent*).

Shortage of well equipped ambulances might have affected the patients to safe and timely access to the healthcare facilities for required treatment.

The Department replied (December 2022) that, in the Vaishali district, Basic Life Support Ambulance (BLSA) and Advanced Life Saving Ambulance (ALSA), had been made available in June and July 2022. Those ambulances, which were more than eight years old and had run more than 1.5 lakh km, would be auctioned in December 2022. Further, it was stated that, in the Madhepura and Patna districts, ambulances were being made available.

The Department further replied (August 2023) that ambulances more than 8 years old and which had covered 1.5 lakh km, had been removed.

Recommendation 4: State Government may ensure that Radiology and Ambulance services are operational in the designated healthcare facilities, with the required manpower and equipment.

3.6.4 Medical gas (Oxygen)

Oxygen, an essential element of basic emergency care[71], is required for surgery and treatment of several respiratory diseases, both chronic and acute. In June 2017, the World Health Organisation (WHO) included oxygen in its model Essential

[70] *DHs: 35, SDHs: 45, RHs: 67, CHCs: 256, PHCs: 533 and APHCs: 1,405.*

[71] *Oxygen acts as a life-saving therapeutic medical gas and is used for the management of Hypoxemia (an abnormally low level of oxygen in the blood that is caused by disease, trauma or other health conditions).*

Medicines List (EML), due to its proven lifesaving properties, safety and cost-effectiveness. IPH Standards also envisage that OT/ICU)/Newborn Care Corner (NBCC) *etc*. should have a centralised oxygen supply system[72] at the level of SDH. For RH, CHC and PHC Oxygen concentrator[73] may be used for this purpose.

Audit observed (May 2023) that Medical Oxygen services were available in 32[74], out of 35 DHs. Further, in respect of test-checked healthcare facilities, following points were observed:

- Required centralised Oxygen supply system, as per IPH Standards, had not been installed in any of the four test-checked SDHs.
- During joint physical verification, Oxygen concentrators were found lying idle/packed, in four[75] test-checked healthcare facilities, as shown in ***Images 3.7*** and ***3.8***.

Image 3.7: Oxygen Concentrators lying idle (31.03.2022) in PHC, Ghailarh

Image 3.8: Oxygen Concentrators lying idle (05.04.2022) in PHC, Ratni Faridpur

The Department replied (December 2022) that, in the Madhepura district, in all healthcare facilities, Oxygen cylinders and concentrators, were made available and Pressure Swing Absorption (PSA) Oxygen plants had been made available, in seven healthcare facilities of the Patna district. However, supporting documents and replies regarding other districts were not provided.

3.6.5 Dietary Services in primary and secondary healthcare facilities

IPH Standards and NHM Assessor's Guidebook envisage standards for dietary services in healthcare facilities, as per the requirements of IPD patients. Health Department issued (December 2009) a resolution to provide dietary services at ₹ 50 per day per IPD patient, which was revised (March 2015) to ₹ 100 per day

[72] *A centralised pipeline system comprises of a main source of supply (generally with secondary and tertiary source to ensure continuity of service), connected via a permanent fixed pipeline system, to appropriate terminal unit outlets, at relevant locations.*

[73] *An 'Oxygen Concentrator' filters out Nitrogen and provides the higher amount of oxygen, needed for oxygen therapy.*

[74] *Except Begusarai and Buxar, where service was not available and information with respect to DH, Rohtas was not provided.*

[75] *CHC: Singheshwar and PHCs: Ghailarh, Ratni Faridpur and Sikariya.*

per patient. As per the model agreement circulated by the SHS: (i) the concerned agency should set up, operate and maintain a hygienic kitchen, in the area provided by the concerned healthcare facility (ii) before serving food to the patients, a sample of it should be served to the MOIC and Hospital Manager[76], for testing and quality check.

Audit observed (May 2023) that out of total 35 DHs, dietary services were available in 34[77] DHs. Further, out of 35 test checked units (SDHs: four; RHs: two; CHCs: four; PHCs: nine excluding Bihta; APHCs: 16 (excluding Sugao) dietary services were not being provided in three PHCs (Goraul, Ratni Faridpur and Sikariya), all 16 APHCs and one RH (Chandi). In the remaining 15 healthcare facilities, dietary services were being provided by the outsourced agencies. Following short comings were noticed in this regard:

- Required quality control mechanism/ monitoring mechanism, as well as quality checking, was available in PHC, Jandaha only.
- Diet planning and management, for providing clean, hygienic and nutritious diet, to the indoor patients, as per their caloric requirements, was not in place. Only regular diet (*i.e.* same diet, for each patient, every day) was being provided in the healthcare facilities.

During joint physical verification of 17[78] test-checked healthcare facilities, it was observed that the food supplied to the patients was not patient-specific (for example diabetic, semi-solid and liquid) and only regular diet was being provided to the patients and proper kitchen hygiene was not being maintained in 11[79] healthcare facilities.

The department replied (December 2022) that, in the Patna district, dietary services were being provided in the DH and SDHs, through Didi Ki Rasoi, run by a self help group (JEEVIKA) and, in other healthcare facilities, through selected agency, by inviting tender. In Madhepura district, food was being served to the patients after ensuring its quality and was being monitored daily through a Whatsapp group.

3.6.6 Dietary Services in tertiary health care facilities

As per resolution (December 2009) of the State Government, diet was to be provided to every indoor patient of the government hospitals. MCI norms also prescribed that every teaching hospital should have a central kitchen for preparation of diet. The Central Kitchen was to be commodious, airy, sunny and clean, with proper flooring and exhaust system. The kitchen was to have proper and clean working platforms and separate store area with proper storage facilities. The service trolleys were to be of stainless steel and should have insulation facility.

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[76] *Hospital Manager oversee day-to-day operations, organize departments, manage infrastructure and staff, and plan financial structures and budgets.*

[77] *DH, Rohtas did not provide the relevant information.*

[78] *CHCs: Bhagwanpur, Bakhtiyarpur, Kako and Singheswar; PHCs: Daniyanwan, Ghailarh, Goraul, Noorsarai, Ratni Faridpur, Shankarpur, Sikariya and Silao; RHs: Chandi and Makhdumpur; SDHs: Mahua, Rajgir and Udakishunganj.*

[79] *CHC: Singheshwar; PHCs: Daniyanwan, Ghailarh, Goraul, Noorsarai, Ratni Faridpur, Sikariya and Silao; RHs: Chandi and Makhdumpur; SDH: Udakishunganj.*

Audit observed that:

(A) Dietary services were being provided in all the three test-checked hospitals. In GMCH, Bettiah, dietary services were being provided through an outsourced agency. In the remaining two MCHs (DMCH and PMCH), dietary services were being provided through in-house arrangements. In these hospitals, it was observed that: (i) the building, housing the kitchens, were very old and was not in a good condition (ii) hygiene was not being ensured therein (iii) the cooks, in the kitchens, or those serving food, were not using protective gear (such as aprons, head gear and clean plastic gloves), as it had not been provided to them as can be seen in ***Images 3.9*** and ***3.10***, taken during joint physical verification.

Image 3.9 and Image 3.10: unclean and unhygienic condition of the Central Kitchen of DMCH, Darbhanga (as on 29.03.2022)

(iv) the system of diet counseling to the patients, formulation of caloric requirements and consequent setting of diets for the patients, was not in vogue (v) the central kitchens had no storage rooms for proper storage facilities and (vi) food being distributed among the patients by using the normal trolley and the service trolleys for food were not insulated ones, as required.

(B) As per MCI norms, in order to prescribe diet on the scientific lines for different types of patients the services of qualified dietician are essential in all the teaching hospital. Audit noticed that dietitians had not been posted in GMCH, Bettiah (since inception) and PMCH (since June 2021) and the quality of diet had never been checked.

(C) NHM Assessor's Guidebook envisage standards for dietary services in healthcare facilities, as per the requirements of patients. A hospital has to prepare SOP for preparation, handling, storage and distribution of diet to patients. Audit, however, noticed that none of the test-checked hospitals had prepared SOP for preparation, handling, storage and distribution of diet to patients.

The Department replied (February 2023) that dietary service was being provided by "Didi ki Rasoi".

3.6.7 Blood Banks

As per the terms and conditions of the licences granted to blood banks under the Drugs and Cosmetics Act, 1945, the blood banks were to be re-inspected periodically, at least once in a year, from the date of licensing, by a team comprising of Drug

Inspectors of Central Drugs Standard Control Organisation (CDSCO)[80], the State Drug Controller (State Licensing Authority) and an expert, if required. Authorities of the concerned blood bank were required to comply with the suggestions of the inspecting team.

During test-check of records of the State Drug Controller (SDC), Audit checked records of seven[81], out of 102 blood banks in the State and observed that none of these blood banks had been inspected, in any of the years covered under audit, except at the time of renewal of their licenses. This implied that, the SDC had not developed any system for the annual inspection of the blood banks.

Due to non-conduct of annual inspections of the blood banks, it could not be ascertained whether the conditions of the Drugs and Cosmetics Act and the Rules made thereunder, were being complied with.

The Department stated (December 2022) that, out of seven blood banks, only two institutions were inspected in the past and the remaining five had been inspected in the year 2022. The reply was not acceptable, as inspections were required to be conducted annually, as per the provisions of the Act.

3.6.7.1 Operation of Blood Banks without valid license

As per Rule 122(H) of the Drug & Cosmetics Rules, 1945, the licences of blood banks are valid for five years. Further, as per Rule 122 (I), the licences may be renewed, after a joint inspection, conducted by a team, comprising of one or more drug inspectors, appointed under the Act, along with an expert in this field.

Audit checked the records of six[82] Blood Banks and observed that during inspections for renewal of license for blood bank (after the lapse of initial validity of five years from the dates of approval), critical shortage of equipment were observed. Therefore, SDC had not renewed the licenses of these blood banks and directed them to resolve these shortages. However, the concerned blood banks had continued to operate with such critical shortages, without being in possession of valid licenses. After removal of the deficiencies and subsequent inspection by the representatives of SDC, their licenses were renewed, with retrospective effect. The chronology for renewal of licenses for blood banks is mentioned in **Table 3.22**.

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[80] *Functions under Director General of Health Services, Ministry of Health and Family Welfare, GoI.*

[81] *SKMC Hospital Blood Centre, Muzaffarpur; Sushila Blood Bank, Bhagalpur; M/s Blood Centre, Sadar Hospital Sasaram; M/s Regional Blood Centre Darbhanga; M/s City Blood Centre, Muzaffarpur; M/s Red cross Blood Centre, Sitamarhi and M/s Blood Centre, RDJM Medical College, Muzaffarpur.*

[82] *Blood Bank, Sadar Hospital Muzaffarpur; Narayana Medical College and Hospital Rohtas; Sadar Hospital Buxar; M/s Blood Centre, Sadar Hospital Sasaram; M/s Regional Blood Centre, Darbhanga and Sadar Hospital, Munger.*

Table 3.22: Chronologies for renewal of licences for blood banks by SDC

Sl. No.	Blood Bank	License issue date	License Renewal date	Period during which blood bank operated without license
1.	Blood Bank, Sadar Hospital, Muzaffarpur	16/4/2004	13/1/2017	16/4/2009 to 12/1/2017
2.	Narayana Medical College & Hospital, Rohtas	15/11/2011	2/5/2019	15/11/2016 to 1/5/2019
3.	Sadar Hospital, Buxar	14/11/2003	25/11/2021	14/11/2008 to 24/11/2021
4.	M/s Blood Centre, Sadar Hospital, Sasaram	11/6/2009	18/11/2021	11/6/2014 to 17/11/2021
5.	M/s Regional Blood Centre, Darbhanga	12/2/1996	29/9/2021	12/2/2001 to 28/9/2021
6.	Sadar Hospital, Munger	26/5/2003	29/9/2021	27/5/2008 to 28/9/2021

(Source: Records of SDC)

As can be seen from **Table 3.22**, these test-checked blood banks operated without valid license, for a period ranging between three years to twenty one years. This depicts lack of monitoring control on the part of SDC.

Further, ***Paragraphs 2.4.15.2*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that all the Blood Banks (except DHs Lakhisarai and Sheikhpura) were running without valid license during 2014-20.

The Department, in its reply, accepted (December 2022) that the number of blood banks and the number of drug inspectors were not proportional and, in light of the audit observation, the Department had advertised (November 2022), for filling the vacant posts through BPSC.

3.6.7.2 Blood Storage Unit

As per IPHS: (i) all SDHs and RHs/CHCs should have a blood storage unit (BSU) (ii) SDHs and RHs/CHCs should have five units each of A, B, O (positive), two units of AB (positive) and one unit each of A, B, O (negative).

During test-check of records, it was observed that none of the 10 test-checked SDHs, RHs and CHCs had functional BSUs. In eight healthcare facilities[83], BSUs were non-functional due to the non-availability of manpower and authorisation certificates issued by the State Licensing Authority, even though equipment and consumables were available, as discussed in ***Paragraph 4.3.4***.

The Department did not provide specific reply to the audit observation and stated (December 2022) that, in CHC, Singheshwar (Madhepura), BSU had been made functional, after obtaining license from State Drug Controller.

[83] *SDHs: Barh, Mahua, Rajgir and Udakishanganj; RH: Makhdumpur and CHCs: Bhagwanpur, Bakhtiyarpur and Singheshwar.*

3.6.8 Cleaning services in primary and secondary health care facilities

As per IPH Standards, healthcare facilities are required to frame a Standard Operating Procedure (SOP) for housekeeping, so as to ensure the cleanliness of the hospital premises, in order to provide a clean environment to patients, visitors and staff. The NHM Assessor's Guidebook requires that the healthcare facilities should ensure decontamination of functional areas.

In 20 test-checked healthcare facilities, cleaning services had been outsourced to private vendors/firms. Audit noted following discrepancies, in this regard:

- All patient care areas (including floors, walls, roofs, rooftops, sinks and circulation areas, including toilets and furniture) were being cleaned, as per the model agreement provided by the SHS, only in seven[84], out of 20 test-checked healthcare facilities.
- As per the NHM Assessor's Guidebook, for ensuring cleanliness of the hospital premises, regular monitoring, evaluation and assessment of the quality of work being carried out by the outsourced agency, was required to be done. However, only five[85], out of 20 test-checked healthcare facilities were monitoring, evaluating and assessing the quality of work being carried out by the outsourced agencies.

As per the standard format of agreement, provided by the SHS: (i) OT and labour room were to be cleaned and disinfected before each use and (ii) wards, other rooms and store rooms and toilets *etc*., were to be mandatorily cleaned twice in each of morning, afternoon and night shift.

Audit observed that in 18[86], out of 20 test-checked healthcare facilities, although the cleaning work was to be carried out in three shifts per day by the outsourced agency but the work was been carried out in three, two and one shift per day in three[87], nine[88] and six[89] healthcare facilities, respectively. In three[90] test-checked healthcare facilities, toilets were not being cleaned six times a day (twice in each shift). Unhygienic conditions, noticed during joint physical verification have been shown, for example, in ***Images 3.11*** and ***3.12***.

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84 *CHC: Kako; PHCs: Daniyawan, Noorsarai, Ratni Faridpur, Sikariya and Silao and RH: Chandi.*

85 *CHC: Kako; PHCs: Noorsarai, Ratni Faridpur and Sikariya and RH: Chandi.*

86 *Except SDH Barh and PHC Bihta.*

87 *CHC: Kako; PHC: Silaoand and RH: Chandi.*

88 *CHC: Singheswar; PHCs: Daniyawan, Ghailarh, Noorsarai, Ratni Faridpur, Shankarpur and Sikariya; RH: Makhdumpur and SDH: Udakishunganj.*

89 *CHCs: Bakhtiyarpur and Bhagwanpur; PHCs: Goraul and Jandaha and SDHs: Mahua and Rajgir.*

90 *CHC: Bakhtiyarpur; PHC: Ghailarh and SDH: Udakishunganj.*

Image 3.11: Garbage in the campus of PHC, Ghailarh (31.03.2022)

Image 3.12: Toilet without running water in PHC, Ghailarh (31.03.2022)

The Department stated (December 2022) that service providers had been instructed strictly to clean healthcare facilities, as per the agreement. Further, in the Patna district, services were being monitored regularly. Reply regarding the remaining districts was not provided. The Department further replied (August 2023) that, in PHCs Noorsarai and Silao, cleaning services were being provided by the outsourcing agency, in three shifts.

3.6.8.1 Excess payments to outsourced agencies

- DHS, Vaishali published an NIT (March 2016), for providing: (i) cleaning services in hospital premises and (ii) laundry, dietary and generator services, in DH, Hajipur; SDH, Mahua, three RHs, 15 PHCs and 10 APHCs, under in the Vaishali district. As per the terms and conditions of NIT, rates of services to be provided were to be quoted inclusive of Service Tax at the rate of 14 *per cent*. An agreement was executed (June 2016) between the selected agencies[91] and DHS, Vaishali and was subsequently extended in June 2018 and June 2021. Service Tax was subsumed (July 2017) in Goods and Services Tax (GST), however, DHS ordered (November 2017) erroneously that VAT at the rate of five *per cent* should be adjusted from the billed amount and after that GST at the rate of 18 *per cent* should be levied on the billed amount.

  Due to this, for providing cleaning services in 14[92] healthcare facilities, excess payment of ₹ 1.67 crore[93] was made to two outsourced agencies, by levying GST at the rate of 18 *per cent* on the billed amount, without adjusting Service Tax already included in the rate quoted by the agency.

  It was also observed that, while providing generator services (July 2017 to February 2022) in 14[94] healthcare facilities, excess payment of ₹ 0.50 crore was made to the outsourcing agency[95], by levying GST at the rate of 18 *per cent* on the billed amount and adjusting only VAT at the rate of five *per cent*

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91 *Health Line, Patna & Gyan Bharti Shiksha Evam Prashikshan Sansthan, Patna.*

92 *Only 14, out of 20 healthcare facilities provided details of payments made to the agency.*

93 *Health Line, Patna: ₹ 1.56 crore and Gyan Bharti: ₹ 0.11 crore.*

94 *DH: Hajipur; SDH: Mahua; CHCs: Bhagwanpur, Mahnar and Rajapakar; RHs: Khajechand (Chapra) and PHCs: Bidupur, Cheharakala, Desari, Goraul, Jandaha, Mahua, Patedhi Belsar and Patepur.*

95 *Swargiya Kanhai Shukla Samajik Sheva Sansthan, Hajipur.*

(which was not mentioned in the NIT), in place of Service Tax at the rate of 14 *per cent*.

Therefore, levying GST, without adjusting for Service Tax, led to excess payment, amounting to ₹ 2.17 crore, to the outsourced agencies.

The Department stated (August 2023) that: (i) before implementation of GST, VAT at the rate of five *per cent,* was applicable on generator services and Service Tax was not applicable on it. Therefore, GST, at the rate of 18 *per cent,* was being paid, after deducting five *per cent* VAT amount and (ii) for cleaning services in the government hospitals, Service Tax was not applicable. Therefore, GST at the rate of 18 *per cent,* was being paid.

The reply of the Department was not acceptable, because, as per the terms and conditions of the tender, Service Tax, at the rate of 14 *per cent,* was already included in the agreed amount, for cleaning and generator services and it had not been adjusted before making payment to the contractor, after the applicability of GST.

- In PHC, Sikariya; CHC, Kako and APHC, Dedhsaiya (Jehanabad), an agreement was executed (July 2018) for cleaning and laundry services, with the rates quoted being inclusive of all taxes. However, payments were made to the agency by levying GST at the rate of 18 *per cent* on the agreed amount, resulting in excess payment of ₹ 8.69 lakh to the agency.

  The Department did not furnish the reply in this regard.

3.6.9 Laundry services in primary and secondary healthcare facilities

Healthcare facilities need to provide clean linens to the patients, for preventing infections among patients, healthcare facility staff, as well as visitors of the patients. The Department decided (September 2015) to provide linens in seven colours (one colour for each day of the week), to the patients admitted in the healthcare facilities. Further, soiled and infectious linen was to be segregated, as per the NHM Assessor's Guidebook.

Audit observed (May 2023) that laundry services were available in 34[96], out of 35 DHs. Further, following shortcomings have been observed, in respect of laundry services, being provided in 20 test-checked healthcare facilities:

- During physical verification in six[97] test-checked healthcare facilities, it was observed that linens were not being changed every day.
- Different coloured linens were not being provided to the patients in 10[98] test-checked healthcare facilities (although this was required, as per the model agreement provided by the SHS).
- As per the model agreement, bed sheets, sheets, pillow covers, chair cloth *etc*., were to be washed, dried and ironed every day. During joint physical

[96] *DH, Rohtas did not provide the relevant information.*

[97] *CHCs: Bhagwanpur and Kako; PHCs: Ghailarh, Jandaha, Ratni Faridpur and Sikariya.*

[98] *SDH: Udakishunganj; CHCs: Bhagwanpur, Kako and Singheshwar; PHCs: Ghailarh, Goraul, Jandaha, Ratni Faridpur, Sikariya and Silao.*

verification, it was noted that dry and ironed linens were not being provided, in eight[99] test-checked healthcare facilities.

- As per the model agreement provided by SHS, the agency was required to first treat the infected linens and then clean them. However, in 17[100] test-checked healthcare facilities, procedure of sluicing the soiled, infected and fouled linen was not being adopted by agency.
- As per agreement, the linens were to be washed through washing machines only, however, it was noticed that linen were being washed manually, in all 20 test-checked healthcare facilities.

For example, manual cleaning of linens and non-segregation of linens before their cleaning have been shown in ***Images 3.13*** and ***3.14***, taken during joint physical verification in PHC, Noorsarai:

Image 3.13: Mannual washing of linens in PHC, Noorsarai (12.04.2022)

Image 3.14: Non-segregation of used linens in PHC, Noorsarai (12.04.2022)

The Department stated (December 2022) that seven coloured linen were being made available to healthcare facilities, as per requirement, and service providers had been instructed to work as per the agreement, in the Madhepura district. In the Patna district, regular monitoring was being done for providing quality service. The Department further replied (October 2023) that, in Madhepura and Nalanda, the laundary services were running smoothly and, in PHC, Silao and Noorsarai and SDH, Rajgir, laundary services were being provided by the outsourcing agencies. Reply, in regard to the remaining districts, was however, not provided.

3.6.10 Cleaning and Laundry Services in tertiary healthcare facilities

Laundering of hospital linen, is expected to satisfy two basic considerations, namely, cleanliness and disinfection. In this regard, MCI norms envisaged that: (i) central mechanical laundry, in each hospital, was to be equipped with a bulk

[99] *SDHs: Mahua and Rajgir; RHs: Chandi and Makdhumpur and PHCs: Daniyawan, Noorsarai, Shankarpur and Silao.*

[100] *Except CHC: Kako and PHCs: Ratni Faridpur and Sikariya.*

washing machine, hydro-extractor[101] and flat rolling machine (ii) hospitals were to be provided with necessary facilities for drying, ironing and storage of cleaned linen and (iii) facilities for housing the laundry equipment were to be provided in the campus.

It was further stipulated that, laundry services could be handed over to any agency and the Hospital Administrator would exercise overall supervision thereof.

Audit observed that laundry services had been outsourced in all the three test-checked hospitals. In this regard, Audit noted the following: (i) two hospitals, *i.e.*, PMCH and GMCH, did not have central mechanical laundry located within their campuses and the concerned agencies were carrying the linens out from the hospital for laundering. Due to this, it could not be ascertained whether the washing had been carried out as per prescribed norms and (ii) the hospital administration had not put in place any structured system, for ensuring the quality of cleanliness and disinfection of the hospital linens.

Thus, the laundry services of the test-checked hospitals were not being provided in the manner envisaged under MCI norms.

The Department replied (October 2023) that a centralized laundary had been established in the campus of Nalanda Medical College and Hospital (NMCH), for providing laundary services in the Patna Medical College and Hospital (PMCH), NMCH, Indira Gandhi Institute of Medical Sciences (IGIMS) *etc*. However, the Department did not reply regarding other Medical Colleges and Hospitals.

3.6.11 Inadmissible payment to agency towards trolley and cleaning services

PMCH, Patna, executed agreements for trolley services and cleaning services, with an agency[102] on May 2016 and January 2012, respectively. Scrutiny of records related to the agreements and test-check of records relating to payment made to the agency, disclosed the following deficiencies:

Inadmissible payment to the agency

As per Clause 3.3 of the terms and conditions of the agreement, all workers operating trolleys were required to perform their duties in one shift of eight hours (without repetition of the workers). Test-check of the workers' list, enclosed with the payment vouchers for December 2021, disclosed that names and bank accounts numbers of 42 trolley workers were repeated in the payment vouchers (for more than one shift; and three times, in six cases). This has resulted in inadmissible payment of ₹ 6.04 lakh[103]. Further, possibility of engagement of lesser number of employees, against the claimed number, cannot be ruled out in this case.

Further scrutiny of bills related to the cleaning work, for the same month (December 2021), disclosed that the names and bank account numbers of 78 workers, engaged for trolley services had been repeated in the bills of cleaning services, as detailed in

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[101] *'Hydro-extractors' are mainly centrifugal machines. The wet material is placed in the extractor and the internal drum of the extractor rotates at high speed, thus, throwing out the water contained in it.*

[102] *Nishka Security & Intelligence Services, Patna.*

[103] *48 (42+6) X ₹ 12,593 (inadmissible payment per worker per month) =₹ 6,04,464.*

Appendix 3.13. If payment to 78 workers (engaged for trolley work) is considered as authentic, then the possibility of inadmissible payment of ₹ 14.99 lakh made to these workers engaged for the cleaning work, cannot be ruled out.

Thus, inadmissible payment of ₹ 21.03 lakh was noticed in the test-check of bills pertaining to just one month.

On this being pointed out by Audit, the Department replied (December 2022 and October 2023) that the bills (from December 2020 to February 2022) submitted by the agency were scrutinised (October 2022) and inadmissible payment, made to be firm, had increased to ₹ 2.04 crore. For recovery of the inadmissible payment, demand notice had been served, by the hospital management, to the agency, and ₹ 0.61 crore had already been recovered and deposited into the treasury (November 2022).

However, inadmissible payment of ₹ 1.43 crore, made to the agency, was yet to be recovered (December 2022).

3.7 Bio-Medical Waste Management

Bio-Medical Waste, generated from medical activities can be hazardous, toxic, infectious and even lethal. Therefore, it should not be allowed to get mixed with other municipal waste and needs proper handling. As per the Bio-Medical Waste Management Rules[104], 2016, every hospital is required to ensure that BMW is handled without any adverse effect to human health and the environment. Handling of Bio-Medical Waste includes generation, collection, segregation, treatment, storage, packaging, transportation, disposal *etc*. The State Pollution Control Board (SPCB) is the prescribed authority, for the enforcement of the provisions of the BMW Management Rules, 2016. IPH Standards, 2012 and the BMW Rules, 2016, stipulate standards for the management of bio-medical waste.

The SHS, Bihar, directed (March 2018) all CS-cum-CMOs (heads of District Level Monitoring Committees), to ensure that all hospitals: (i) obtain authorisation for handling of BMW, from SPCB (ii) carry out segregation of Bio-medical waste (iii) constitute a committee for ensuring segregation of BMW(iv) establish Effluent Treatment Plants[105] (ETPs) and (v) adhere to all the instructions contained in the BMW Rules, 2016.

Audit observed several shortcomings, in regard to adherence to the BMW Rules, 2016, as detailed in the succeeding paragraphs.

3.7.1 Non-preparation of Bio-medical waste management plan

IPH Standards stipulated that all hospitals were to develop comprehensive plans for Bio-Medical Waste (BMW) management, in terms of segregation, collection, treatment, transportation and disposal of the hospital waste. Further, the waste was to be collected from the hospital on a daily basis (as per the BMW Management Rules, 2016 and in no case, should the collection period exceed 48 hours).

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104 *Framed by GoI, under the Environment (Protection) Act, 1986.*

105 *Effluent Treatment Plant (ETP) is used in various industries to clean water and remove toxic and non-toxic materials or chemicals from it, so that that water can be reused or released in the environment, which will do less harm to the environment.*

During scrutiny of records relating to Bio-Medical Waste, in the test-checked healthcare facilities, it was observed that only one (PHC, Shankarpur), out of 20 test-checked healthcare facilities had a Bio-Medical Waste management plan. However, this healthcare facility had not developed any action plans for its waste management. Reason(s) for not having any Bio-Medical Waste Management plan and action plans were not found available on records.

Further, ***Paragraph 2.6.3*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that all the test-checked DHs had outsourced the Bio-Medical Waste related services and the operator did not collect the Bio-medical waste daily or within 48 hours from Nalanda and Madhepura DHs.

The Department did not provide any specific reply regarding Bio-Medical Waste Management Plan.

3.7.2 Inadmissible payment of Goods and Services Tax

In PMCH, work relating to disposal of Bio-Medical Waste was being executed by M/s Environment Care & Solution Services, Patna, since November 2016. As per GoI Notification (No. 12/2017 dated 28 June 2017), in regard to services provided by operators of a common bio-medical waste treatment facility, to a clinical establishment, by way of treatment or disposal of bio-medical waste or the processes incidental thereto, the rate of GST would be zero. Accordingly, no payment, in regard to GST, was to be allowed to the agency, after June 2017. It was, however, noticed that the Superintendent of the hospital continued to permit payment of GST, at the rate of 18 *per cent* of the value of the bill, to the agency, even after June 2017. Scrutiny of bills paid, pertaining to the aforesaid work, showed inadmissible payment of amount of ₹ 28.11 lakh to the agency, during July 2017 to April 2022, towards GST.

The Department replied (December 2023) that: (i) in PMCH, ₹ 36 lakh (forfeiture of bank guarantee: ₹ 5 lakh and adjustment from bills: ₹ 31 lakh from the agency) had been recovered and (ii) an FIR, as well a Certificate case, had been lodged (December 2022) against the agency.

3.7.3 Authorisation of generation of waste

In light of the provision mentioned in ***Paragraph 3.7****. ante*, each healthcare facility had to obtain authorisation from the State Pollution Control Board (SPCB), for handling of BMW and all healthcare facilities, up to the level of PHCs, and should establish Effluent Treatment Plants (ETPs) for treatment of liquid waste.

Audit observed that 12[106], out of 20 test-checked healthcare facilities, had not obtained authorization for handling of BMW, from the SPCB. Further, in six[107] test-checked healthcare facilities, instructions for segregation and handling of Bio-

[106] *CHCs: Singheshwar and Bhaktiyarpur*; *PHCs: Chandi, Daniyawan, Ghailarh, Kako, Noorsarai, RatniFaridpur, Sikariya and Silao; SDHs: Barh and Udakishunganj.*

[107] *CHCs*: *Bhagwanpur and Bhaktiyarpur; PHCs: Daniyawan and Bihta; SDHs: Barh and Mahua.*

Medical waste, had not been displayed. Audit also observed that ETPs had not been established in any of the test-checked healthcare facilities. Consequently, liquid waste was not being disinfected, before its disposal, in any of the test-checked healthcare facilities and, therefore, its adverse impact on the environment could not be ruled out. Reason(s) for these irregularities, were not found available on records.

The Department replied (December 2022) that all the healthcare facilities up to the level of PHC, had applied for authorisation from the SPCB and 563 healthcare facilities had been authorised. Further, ETPs would be established in future.

Recommendations 5 & 6: State Government may ensure:

- ***preparation of Comprehensive plans for Bio-Medical Waste management.***
- ***segregation of Bio-Medical Waste and proper disposal thereof, as also the establishment of Effluent Treatment Plants in all healthcare facilities.***

3.8 Infection Control

Infection control practices are important in maintaining a safe environment for both patients and staff in the healthcare facilities, by reducing the potential risk of spread of hospital associated infections.

3.8.1 Non-preparation of Standard Operating Procedures and Non-constitution of Hospital Infection Control Committees

As per the Hospital Infection Prevention and Control guidelines, issued by Ministry of Health and Family Welfare (MoHFW), GoI, Infection Control Practices, for each hospital, are to be framed, practiced and monitored by the Hospital Infection Control Committee (HICC) of the hospital concerned, at all levels. The role of the HICC is to implement the infection control programme and policies, for the concerned healthcare facility. The committee is also responsible for establishing and maintaining infection prevention and control, its monitoring, surveillance, reporting, research and education.

For the purpose of preventing hospital acquired infections, among patients, visitors and staff, the NHM Assessor's Guidebook required framing a schedule of Standard Operating Procedures (SOPs), which were to be followed by the concerned healthcare facilities. Accordingly, standard practices must be followed for cleaning and disinfecting patient care areas, through maintenance of checklist for hygiene and infection control.

During audit, following deficiencies were noticed in the test-checked healthcare facilities:

- HICCs did not exist in 18, out of 20 test-checked healthcare facilities (except CHC, Singheshwar and PHC, Ratni Faridpur), during 2016-17 to 2021-22.
- Checklists for hygiene and infection control were not available in 17, out of 20 test-checked healthcare facilities (except CHC, Kako and PHCs, Ratni Faridpur and Sikariya).

- SOPs for infection control were not available in all the 20 test-checked healthcare facilities.

Further, during joint physical verification also, unhygienic conditions like littering of garbage and stray animals roaming in the premises of the healthcare facilities were noticed. Under these conditions, Audit could not derive any assurance that the required processes of hygiene and infection control were being followed in the test-checked healthcare facilities.

Further, ***Paragraph 2.6*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had pointed out audit observations related to infection control in the test-checked DHs.

The Department replied (December 2022) that SOPs for infection control had been prepared in the Patna district. The reply was not acceptable, as, during cross-verification (January 2023), in SDH, Barh (Patna), it was found that SOPs for infection control had not been prepared. Further, information regarding districts other than Patna, was not furnished.

3.8.2 Deficient Infection Control Management

Every healthcare facility should have infection control programme and procedures in place for prevention and measurement of hospital associated infection.

In light of provisions mentioned in ***Paragraph 3.8.1*** *ante*, Audit noticed that: (i) hospital infection control committee had not been constituted in any of the three test-checked hospitals (ii) there was no mechanism for conducting periodic medical check-ups and immunisation of medical and administrative staff (iii) no mechanism had been adopted for regular monitoring of infection control practices (iv) regular training courses/sessions, for healthcare workers, in patient safety, infection control and bio-medical waste management, were not being conducted in PMCH, Patna and (v) although such courses were being conducted in DMCH, without any required periodicity prescribed by the hospital.

These findings indicated deficiencies in infection control management, in regard to the test-checked hospitals.

The Department replied (December 2022) that an infection control committee had been constituted and was functional in DMCH and PMCH. It added (October 2023) that, in DMCH, a committee had been constituted, for imparting training to officials.

The reply of the Department was not acceptable, as: (i) during cross-verification (January 2023), it was observed that, although an infection control committee in DMCH had been constituted (9 September 2022), records relating to the activities of committee were not made available to Audit (ii) records relating to the constitution of the infection control committee in PMCH, were not provided and (iii) for GMCH, no reply was provided by the Department.

3.9 Patients' safety

The National Building Code of India, 2016, mentions that Fire Safety Plan should be prepared, so that appropriate number and kind of exits should be evaluated. Further, it requires that fire extinguishers must be installed in every healthcare facility, so that, in the case of any fire in the hospital premises, the safety of the patients/ attendants/visitors and the hospital staff may be ensured. Besides, as per the NHM Assessors' Guidebook, evacuation plans should be displayed at critical areas, at each floor of the healthcare facilities.

During audit, following deficiencies were observed in all the 20 test-checked healthcare facilities:

- No fire safety plans, for prevention of fires, were in place.
- Fire extinguishers were either not available or non-functional.
- No evacuation plans were displayed.
- In thirteen[108] test-checked healthcare facilities, fire audit was not conducted by the competent authority.

As such, the safety of patients, attendants, visitors and hospital staff, from fire, was compromised in these healthcare facilities.

The Department replied (December 2022) that fire audit had been conducted and fire extinguishers had been installed in Patna district, whereas reply, in regard to the remaining districts, was not furnished. Further, during cross-verification (January 2023) at PHC, Daniyawan and SDH, Barh, it was observed that fire audit had not been conducted. The Department further replied (October 2023) that: (i) in SDH, Barh, the work of construction of a new building was under progress (ii) the fire safety work would be carried out as per guidelines and (iii) at present, fire safety equipment was available in the hospital. The Department, however, did not furnish reply in regard to other districts.

3.9.1 Patients rights and grievance redressal

➢ IPH Standards prescribes that every hospital should: (i) display the Citizen's Charter at a suitable place, to ensure that patients are aware of their rights and (ii) have a uniform user friendly signage system.

Audit, however, observed that:

- Citizen's Charters were displayed in only seven[109], out of 20 test-checked healthcare facilities.
- Only six[110], out of 20 test-checked healthcare facilities, had uniform user friendly signage system.

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[108] *SDHs: Udakishunganj (Madhepura), Mahua (Vaishali) and Barh (Patna); RH: Makhdumpur (Jehanabad); CHCs: Bhagwanpur (Vaishali), Bakhtiyarpur (Patna), Kako (Jehanabad); PHCs: Bihta (Patna), Goraul (Vaishali), Ratni Faridpur and Sikaria (Jehanabad), Ghailarh and Shankarpur (Madhepura).*

[109] *CHCs: Bhagwanpur and Singheshwar; PHCs: Daniyawan, Goraul and Silao; RH: Makhdumpur and SDH: Mahua.*

[110] *CHCs: Bhagwanpur and Singheswar; PHCs: Goraul and Noorsarai; RH: Chandi and SDH: Mahua.*

- Further, for effective redressal of grievances of patients, the IPH Standards envisages: (i) a mechanism for receipt, registration and disposal of complaints, on a first-come-first-serve basis (ii) noting of the actions taken in regard to complaints, in a register (iii) periodic monitoring of the system of disposals and (iv) follow-up by superior authorities.

During audit, it was observed that none of the 20 test-checked healthcare facilities had a defined and established system for grievance redressal mechanism. Further, neither complaint registers, nor complaint boxes, were found to be available in any of the test-checked healthcare facilities.

In the absence of such records, it could not be verified whether the healthcare facilities had attended to the complaints of the patients, properly.

Also, the ***Paragraph 2.2.10*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated that none of the test-checked DHs had defined mechanism for registration and disposal of complaint case including maintenance of complaint register and provision of complaint box.

The Department replied (December 2022) that complaint boxes had been made available in CHC, Singheshwar and PHC, Ghailarh and, in the Patna district, Citizen's Charter, as well as 'May I Help you' counter had also been made available. During cross-verification (January 2023), it was observed that Citizen's Charter and 'May I Help You' counter were not available in PHC, Daniyawan and SDH, Barh. The Department further replied (August 2023) that Citizen's Charter, as well as 'May I Help you' services, are available in SDH, Barh and PHC, Daniyawan, in Patna District and, in PHC, Silao (Nalanda), Citizen's Charter was available.

Lack of required services envisaged in the guidelines, was mainly due to shortage of required infrastructure. Consequently, patients were deprived of the required healthcare services, to be provided by the HWCs.

Specific reply, in this regard, was not furnished by the Department.

Recommendations 7 and 8:

State Government may ensure that:

- ***Fire Safety Plan is prepared by the Health Department and fire extinguishers are installed in every healthcare facility.***
- ***at healthcare facility level there is a defined and established system for grievance redressal mechanism for beneficiaries.***

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

Chapter-IV

Availability of Drugs, Medicines, Equipment and other consumables

Shortages of essential drugs and equipment was noticed in all the test-checked healthcare facilities due to ineffective planning by the nodal agency i.e. Bihar Medical Services and Infrastructure Limited (BMSICL). These deficiencies had resulted in non-providing of uninterrupted and quality healthcare services to the intended beneficiaries.

The GoB established (July 2010) BMSICL, as a centralised agency, with the objective of procuring and managing drugs, equipment and instruments, at fair and reasonable prices, for all medical institutions of the government. It charges centage @ 5 *per cent* of the value of procurement, from the State Government.

As per Clause 2.1 (ii) of its Procurement Manual, BMSICL was to ensure rate contracts (RCs) with suppliers, for supply of drugs/surgical items/reagents *etc.* These rate contracts were required to be in place throughout the year. Further, alternate options for supplies were also required to be in place, to avoid disruption in supplies. Also, as per clause 3.8 of the manual, the period of rate contract was to be two years from the date of award of work, extendable for a further period of one year. In addition, tendering for an item was to be initiated six months prior to the date of expiry of the existing rate contract.

4.1 Procurement Process

BMSICL notified (October 2018) the Manual for the Procurement of Drugs and Medical Equipment-2018 (Procurement Manual). As per the procurement Manual, the Procurement Steering Committee[1] (PSC) was to be the administrative body responsible for preparation and execution of an annual procurement plan, for procurement of drugs. The committee was required to meet at least once every quarter in a year. The PSC was to ensure that rate contracts are in place throughout the year, for generic drugs, and other essential drugs, surgical items and other hospital consumables, and are executed in time.

During the course of audit of BMSICL, Patna, it was observed that: (i) no annual procurement plan was in place and BMSICL had been following the practice of procuring drugs based on the indents received through medical institutions (ii) RCs for all EDL drugs were not executed, as mentioned in ***Paragraph 4.2.2***, (iii) Efforts for approaching other states and central agencies, were not made for drugs not covered under rate contracts and (iv) It was also observed that BMSICL had not ensured meeting of PSC once in every quarter, as prescribed in the Procurement Manual. The PSC had only met when there was requirement of modification in

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[1] *Steering Committee (an administrative body) consists of Chairman: Managing Director, BMSICL; Member Secretary: Internal Financial Advisor, Department of Health; Members: Chief General Manager (Supply Chain) BMSICL, General Manager, Finance (BMSICL); Additional Secretary/Joint Secretary (Department of Health as nominated by Principal Secretary, Health, GoB), State Drug Controller (Government of Bihar) and any other member as deemed fit by the Managing Director, BMSICL.*

the terms and conditions of tender documents and never met for finalisation or execution of the annual procurement plan.

Thus, non-preparation of annual procurement plans and non-finalisation of rate contracts, led to delays in the procurement and supply of drugs, as discussed in the succeeding paragraphs.

The Department replied (December 2022) that a new indent policy had been implemented (July 2021) and an annual procurement plan had been prepared on the basis of the quarterly indent system, as well as the annual indent received from SHS. Further, the State had decided to approach other states and central agencies, for procurement of drugs not covered under rate contracts.

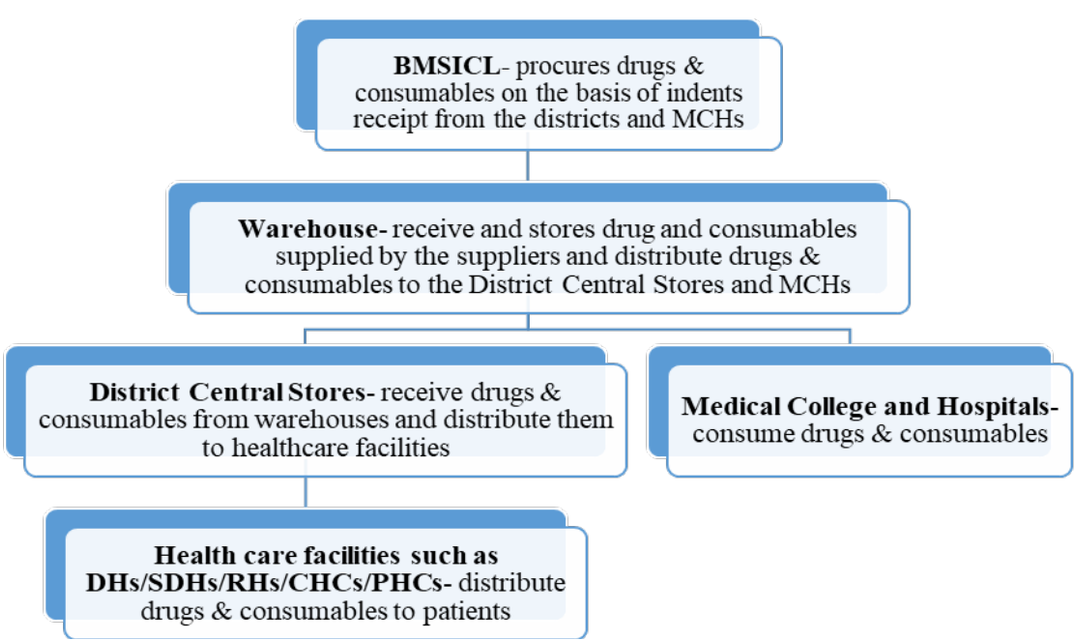
Although, a new indent policy had been started only in July 2021, however, for the period from April 2017 to June 2021, an annual procurement plan had not been prepared. Further, the reply of Department was silent about non-conducting of PSC meeting, for preparation of the annual procurement plans.

The Department further replied (October 2023) that: (i) the number of drugs in EDL had been revised to 611 drugs, from 387 drugs, for the Annual Procurement Plan (ii) tenders had been floated and Rate Contracts were in process for various drugs added in the EDL and (iii) BMSICL would conduct PSC meetings from time to time, on regular basis.

4.2 Procurement, supply, storage and distribution of drugs and consumables

Process, adopted by the BMSICL, for procurement, supply, storage and distribution system of drugs and consumables has been depicted in **Chart 4.1**.

Chart 4.1: Procurement, supply, storage and distribution of drugs and consumables



(Source: Records of BMSICL and test-checked healthcare facilities)

4.2.1 Non-categorisation of drugs, as per the procurement manual

As per Annexure 1 of the Procurement Manual of BMSICL, to ensure timely availability of generic drugs at each of the healthcare facility in the State, BMSICL was required to analyse, inventory management of generic drugs and consumables in the following categories: (i) ABC (Always, Better and Control) analysis (based on item value and quantity (ii) VED (Vital, Essential and Desirable) analysis (based on the criticality of an item) (iii) FSN (Fast, Normal and Slow-moving) analysis (based on the level of movement of items). The safety stocks, reorder frequencies and reorder quantities, at BMSICL warehouses, was to be arrived at on the basis of the ABC/VED/FSN classification, for all generic drugs, so that out-of-stock situations could be avoided.

During audit of BMSICL, it was observed that:

- The above analyses had not been carried out. As a result, the warehouse capacity and expenditure on purchase of medicines, out of the available funds, could not be optimised.
- BMSICL had not set any safety stock levels, reorder frequencies or reorder quantities, for drugs/consumables, to prevent out-of-stock situations. The purchase order quantities for drugs were being decided by the concerned officials.

As a result, during FYs 2016-17 to 2021-22, there were various instances of stock-out situations, and the deliveries of drugs/surgical items were made with inordinate delays, as detailed in ***Appendix 4.1.*** *As per* ***Appendix 4.1***, only 52.47 *per cent* of the drugs were issued within 30 days of indent; 13.83 *per cent* were issued within 31-60 days; 8.16 *per cent* within 61-90 days; 16.64 *per cent* within 91-180 days; 7.53 *per cent* within 181-365 days and 1.36 *per cent* in above 365 days of indent.

The Department replied (December 2022) that new indent policy had been introduced (July 2021) to ensure timely availability of generic drugs and other consumables and now proper order was being issued, following ABC, VED and FSN, to maintain stock to avoid stock, out situations.

The reply of the Department was not acceptable, as the fact remained that, due to non-compliance of the provisions of Procurement Manual, frequent stock-out situations were observed, leading to deficient patient service, as analysed in ***Chapter III*** of this Report. Further, no supporting document was provided regarding categorisation of drugs, according to ABC, VED and FSN analysis and stock being managed accordingly.

The Department further stated (October 2023) that: (i) a list of fast moving, slow moving and non-moving drugs had been prepared and (ii) purchase orders were being issued on the basis of this list and indents received from health institutions in each quarter, to maintain the supply chain of drugs and to avoid the stock-out situation.

4.2.2 Inadequate coverage of drugs under Rate Contracts

As per NHM guidelines, essential drugs should be provided to citizens, free of cost, at different levels of healthcare facilities. Accordingly, the Department issued (October 2009) a resolution regarding essential drugs. As per this resolution, essential drugs, appearing in the Essential Drug List (EDL) (containing 250 to 387 drugs, during 2016-17 to 2021-22), were to be provided to patients freely, at different levels of healthcare facilities, from PHCs to Medical College and Hospitals.

The details of the Rate Contracts (RCs) entered into by BMSICL, during the period from FY 2016-17 to FY 2021-22, is shown in **Table 4.1.**

Table 4.1: Rate Contracts in force during FY 2016-17 to FY 2021-2022

Financial Year	Total no. of drugs in EDL	No. of drugs covered under RCs	Percentage of drugs covered under RCs
2016-2017	250	36	14
2017-2018	250	38	15
2018-2019	310	195	63
2019-2020	355	218	61
2020-2021	387	234	61
2021-2022	387	235	61

(Source: Records of BMSICL)

As can be seen from **Table 4.1**, BMSICL could not execute RCs for several drugs listed in the EDL, during the period from FY 2016-17 to FY 2021-22, and the percentage of RCs executed during the said period, ranged from 14 to 63 *per cent* only. Inadequate coverage of essential drugs under the RCs was attributable to inadequate participation of manufacturers in the tendering process, absence of a sound Procurement Policy and proper planning framework by BMSICL. This resulted in low procurement activity and non-supply of drugs to healthcare facilities.

The Department replied (December 2022) that in comparison to 2016-17, the drugs covered under RCs in 2021-22 were higher in number and the EDL had also been revised to 611 drugs. Further, continuous efforts were being made by BMSICL, for rate contracts of the drugs mentioned in EDL.

However, despite the efforts of the Department, the fact remained that, only 14 *per cent* to 63 *per cent* EDL drugs were under rate contracts.

The Department further replied (October 2023) that efforts were being made to maintain the stocks of different kind of drugs.

4.2.3 Loss due to short levy of penalty for delayed supply of drugs

As per Clause 20 (Supply conditions) of the terms and conditions of the bid documents of BMSICL for rate contract for supply of drugs/surgical items, 50 *per cent* of the ordered quantity was to be supplied within 45 days of placing the purchase order. The balance 50 *per cent* was to be supplied within 60 days of the

placement of the purchase order. Further, as per Clause 26 (Deduction of Payments & Penalties), if the supply reached the Drug Warehouses beyond the stipulated time of 60 days, as mentioned in the Bid Document of BMSICL, liquidated damages were to be levied at 0.5 *per cent* per day of the value of the delayed supply, subject to a maximum of 10 *per cent* of the contract value.

Scrutiny of Purchase Orders' delivery data, extracted from *e-Aushadhi* portal[2], revealed that the *e-Aushadhi* system[3] had an inbuilt system[4] of calculating the scheduled period of delivery as the 61st day (instead of the 60th day) from the date excluding the date of purchase order. As a result, for the items delivered after the 60th day, liquidated damages were charged for one day less than was prescribed in the terms and conditions of the contract.

During March 2017 to September 2021, 4,748 purchase orders, placed for ₹ 1,526.18 crore, were delivered by suppliers after the scheduled period of 60 days. However, for each purchase order, liquidated damages were charged for one day less. As a result, liquidated damages of ₹ 7.63 crore could not be levied against the suppliers, resulting in loss of similar amount to BMSICL. Further, non-provision of any penal clause, for non-supply of 50 *per cent* of the ordered quantity within 45 days of placing the purchase order, defied the purpose of Clause 20, as the suppliers were under no compulsion to provide these drugs within 45 days of placing the purchase order.

The Department replied (December 2022) that BMSICL had excluded the delivery dates, because BMSICL warehouses are generally closed by 5:00 PM and consignments arriving on the scheduled delivery date, that could not be offloaded on the same day, were offloaded the next day. To ensure a level playing field, the delivery date was excluded and it had been also excluded by the DVDMS.

The reply of the Department was not acceptable as the practice of excluding the delivery date, for reckoning the scheduled time-period of 60 days for supply of drugs, was against the terms and conditions of the contract.

The Department further stated (October 2023) that the delivery schedule would be revised, in view of the audit observation.

4.2.4 Excess payment of Goods and Services Tax

As per Section 14 of the Central Goods and Services Tax Act, 2017, in case the goods or services or both have been supplied after the change in rate of tax:

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[2] *E-Aushadhi Portal is a comprehensive application software which was customised and deployed by C-DAC data centre, Noida, to automate the complete supply chain management system of BMSICL.*

[3] *E-Aushadhi is an application software having an inbuilt (April 2016) system for efficient control on supply and inventory. It records all the purchase orders and challans at the warehouses and generate reports.*

[4] *The main functions of E-Aushadhi system are supplier registration and rate contract, demand generation, purchase order generation, challan process, drug inventory, quality control, indent issue and acknowledgment etc.*

(i) Where the payment was received after the change in rate of tax but the invoice had been issued prior to the change in rate of tax, the time of supply should be the date of receipt of payment;

(ii) Where the invoice had been issued and payment was received before the change in rate of tax, the time of supply should be the date of receipt of payment or date of issue on invoice, whichever is earlier; or

(iii) Where the invoice had been issued after the change in rate of tax but the payment was received before the change in rate of tax, the time of supply should be the date of issue of invoice.

Ministry of Finance, GoI, vide notification dated 14 June 2021, revised the GST rates from 12 *per cent* to 5 *per cent,* on COVID-19 related drugs and equipment, *viz*. COVID-19 testing kits, pulse oximeters, ventilators and Remdesivir injections *etc*.

Scrutiny of records related to the procurement of equipment/devices revealed that during the intervening period, as detailed in ***Appendix 4.2***, BMSICL, while purchasing the aforesaid items, had made payments to the suppliers, applying GST at the rate of 12 *per cent*, instead of 5 *per cent*. This had led to excess payment of ₹ 51.20 lakh, as calculated in ***Appendix 4.2***.

The Department replied (December 2022 and October 2023) that the date of supply order was prior to the notification date (change in rates of GST) and it was verified on the GST portal, as per the B2B invoices of GSTR2A.

The reply of the Department was not tenable, as BMSICL was liable to pay only five *per cent* GST for procurement of COVID-19 related drugs and equipment, during the said period, as per the existing GST rates.

4.2.5 Procurement of drugs below 75 per cent shelf life

As per Clause 20 - Supply Conditions (f), of the terms and conditions of tender document for Rate Contract for supply of drugs, for different healthcare facilities of the State, the supplied Drugs, including cold chain products, must have 75 *per cent* of shelf-life[5] period, in accordance with Schedule P of the Drugs and Cosmetics Rules, 1945. Further, as per Clause 20(l), in the event of drugs below 75 *per cent* shelf-life were not utilised within their shelf life period, the concerned firms were to replace the unspent/unused/expired stocks, by fresh stocks, with shelf life as per Clause 20(f), without any extra cost, unconditionally.

Scrutiny of purchase orders' data of BMSICL, extracted from the *e-Aushadhi* portal, revealed that, during FYs 2016-17 to 2021-22, 13,440 purchase orders for, 197.38 crore units of drugs at a cost of ₹ 1,290.39 crore, were placed and supplies were received, with only 35 *per cent* to 74 *per cent* of their shelf life, as shown in **Table 4.2**.

[5] *Shelf life is defined as the length of time up to/for which a product may be stored without becoming unsuitable for use or consumption (www.ncbi.nlm.nih.gov).*

Table 4.2: Purchase of drugs with below 75 *per cent* shelf life

Sl. No.	Period *(per cent)* of shelf life	No. of Purchase Orders	Quantity (units in crore)	Value (₹ in crore)
1	35 to 44	798	0.16	10.21
2	45 to 54	1,020	0.86	28.03
3	55 to 64	5,607	15.63	227.06
4	65 to 74	6,015	180.73	1,025.09
Total		**13,440**	**197.38**	**1,290.39**

(Source: Records of BMSICL)

The main reason for receipt of drugs with less than 75 *per cent* of shelf life was lack of adequate monitoring by BMSICL, as *e-Aushadhi* software did not flag receipt of drugs below the prescribed shelf life.

Further, BMSICL did not provide data of expired drugs replaced by suppliers. Therefore, the replacement of expired drugs by the suppliers could not be verified.

The Department replied (December 2022) that the shelf life of certain drugs (mostly lifesaving) was less than the general drugs. These drugs were being imported and so take time, leading to receipt of drugs with lower shelf lives. Drugs with lesser shelf life were allowed only with the condition of free replacement, in case of expiry. List of expired drugs had been provided and replacement process had been started.

The reply of the Department was not acceptable, as there was no proper monitoring system in BMSICL, to ensure that drugs with less than 75 *per cent* of shelf life were not accepted and the expired drugs were being replaced by the supplier. Further, most of the drugs, received with less than 75 *per cent* of their shelf-life, were indigenous drugs. Also, BMSICL had not provided any supporting documents, corroborating the replacement of expired drugs.

The Department further replied (October 2023) that now BMSICL's Drug Vaccine Distribution Management System did not allow the supplier to supply drugs having shelf life below 75 *per cent,* except in special cases, wherein permission of the competent authority had to be taken.

4.2.6 Deficient Indenting System

BMSICL introduced (July 2021) the 'Drugs and Vaccine Distribution Management System-Direct Indenting Policy', which introduced the systems of: (i) direct indenting by healthcare facilities (DHs/SDHs/CHCs/PHCs), with minimal involvement of the District Central Stores in the indenting process and (ii) raising of quarterly indents by healthcare facilities, including a timeline as the cut-off date, for placing of indents under the *e-Aushadhi* system.

Audit observed that, prior to July 2021, *i.e.* during April 2016 to June 2021, time frame for placement of indents by healthcare facilities was not prescribed. Accordingly, the healthcare facilities used to place frequent indents/untimely

indents within a particular period (month/quarter). Non-framing of timeline for placing indents had hampered the efficiency of supply chain management. As a result, it was not feasible to plan for the procurement of drugs in a systematic manner, in order to ensure the timely supply of drugs. This had resulted in frequent cases of non-issuance of drugs against the indents placed.

BMSICL could not supply the drugs as indented by various healthcare facilities, during FYs 2016-17 to 2021-22, as detailed in **Table 4.3**.

Table 4.3: Non-issuance of drugs against indents placed

Financial Year	No. of indents placed	Indented quantity (in crore)	Non-issued quantity in crore (in *per cent*)	Value of non-issued quantity (₹ in crore)
2016-17	37	1.15	0.34 (30)	1.28
2017-18	260	78.57	18.64 (24)	35.58
2018-19	474	213.38	60.55 (28)	50.28
2019-20	258	136.12	27.65 (20)	47.21
2020-21	257	68.57	22.11 (32)	50.06
2021-22	348	73.15	26.07 (36)	57.4
Total		**570.94**	**155.36**	**241.81**

(Source: Records of BMSICL)

As evident from **Table 4.3**, during FYs 2016-17 to 2021-22, percentage of drugs valuing ₹ 241.81 crore which were not issued to the healthcare facilities, ranged from 20 *per cent* to 36 *per cent* of the total number of drugs indented. This shortfall in issuances of indented drugs to healthcare facilities indicated lack of performance on the part of BMSICL and further, resulted in non-availability of drugs to patients. The main reasons for non-issue of indented drugs were: (i) non-availability of drugs due to non-finalisation of the rate contracts of drugs (ii) absence of any time-frame for placing indents by healthcare facilities and (iii) inefficiency in the procurement of drugs.

The Department replied (December 2022) that BMSICL had introduced a new online indenting policy, with timeframe for placement of indent by healthcare facilities.

However, prior to July 2021 (*i.e.* from April 2017 to June 2021), deficiencies in supply of drugs were noticed, due to non-existence of any indenting policy and the situation had not improved much, even after introduction of the new indenting policy.

The Department further stated (October 2023) that, due to the new indenting policy, the procurement had increased.

4.2.7 Short supply of drugs/ surgical items by suppliers

BMSICL placed supply orders to suppliers of drugs/surgical items, for purchase of drugs/surgical items under rate contract, for issuing them to the healthcare

facilities. During FYs 2016-17 to 2021-22, status of purchase orders placed and supplies received against these orders, are shown in **Table 4.4**.

Table 4.4: Drugs/surgical items received against supply orders placed during FYs 2016-17 to 2021-22 (Quantity and value in crore)

Financial Year	Quantity of drugs/ surgical items for which supply orders were placed	Value for which supply orders were placed	Quantity received	Percentage of Quantity received	Value of drugs/ surgical items received	Quantity of drugs/ surgical items not received	Percentage of Quantity of drugs/ surgical items not received	Value of drugs/ surgical items not received
2016-17	7.46	23.02	3.38	45.31	5.24	4.07	54.56	17.78
2017-18	88.01	112.69	77.2	87.72	94.87	10.81	12.28	17.81
2018-19	120.59	133.72	119.52	99.11	130.88	1.08	0.9	2.84
2019-20	168.78	275.12	156.66	92.82	227.91	12.13	7.19	47.21
2020-21	44.24	725.56	41.98	94.89	683.5	2.26	5.11	42.06
2021-22	201.7	642.45	182.74	90.6	571.74	18.96	9.4	70.71
Total	**630.78**	**1,912.56**	**581.48**	**92.18**	**1,714.14**	**49.31**	**7.82**	**198.41**

(Source: Records of BMSICL)

As can be seen from **Table 4.4**, purchase orders for 630.78 crore units of drugs/ surgical items, valuing ₹ 1,912.56 crore, were placed, against which only 581.48 crore units of drugs/ surgical items, valuing ₹ 1,714.14 crore, were supplied by the suppliers, during FYs 2016-17 to 2021-22. Consequently, 49.31 crore units of drugs/surgical items, valuing ₹ 198.41 crore, were not received from the suppliers.

This had further led to non-supply of above drugs/ surgical items to healthcare facilities.

The Department replied (December 2022 and October 2023) that BMSICL had the policy of deduction of late delivery charges, for short supply of drugs against supply orders. In case of non-supply from supplier, BMSICL issues No-objection Certificate to districts and MCHs, for local procurement, to ensure regular supply of medicines.

The reply of the Department was not acceptable, as the fact remained that the required drugs did not reach the healthcare facilities. Further, supporting documents, having details of NOC provided to districts for local purchase were not produced to Audit, to verify that the NOCs provided were commensurate with the quantity of non-supplied drugs.

4.2.8 Availability of drugs, surgical items and reagents

During test-check of records of BMSICL, it was observed that, as on 31 March 2022: (i) 126 drugs, surgical items and reagents, which were under the rate contract, were out of stock and, consequently were not available for issue and (ii) there was an aggregate requirement of 15.09 crore units, for these 126 drugs, surgical items and reagents.

The normal cycle[6], between the date of placement of the indent and the availability of drugs, surgical and reagents for issue, was 90 days. Due to non-placement of purchase orders in a timely manner, 'stock-out' situations occurred, despite the availability of rate contracts, leading to non-availability of drugs on time.

Test-check of the Stock Reports of drugs, reagents and surgical items (March 2022) from the *e-Aushadhi* portal, revealed insufficient availability of drugs, reagents and surgical items, as shown in **Table 4.5**.

Table 4.5: Availability of drugs, surgical items and reagents

No. of drugs, reagents and surgical items	Not Available	Available (1-49)	Available (50-99)	Available (100-999)	Available (1,000-9,999)	Available (Above 10,000)
1,006	59	308	49	271	89	230
100 (in *per cent*)	5.86	30.62	4.87	26.94	8.85	22.86

(Source: Records of BMSICL)

As can be seen from **Table 4.5**, the stock level of 59 items (5.86 *per cent*) was 'nil', while, for 357 items (35.49 *per cent*), the quantities available for issue were less than 100. For 271 items (26.94 *per cent*) and 89 items (8.85 *per cent*), the quantities available for issue ranged between 100 to 999 and 1,000 to 9,999, respectively.

The Department replied (December 2022 and October 2023) that: (i) the stock-out position was after the distribution of drugs and medicines at various healthcare facilities and the requirement mentioned was for the next quarter and (ii) currently, BMSICL was having Quarterly Indent Policy, according to which, indent was to be obtained from various hospitals one quarter in advance to ensue timely purchase orders to the manufacturing firms and availability of drugs.

The reply of the Department was not acceptable as 'stock-out' situations were noticed, which implied that no safety stock limit was followed. This was due to not conducting of procurement analysis, as already elaborated in ***Paragraph 4.2.1***.

4.2.9 Short supply of drugs/surgical items to healthcare facilities

BMSICL issues drugs to healthcare facilities in Bihar, on the basis of indents placed by the healthcare facilities. During FYs 2016-17 to 2021-22, details of indents for various types of drugs/surgical items, placed by the test-checked districts/ healthcare facilities and supplies received against them, are shown in ***Appendix 4.3***.

As can be seen in ***Appendix 4.3***, the percentage supply of drugs/surgical items, for the healthcare facilities, ranged from 70 *per cent* (FY 2021-22) to 94 *per cent* (FY 2019-20). Further, healthcare facility-wise supply of drugs/surgical items against indents range from 58 *per cent* (Patna Distribution Control System; FY2017-18) to 100 *per cent* (various healthcare facilities). The main reasons for

[6] *Normally, 10 days' time is taken for placement of purchase order, 60 days taken by supplier to supply drugs and 20 days taken for quality testing of drugs.*

non-supply of indented drugs/surgical items to healthcare facilities included non-finalisation of rate contracts, delays in placement of purchase orders and short supply by suppliers.

The Department replied (December 2022) that drugs, as mentioned in EDL, were procured by BMSICL, as per indents received from various hospitals. For certain drugs not covered in RC, NOC was provided to Civil Surgeons and MCH, for local procurement. Further, BMSICL had made all efforts to increase the number of rate contracts.

The Department further stated (October 2023) that, to minimize the short supply, BMSICL had implemented the indenting policy, so that requirements are received in advance and purchase orders are also placed in advance.

The reply of the Department was not acceptable, as BMSICL had not prepared any procurement plan, in terms of the procurement manual. Besides, there was no time-frame for placement of indent by healthcare facilities prior to July 2021, which had resulted in short-supply of indented drugs.

4.2.10 Non-availability of drugs/consumables as per EDL

Timely availability of drugs/consumables prescribed under EDL is essential for providing good healthcare facilities. During audit of 20 test-checked healthcare facilities (SDHs/RHs/CHCs/PHCs), it was observed that during FYs 2016-17 to 2021-22, essential drugs ranging between 21 *per cent* to 65 *per cent,* were not available in Out Patient department (OPD), as detailed in ***Appendix 4.4***. Further, non-availability of essential drugs for In Patient Department (IPD) was 34 *per cent* to 83 *per cent,* during FYs 2016-17 to 2021-22, as detailed in ***Appendix 4.5***. It was also observed that non-availability of consumables for IPD was 32 *per cent* to 73 *per cent*, during FYs 2016-17 to 2021-22, as detailed in ***Appendix 4.6***. Further, in nine[7] test-checked HWCs, only 11 to 47 types of drugs were available, during the test-checked months of FY 2021-22, against required 109 types of drugs, as prescribed by GoI.

The main reasons for non-availability of essential drugs were lack of an annual procurement plan, lack of an indenting policy and delays in procurement. Non-availability of essential drugs resulted in ineffective patient service at healthcare facilities.

The Department replied (December 2022) that a new indenting policy had been introduced, to ensure timely availability of generic drugs and other consumables, and now proper orders are being issued, following ABC, VED, FSN, to maintain safety stock and to avoid stock-out situations.

The reply of the Department substantiated the fact that it had no procurement plans, as per the procurement manual policy, as well as indenting policy, prior to July 2021.

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[7] *Jehanabad: Nawada, Derhsaiya, Chainpura, Gonwan and Bhawani Chak; Nalanda: Dahpar; Patna: Sirsi and Vaishali: Prataptand and Sondh.*

The Department further replied (October 2023) that efforts were being made to enter into rate contracts, for the drugs enlisted in the EDL.

Recommendations 9 and 10:

State government may ensure that:

- ***BMSICL executes rate contracts, prepare annual procurement plan for procurement of equipment, to ensure their timely availability and distribution thereof across healthcare facilities.***
- ***terms and conditions of the supply contracts are adhered to, for ensuring the timely supply and adequate shelf life of drugs.***

4.2.11 Storage of drugs

As per the National Formulary of India guidelines (NFI[8]) 2011, issued by the Indian Pharmacopoeia Commission, Ministry of Health and Family Welfare, GoI, drugs should be stored at controlled temperature and mostly away from light and moisture, to maintain their quality and efficacy. Further, Schedule P of the Drugs and Cosmetics Rules, 1945, prescribes, the maximum permissible storage period for various drugs. Besides, as per the draft Guidelines on Good Distribution Practices for Pharmaceutical products, issued (September 2018) by the Drugs Controller General, GoI: (i) the storage area for drugs should be clean and dry (ii) the storage area should have sufficient capacity and adequate lighting and (iii) expired/quarantined/damaged drugs should be segregated.

BMSICL had three warehouses located at Fatuha (Patna), Muzaffarpur and Purnea. During inspection of the Fatuha and Muzaffarpur warehouses, it was observed that, except cold chain drugs, kept in refrigeration rooms (which are required to be stored below eight degree temperature), all other drugs were kept stacked on the floor ***(Images 4.1*** to ***4.4*** taken during joint physical verification), at normal room temperature.

Images 4.1 and 4.2: Drugs scattered on the floor at Fatuha warehouse (28.04.2022)

[8] *NFI is a book that contains list of drugs that are approved for prescription. It serves as a guidance document to medical practitioners, pharmacists, nurses, medical and pharmacy students, and other healthcare professionals and stakeholders in the healthcare system.*

Images 4.3 and 4.4: Drugs scattered on the floor at the Muzaffarpur warehouse (06.05.2022)

Maximum prescribed storage temperatures, for 12 test-checked drugs[9] ranged between 20°C to 30°C**.**

Audit observed that there was no evidence of any system, being in place, for regulating the temperature levels of the storage areas of the test-checked warehouses. Scrutiny of the temperature recording registers of the warehouses revealed that, during the major part of the year: (i) the temperatures had remained above 30 degrees (exceeding 40 degrees, on various occasions) and (ii) the humidity levels had remained above 70 *per cent,* during the rainy season. Storage of drugs in variation to the prescribed temperature and humidity might have adverse impact on the drugs, with regard to: (i) the quality and efficacy of drugs (ii) the desired benefits not accruing to the final users/patients. Further, it might have also affected the shelf life of the drugs.

The Department replied (December 2022) that BMSICL had taken adequate measures, in order to maintain the required temperature of stored medicines such as regular monitoring of the temperature and humidity, and whenever the temperature exceeded the required level, then sprinklers, installed at the warehouses, were used to maintain the temperature. The warehouses had heavy duty exhaust fans, which were operated to maintain the temperature.

The reply of the Department was not acceptable, as the fact remained that the prescribed temperature and humidity level were not maintained in the warehouses, which might have affected the quality and expiry period of drugs.

The Department further stated (October 2023) that: (i) BMSICL was in process of building District Drug Warehouses in all districts, to improve the storage condition and (ii) extra space of 97,000 square feet, had been made available, for adequate storage of drugs, under appropriate conditions.

[9] *Acetylsalicylic Acid, Dexamethasone, Hydrocortisone, Miconazole, Mannitol, Beclomethasone, Salbutamole, Methyl Prednisolone, Chloramphenicol, Ciprofloxacin, Atropine and Water for Injection.*

4.2.12 Other deficiencies in procurement/storage/inspection of drugs/ consumables at district level

Scrutiny of records of 17[10] healthcare facilities, in five test-checked districts, revealed the following deficiencies in procurement/storage/inspection of drugs/ consumables:

- There were no comprehensive annual plans for procurement of drugs and consumables.
- There was no mechanism to assess the 'stock-out' situations in the healthcare facilities, as 10[11], out of the 17 test-checked healthcare facilities, did not maintain any records for assessing the stocks of essential/ critical drugs.
- Physical verification of stores was not being conducted, in all the test-checked healthcare facilities. As per directions issued (November 2013) by SHS, sample of every supplied batch of drugs was to be taken by Drug Controllers/Drug Inspectors. However, it was observed that Drug controllers/ Inspectors, had not visited/inspected any of the 13[12] healthcare facilities, during the FYs 2016-17 to 2021-22.

Recommendation 11: State Government may ensure that drugs and surgical items are stored at the prescribed temperature and moisture standards, to help preserve their shelf life.

4.2.13 Availability of drugs in tertiary healthcare facilities

The State Government had prepared an Essential Drugs List (EDL), which included 128 and 164 drugs for OPD and IPD respectively, for each Medical College and Hospital (MCH).

Out of three test-checked MCHs, availability of drugs, in the central pharmacy of two MCHs (except PMCH), was analysed. In the absence of a stock register, availability of drugs could not be scrutinised in PMCH, by Audit. On this being pointed out, Superintendent of the hospital informed that an FIR had been lodged with the police, for theft of the stock register. It was observed that the number of drugs, available in remaining both the hospitals, was less than the total number of drugs required. Availability of drugs, in both the hospitals, was scrutinised for FYs 2019-20 and 2020-21 and is detailed in **Table 4.6**.

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[10] *SDHs: Mahua (Vaishali), Udakishunganj (Madhepura) and Barh (Patna); RHs: Makhdumpur (Jehanabad) and Chandi (Nalanda); CHCs: Bhagwanpur (Vaishali), Bakhtiyarpur (Patna) and Kako (Jehanabad) and PHCs: Goroul, Jandaha (Vaishali), Shankarpur, Singhwshwar, Ghailarh (Madhepura), Noorsarai (Nalanda), Bihta (Patna), Sikariya and Ratni Faridpur (Jehanabad).*

[11] *SDH: Udakishunganj (Madhepura); RH: Chandi (Nalanda); CHCs: Bakhtiyarpur (Patna), Kako (Jehanabad) and PHCs: Noorsarai (Nalanda), Bihta (Patna), Ratni Faridpur and Sikarya (Jehanabad), Singheshwar and Ghailarh (Madhepura).*

[12] *SDH: Barh (Patna); RHs: Chandi (Nalanda) and Makhdumpur (Jehanabad); CHCs: Bhagwanpur (Vaishali), Bakhtiyarpur (Patna) and Kako (Jehanabad) and PHCs: Goraul (Vaishali), Noorsarai (Nalanda), Bihta (Patna), Ratni Faridpur and Sikarya (Jehanabad), Singheshwar and Ghailarh (Madhepura).*

Table 4.6: Availability of drugs in the test-checked hospitals

No. of drugs required, as per EDL		No. of drugs not available at all (*per cent*)			
		DMCH, Darbhanga		GMCH, Bettiah	
		2019-20	2020-21	2019-20	2020-21
OPD	128	57 *(45)*	58*(45)*	66 *(52)*	87 *(68)*
IPD	164	93 *(57)*	94 *(57)*	97 *(59)*	107 *(65)*

(Source: Records related to test-checked MCHs)

Table 4.6 shows that only 32 *per cent* to 55 *per cent* of the OPD drugs were available in the hospitals, whereas availability of IPD drugs ranged between 35 *per cent* and 43 *per cent*. Audit further scrutinised the stock-outs situations of the available drugs for these two years and observed that even essential drugs were also not available for the entire period. Status of stock-out of drugs is detailed in the **Table 4.7**.

Table 4.7: Stock-out of essential drugs in test-checked hospitals

Stock-out of drugs (in days)	DMCH, Darbhanga				GMCH, Bettiah			
	2019-20		2020-21		2019-20		2020-21	
	OPD (No. of drugs)	IPD (No. of drugs)	OPD (No. of drugs)	IPD (No. of drugs)	OPD (No. of drugs)	IPD (No. of drugs)	OPD (No. of drugs)	IPD (No. of drugs)
One to two months (30 to 60 days)	13	09	04	05	04	03	05	0
More than two months to four months (61 to 120 days)	08	10	06	07	09	05	03	03
More than four months (more than 120 days)	30	33	16	17	45	44	27	31

(Source: Test-checked MCHs)

Table 4.7 indicates the shortage of drugs across FYs 2019-20 and 2020-21. The Superintendents of the concerned hospitals attributed this shortage to short/non-supply of drugs by BMSICL. Scrutiny of records also revealed that availability of drops and syrups, which were out of the notified EDL, was negligible for OPD, as well as IPD.

In reply, the Department did not explain the reason for shortage of drugs. However, it stated that attempts had been made to make available the sufficient stock of drugs under EDL.

The reply of the Department was not satisfactory, as funds provided for local purchase of drugs, to the respective Superintendents, had not been utilised by them and BMSICL had also failed to provide the necessary drugs in the test-checked hospitals.

4.2.14 Non-recovery of cost of sub-standard drugs

In DMCH, it was noticed that, four drugs, valuing ₹ 12.91 lakhs, were purchased from the local market, during July 2016 to July 2018, and samples of these drugs were collected (January 2017 to August 2018) by the concerned Drug Inspector. In

test reports, received (May-August 2018) in this regard, drugs were found 'Not of standard quality'. However, prior to the receipt of the test reports, drugs valuing ₹ 11.10 lakh had already been consumed, which was against the directive of the Government (October 2015) and the hospital administration had raised a demand of only ₹ 1.81 lakh, i.e. the cost of the balance drug in stock, against the supplier. Even this amount of ₹ 1.81 lakh had not been refunded (as of May 2022) by the supplier. It was noted that neither the hospital had initiated any penal action against the supplier firm, nor any action to recover the full cost of the sub-standard drugs had been initiated (as of May 2022).

The Department intimated that action for recovery of amount had been initiated (November 2022).

4.2.15 Expired drugs in IGIC

During audit, it was observed that Director, IGIC made correspondences (December 2019-April 2021), with BMSICL, for withdrawal of 15 drugs[13] nearing expiry. However, BMSICL had not withdrawn the drugs from the hospital. This had resulted in expiry of these drugs and indicated lackadaisical approach of BMSICL.

The Department admitted the audit observation and stated (December 2022) that several letters were written to BMSICL for lifting the drugs. BMSICL was in regular contact with IGIC, for replacement of the expired drugs and a fresh stock of drugs would be provided to IGIC, as and when replacement was received from the supplier.

4.2.16 Expiry of reagents chemicals

In GMCH, Bettiah, Fully Auto Clinical Chemistry Analyser Machine, to be utilised for clinical investigations was supplied by BMSICL and was installed (June 2014). The machine had a warranty period up to June 2017. BMSICL entered into CMC for the machine, for the next seven years after June 2017 (*i.e.* till 2024).

Scrutiny of records disclosed that the Superintendent, GMCH, has requisitioned (August 2017 to July 2019) BMSICL, for supply of chemical/ reagents for this machine. These chemical/reagents, valuing ₹ 2.30 crore, were supplied between October 2017 to January 2020. The machine became out of order in September 2019 and the hospital, accordingly, informed (September 2019 and September 2020) BMSICL, about the out-of-order condition of the machine but the machine was not made functional till May 2022. Instead of making the machine functional the BMSICL, on the request of the hospital management, provided reagents, for the use in this machine. Consequently, these reagents amounting to ₹ 1.71 crore, had expired and became non-usable. This lackadaisical attitude of the hospital, as

[13] *Vancomycine inj 1gm: 4,704 vial; Vancomycine inj 500 mg: 1,782 vial; Dizepam Tab 5mg: 5,700 tab; Cefexime100 mg: 1,900 tab; Dexamethasone sodium Phosphate Inj. 4mg/ml: 2400 vial; Vecurinium Bromid Inj: 73 vial; Nipress Inj: 45 vial; Dexamethasone Inj: 380 vial; Dobutamine Inj: 857 Vial; Ramipril 5 mg: 2,500 tab; Cetrimide Solution: 57 bottle; Lingnocaine Hydrochloride gel-2%- 30 gm: 294 tube; Inj. Magesiumsulphate 500 mg: 315 vial; Dobutamine Inj: 4,450 amp and Syp. Livocetrizine 30 ml: 950 bottle.*

well as BMSICL, ultimately caused loss of ₹ 1.71 crore to the state government exchequer.

The Department replied that, despite intimation about the dysfunctional machine to BMSICL, it had remained unrepaired and the reagents could not be utilised.

4.2.17 Non-procurement of Essential Drugs in AYUSH

The NAM objectives envisaged that essential drugs, as listed in the Essential Drugs List (EDL), for Ayurveda, Unani, Siddha and Homoeopathy, published in the year 2000 by the Department of AYUSH, GoI, were required and at least 50 *per cent* of the grants-in-aid provided should be used for procuring medicines from M/s Indian Medicines Pharmaceutical Corporation Limited[14] (IMPCL).

Scrutiny of the records of SAS revealed that although grants-in-aid of ₹ 35.36 crore had been provided to the Society during FYs 2014-15 to 2019-20, the essential drugs prescribed by GoI had been not purchased through IMPCL. Society could not finalise the tender process for purchase of drugs due to litigation (May 2020) of the matter in the court. This fact has been substantiated in ***Paragraph 4.2.18***, wherein it has been observed that which 92 *per cent* Ayurvedic, 72 *per cent* Homeopathy and 92 *per cent* Unani drugs were not available in the test-checked District Joint Dispensaries[15].

The Department stated (December 2022) that the decision of third executive committee meeting (December 2022) of SAS, to procure the drugs from IMPCL, had been laid for the approval of cabinet.

The reply itself indicated that the Department had not taken action in time, regarding purchase of drugs, as per GoI guidelines.

Recommendation 12: State government may ensure that required equipment and drugs as per EDL, are available in all the healthcare facilities.

4.2.18 Availability of drugs in District Joint Dispensaries

The State had implemented AYUSH systems of medicine in 26 of 38 districts, out of which four District Joint Dispensaries were test-checked and following deficiencies, related to the availability of drugs were observed:

- During FYs 2016-17 to 2020-21, four test-checked District Joint Dispensaries had received ₹ 21.48 crore from the state budget ***(Appendix 4.7)***. Out of this, only ₹ 1.28 crore (six *per cent*) were meant for purchase of drugs, materials and machines and ₹ 20.20 crore (94 *per cent*) were received for salary and other expenditure.
- In the absence of adequate funds for other than salary heads, the objectives of reducing patients' burden on other system of medicine, out-of-pocket expenditure and providing informed choices to healthcare systems to the public remained unachieved.

[14] *Indian Medicines Pharmaceutical Corporation Limited, a Central Public Sector Enterprise under the Ministry of AYUSH, GoI.*

[15] *Joint Dispensaries are located at the District level, with OPD services of Ayurveda, Unani and Homeopathy systems.*

- Availability of AYUSH drugs, during test-checked months (February 2020, May 2020 and August 2021) in three District Joint Dispensaries (except Madhepura, wherein the related records were not provided), are given in **Table 4.8**.

Table 4.8: Availability of AYUSH drugs in the test-checked District Joint Dispensaries

(*in per cent*)

Component	Full range availability	Partial availability	'Nil' availability
Ayurveda	6.4	1.8	91.8
Homeopathy	26.7	1.6	71.7
Unani	7	0.8	92.2

(Source: Records of test-checked District Joint Dispensaries)

It is evident from **Table 4.8** that lack of drugs therein might have forced patients either to purchase drugs from the open market, increasing out-of-pocket expenditure or opt for other system of medicine.

The Department did not furnish any reply to the above audit observation.

4.2.19 Irregularities in procurement of drugs in Government Tibbi College and Hospital (GTCH), Patna

During FYs 2016-17 to 2021-22, an amount of ₹ 6.30 crore was provided by the Department, to the Hospital, for procurement of drugs and consumables. The hospital had purchased drugs, costing ₹ 6.22 crore, during this period. Audit noticed that during FYs 2019-20 to 2021-22, 56 *per cent* to 69 *per cent* drugs were not available in the hospital, against 153 drugs prescribed in EDL. Further, overall 210 (68 *per cent*) against required 309 equipment were available.

During audit, cases of overpayments, purchase of drugs in excess of requirement leading to expiry of reagents, doubtful purchases *etc*., were noticed, as mentioned below:

Drugs remained unutilised

- Audit scrutiny disclosed that in GTCH, Patna, 55 drugs, costing ₹ 22.33 lakh, purchased during October 2018 to October 2019 without assessment of their requirement, could not be utilised and had been kept idle in stock, and the shelf-life of 20 medicines had already expired ***(Appendix 4.8)***.

The Department accepted the audit observation and stated (December 2022) that purchased items had not supplied to the hospital in a timely manner and had expired. The Department suspended the concerned authority and staff after enquiry.

Further, the Department, in the context of the Bettiah district, stated (October 2023) that: (i) quarterly requisitions to BMSICL had been made by all Heads of Departments, on the basis of consumption of drugs and (ii) the requisitioned drugs had been supplied by BMSICL, from time to time.

Excess payment

- Drug (Habbemarwaridi), with an approved rate of ₹ 34.34 per box (for 50 pills in a box), was purchased (February 2022). The supplier had supplied 3,000 boxes of the medicine, containing 20 pills in a box (60,000 pills) and raised demand for the payment of the same, amounting to ₹ 1.03 lakh. The hospital was required to pay ₹ 41,208[16] to the supplier, as per the approved rates. However, the hospital made payment of ₹ 1.03 lakh (3,000 x ₹ 34.34 =₹ 1,03,020), which led to excess payment of ₹ 61,992 (₹ 1,03,020- ₹ 41,208).

The Department replied (December 2022) that the supplier had been directed (October 2022) to return the amount and, on receipt of the amount, the same would be deposited in the government account.

Procurement without assessment

- The hospital issued (October 2019) a supply order, for supply of reagents/ chemicals, to be used by the pathology department. It was observed that a firm supplied (December 2019) the reagents, valuing ₹ 1.83 lakh and these reagents were issued to the Pathology Department. Joint Physical verification (June 2022) and scrutiny of records, showed that all the reagents/chemicals were still available in stock and their shelf-life had been expired.

This indicated that GTCH made purchases without assessing the demands raised by the pathology department, leading to expiry of reagents and consequent loss of ₹ 1.83 lakh to the Government.

Doubtful Purchase of drugs

- The hospital placed a supply order (March 2021) of reagents. The supplier made the supply (March 2021) and payment of ₹ 3.79 lakh, was made to the supplier. Audit scrutiny, however, disclosed that the date of expiry of the reagents had not been mentioned on the bill. Further, receipt of the reagents were not found recorded in the stock register. In the absence of these records (relating to actual receipt of the material supplied by the firm), Audit could not ascertain, whether the reagents had actually been supplied/utilised or not. As such, purchase of reagents amounting to ₹ 3.79 lakh was doubtful.

The Department stated (December 2022) that reagents and chemicals were available but issue and supply details were not mentioned theiragainst.

4.2.20 Irregularities in procurement of drugs in RBTS, Muzaffarpur

As per the Bihar Financial Rules (amended up to 2017), goods valuing up to ₹ 25.00 lakh, may be procured through Limited Tender Enquiry, with the participation of at least three bidders. Further, as per the standard terms and conditions of tender for procurement of AYUSH drugs, issued (September 2019) by the SAS (i) the supplier was required to submit a security deposit, amounting to 10 *per cent,* as performance guarantee (ii) liquidated damages were to be levied at the rate of

[16] *(3,000 x ₹ 34.34)/50 X 20.*

0.5 *per cent* (of the value of delayed supply) per day, subject to a maximum of 10 *per cent* of the total value of the supplied items (iii) the supplied drugs should be of standard quality and should be tested from a laboratory accredited with the National Accreditation Board for Testing and Calibration Laboratories and (iv) six parameters have to be tested for Mother Tincture, four parameters for syrups (liquid orals) and one parameter for ointments/drops.

During audit, it was observed (June 2022) that during FYs 2016-17 to 2021-22, RBTS had received ₹ 20 lakh each year (total ₹ 1.20 crore), for purchase of drugs. Out of the above allotment, RBTS purchased drugs valuing ₹ 1.17 crore.

Audit scrutiny of the purchases indicated the following irregularities:

- During FYs 2016-17 to 2020-21, contracts for procurement of drugs had been awarded without entering into any agreement. In the absence of a formal agreement, it had not been possible to ensure: (i) obtaining of a performance guarantee from the contractor (ii) replacement of expired/non-standard quality drugs or (iii) levy of penalty for delays *etc*.
- Quality check of medicines had not been ensured. Neither had the supplier provided any certificates of quality testing from a lab, nor had RTBS carried out any independent quality checks of the medicines supplied.

The Department replied (December 2022) that: (i) a committee had been constituted (September 2022) and, after receiving the report, suitable action would be taken and (ii) the Head of the Department (Medicine) had been entrusted (January 2022) the verification of the quality and quantity of drugs supplied to the store.

4.2.21 Quality Control

BMSICL empanelled analytical testing laboratories for the testing and analysis of drugs/surgical items, which are important for healthcare services. As per the terms and conditions (Clause 24-c) of the Rate Contract for supply of drugs to BMSICL, random samples of each supplied batches of drugs were to be chosen, by BMSICL, at the point of supply or distribution/storage points for testing. The samples were to be sent for testing, to different BMSICL empanelled laboratories. If the products/samples failed the quality test, every failed batch was to be taken back by the suppliers at their own cost and BMSICL was not to be responsible for any damages during this period. Further, if the sample was Not of Standard Quality (NSQ), the distribution of the NSQ batch was to be frozen and appropriate action was to be taken against the supplier.

During the course of audit of BMSICL, for the period during FYs 2017-18 to 2021-22, it was observed that the company had received 14,615[17] batches of drugs, during FYs 2017-18 to 2020-21, out of which only 10,492[18] (72 *per cent*) samples were sent for testing in empanelled laboratories. Thus, 4,123 batches (*28 per cent*) of drugs were not sent for quality testing and were distributed without any quality

[17] *2017-18: 2,623, 2018-19: 3,357, 2019-20: 5,615 and 2020-21: 3,020.*
[18] *2017-18: 2,390, 2018-19: 2,566, 2019-20: 4,021 and 2020-21: 1,515.*

checks. Further, BMSICL had not made provision for quality testing of Cold Chain drugs[19]. As such, quality testing of these drugs was not being conducted and were being utilised without ensuring their quality.

During FYs 2017-18 to 2021-22, BMSICL received 2,150[20] batches of surgical items, out of which only 1,243[21] batches (58 *per cent*) were sent for quality testing. Remaining 907 batches of surgical items were issued without any quality tests. The main reason for shortfall in quality testing was inadequate empanelment (only four agencies[22] were empanelled) of drug testing labs by BMSICL.

Thus, during the FYs 2017-18 to 2021-22, 28 *per cent* of the drugs and 42 *per cent* of the surgical items received by BMSICL, were issued to various healthcare facilities, without ensuring quality checks. Therefore, it could not be ascertained whether these issued drugs/ surgical items were of standard quality or not.

The Department replied (December 2022 and October 2023) that: (i) no medicines were being issued without quality testing and (ii) in cases, where the same batch of drugs were received in different warehouses, random samples from one warehouse only were sent for quality testing. Therefore, the total number of batches and total number of testing varies.

The reply was not acceptable, as no documentary evidence was provided to substantiate the fact that all the batches of drugs were tested. Further, BMSICL had not empanelled labs for testing of cold chain drugs and no lab had been empanelled for quality testing of surgical items, till December 2018.

4.2.22 Non-conducting of proficiency tests of drugs/surgicals

As per Clause 7b of the agreement executed (July 2017) between BMSICL and its empanelled Quality Testing labs, apart from the regular testing of each batch of drugs/surgicals, BMSICL was required to conduct proficiency tests of samples, on random basis, in other laboratories or government laboratories and discrepancy, if any, between both the reports, was to be taken as non-performance on the part of empanelled labs conducting the regular tests. For each instance of non-performance, no bills, for performing the tests, were to be paid to the testing labs.

It was observed that BMSICL did not conduct any proficiency tests on drugs/ surgical items during the FYs 2016-17 to 2021-22. As a result, the test reports were not cross-verified in any instance. Further, instances were noticed where independent lab test reports, conducted by Central Drug Laboratory (CDL), Kolkata, GoI, on the basis of sampled drugs sent by the Drug Inspector under the State Government, were at variance with the lab reports provided by the

19 *Vaccines, Glucoma eye drops, Aerosol spray against asthma, Insulin, Biologicals, etc.*

20 *2017-18:176, 2018-19: 56, 2019-20: 1,121 and 2020-21: 797.*

21 *2017-18: 173, 2018-19: 12, 2019-20: 716 and 2020-21: 342.*

22 *M/s Standard Analytical Laboratory, New Delhi; M/s Devansh Testing and Research, Haridwar; M/s Sophisticated Industrial Materials Analytical (M/s SIMA) Lab, New Delhi and M/s ITC lab.*

empanelled lab of BMSICL. For example, M/s Standard Analytical Laboratory, New Delhi, conducted (February 2019) test on Linezolid Tablet IP 600 mg, Batch no. LNZD-6116 and LNZD-6117 and reported the same as NSQ. However, when a sample from the same batch was sent to CDL, Kolkata, by the Drug Inspector, Purnea it was reported by the lab that the sample was of Standard Quality. Thus, there were discrepancies in the analytical reports of the drug, indicating the need to carry out proficiency tests of drugs and chances of error, in the testing results of the drugs, could not be ruled out. This was indicative of inadequate quality monitoring of drugs.

The Department replied (December 2022 and October 2023) that BMSICL had sent the drugs for distribution, once tested from empanelled laboratories. From then onwards, the Local Drug Department, on random basis, took the drugs for testing to government labs. For the proficiency of testing of drugs, BMSICL also sent drugs of the same batch for quality testing to different labs, without mentioning the batch nos. to the labs.

The reply of the Department was not acceptable, as supporting documentary evidences of proficiency tests were not provided.

4.2.23 Quality testing of drugs by an empanelled lab without accreditation license

BMSICL invited tender for empanelment of analytical testing laboratories for the test and analysis of drugs/surgical items, for FYs 2018-19 and 2019-20. Based on technical and financial evaluation, it empanelled (December 2018) four laboratories for testing and analysis of drugs/surgical items. It entered (December 2018) into an agreement with M/S SIMA, for a period of two years from the date of start of work, extendable by a period of one year.

Audit observed that the NABL accreditation license of M/s SIMA was valid only up to 25 June 2021 and NABL debarred (20 November 2021) it from reapplying for NABL certification. However, BMSICL sent 39 samples (from July 2021 to November 2021) of drugs/surgical items to M/S SIMA, even after the lapse of its accreditation license on 25 June 2021. Further, BMSICL did not have any system for conducting proficiency test of drugs, for cross-checking the test results of laboratories. Consequently, 39 batches of drugs were distributed throughout the State, based on the quality report of a lab whose NABL accreditation was repudiated by NABL.

Thus, M/s SIMA continued as the empanelled lab, without being in possession of a valid NABL certificate and without any proficiency testing of drugs sent to the lab, tests reports of drugs tested by M/s SIMA could not be relied upon.

The Department replied (December 2022 and October 2023) that: (i) M/s SIMA Labs had been empanelled in 2018 and the NABL Accreditation License of the Lab was valid up to 25 June 2021 (ii) but the Lab had clarified that NABL had extended the validity of license for another one year *i.e.,* up to 25 June 2022 and (iii) on 20 November 2021, M/s SIMA Labs was debarred from reapplying for

NABL accreditation. So, from that day onwards, no samples had been sent to M/s SIMA Labs.

The reply of the Department was not found to be correct, as the validity of license had not been renewed till 25 June 2022, as verified independently by Audit, from NABL.

Recommendation 13: State government may ensure carrying out quality tests of each batch of drugs and surgical items. Further, proficiency tests of drugs are conducted, to ensure random cross-checking of the quality of test results.

4.3 Procurement and Utilisation of equipment

BMSICL is the dedicated agency for procuring and supply of equipment to various healthcare facilities in the State. Procurements were to be done as per Procurement Manual (2017) of BMSICL. As per this Manual, the preparation and execution of Annual Procurement Plans, has been entrusted to the Procurement Steering Committee, comprising of six members and chaired by the Managing Director, BMSICL.

4.3.1 Procurement of equipment without Annual Procurement Plan

Audit observed that BMSICL had not prepared any Annual Procurement Plan for procurement of equipment. It was further observed that during FYs 2016-17 to 2021-22, equipment were being procured on the basis of indents received from healthcare facilities and not on the basis of Annual Procurement Plan.

In addition, BMSICL had expended only ₹ 279.85 crore (43 *per cent*), out of the total funds of ₹ 644.74 crore, available for procurement of equipment, during FYs 2016-17 to 2021-22.

This has resulted in shortage of equipment in healthcare facilities, as detailed in ***Paragraph 3.5.3*** of ***Chapter III*** of this Report.

4.3.2 Non-finalisation of Essential Equipment List

As per Paragraph 4.1 of the Procurement Manual (2017), SHS was required to develop/prepared an essential equipment list of equipment/devices to be procured for their availability at the healthcare facilities.

This list was subject to revision in future. It was, however, observed that the Essential Equipment List (EEL) was not prepared by the Department.

As a result, procurement of essential equipment, to ensure their availability for providing unhindered health services in the State, could not be planned in advance.

The Department stated (December 2022) that: (i) Essential Equipment list (EEL) had been prepared for DH and SDH and would be notified shortly and (ii) after notification of EEL for DH and SDH, the task of preparing EEL for other test facility types would be taken up and would be completed by March 2023.

4.3.3 Non-functional equipment due to non-availability of reagents/lack of vendor support

An agreement was executed (August 2015) with POCT Services Pvt. Ltd and BMSICL for procurement of Automated Blood Cell Counter 3 parts[23] @ ₹ 3.27 lakh per unit including taxes. As per agreement, the agency would submit 10 *per cent* Performance Security and the Comprehensive Maintenance Contract (CMC) would be for the period of 10 years.

Scrutiny of records revealed that supply order for 89 Automated Blood Cell Counter 3 parts were placed (December 2015) by the BMSICL. Out of these 89 machines, 16 machines were non-functional/idle, due to: (i) non-supply of reagents (essential for functioning of the equipment), (ii) other maintenance related services not being provided by the vendor and (iii) non-installation of machine. As per the contract agreement, the supplier was to provide reagents free of cost, for 7,300 tests, for two years, and thereafter, at the rate, fixed by BMSICL. However, due to non-availability of Reagents and other maintenance related issues, these 16 machines, of ₹ 0.52 crore, were lying non-functional and unutilised, in 14 healthcare facilities. Details of the non-functional/idle machines are given in **Table 4.9**.

Table 4.9: Non-functional/idle Automated Blood Cell Counter 3 parts (as on March 2022)

Sl. No.	Healthcare facility	Period during which Automated Blood Cell Counter 3 parts remained non-functional/idle	Reason(s)
1	District Hospital, Aurangabad	27/2/2016 to 25/5/2018	Printer not installed
2	District Hospital, Purnea	4/3/2016 to 25/5/2018	Printer not installed
3	Sub-Divisional Hospital, Simri Bakhtiarpur, Saharsa	25/5/2016 to 31/5/2018	All three machines were not installed
4	Sub-Divisional Hospital, Kahalgaon, Bhagalpur	3/2018 to 2/6/2018	Reagent not available
5	Referral Hospital, Marhaura, Saran	11/2017 to 31/5/2018	NA*
6	PHC, Narkatiyaganj, West Champaran	30/08/2017 to 5/6/2018	
7	District Hospital, Jahanabad	22/6/2016 to 31/5/2018	Printer not installed
8	Nalanda Medical College and Hospital, Patna	920/17 to 2/5/2018	Reagents not available
9	SDH, Pakridayal, East Champaran	7/2/2018 to 27/6/2019	
10	District Hospital, East Champaran	1/2019 to 28/6/2019	
11	District Hospital, Aurangabad	6/3/2019 to 26/6/2019	
12	District Hospital, Sasaram	NA	
13	District Hospital, Supaul	25/06/2018 to 25/06/2019	Machine damaged and Reagent not available
14	District Hospital, Bhagalpur	As on 14/10/2019	Defective since long time
Total value of Automated Blood Cell Counter 3 parts: ₹ 3,27,500*16=₹ 52,40,000			

*(Source: Records of BMSICL), (*NA: Records Not available)*

[23] *Automated Blood Cell Counter 3 parts is a machine that automatically counts the blood cells from the sample of blood and displays the count as a result of the test.*

As evident from the **Table 4.9**, the corporation could not procure and provide reagents to the above healthcare facilities, which had rendered the aforesaid equipment non-functional. Apart from this, the corporation was also required to execute CMC with the supplier, after completion of the warranty period, to provide the required service and spares for upkeep of the equipment, but the same had been made 18 months after the expiry of warranty period. Besides above, BMSICL had not obtained Performance Security from supplier, to safeguard its interest. This had resulted in poor vendor support, during the warranty period, as well as the post-warranty period.

The Department did not furnish reply on this audit observation.

4.3.4 Procurement and maintenance of equipment at the district level

Availability of essential functional equipment in all healthcare facilities, regular needs assessment, timely indenting and procurement, identification of unused/faulty equipment and regular maintenance are the significant components of equipment management.

Test-check of records of 16[24] test-checked healthcare facilities, in five test-checked districts revealed that:

- In 12[25] healthcare facilities, AMCs/CMCs had not been executed for the equipment/ machines/instruments available therein.
- In nine[26] healthcare facilities, required trained staff/technicians, storage facility and space for installation, were not available, for operating the equipment.
- In CHC, Bhagwanpur (Vaishali), various equipment (Blood bank Refrigerator, Incubator, Centrifuge, Compound Microscope Binocular, AC, Blood Transportation Box, *etc*.), relating to Blood Storage Unit (BSU), were received from BMSICL, in 2020-21. Further, in SDH, Barh, also, equipment were purchased during April 2008 to July 2009. These equipment were lying idle, for a period ranging from one year to 14 years, due to non-installation and BSU remained non-functional.
- Further, the reagents made available in SDH, Mahua and CHC, Bhagwanpur, had expired, as blood storage units remained non-functional, due to non-availability of manpower, as shown in **Table 4.10**.

  Details of equipment lying idle in the test-checked healthcare facilities are given in **Table 4.10.**

[24] *SDHs: Mahua (Vaishali) and Udakishunganj (Madhepura); RHs: Chandi (Nalanda) and Makhdumpur (Jahanabad); CHCs: Bhagwanpur (Vaishali), Bakhtiyarpur (Patna), Kako (Jahanabad) and Singheshwar (Madhepura) and PHCs: Ratni Faridpur (Jahanabad), Sikariya (Jahanabad), Noorsarai (Nalanda), Goraul (Vaishali), Ghailarh, Shankarpur (Madhepura, Bihta (Patna) and Jandaha (Vaishali).*

[25] *SDH: Mahua (Vaishali); RH: Makhdumpur (Jehanabad); CHCs: Bakhtiyarpur (Patna), Bhagwanpur (Vaishali), Singheshwar (Madhepura) and Kako (Jehanabad); PHCs: Jandaha and Goraul (Vaishali), Ghailarh and Shankarpur (Madhepura), Ratni Faridpur and Sikariya (Jehanabad).*

[26] *SDH: Mahua (Vaishali); RHs: Chandi (Nalanda) and Makhdumpur (Jehanabad); CHCs: Bakhtiyarpur (Patna), Bhagwanpur (Vaishali); PHCs: Goraul (Vaishali), Ghailarh and Shankarpur (Madhepura), Noorsarai (Nalanda).*

Table 4.10: Equipment lying idle in test-checked healthcare facilities (as of March 2022)

Name of equipment lying idle	Period (In years)	Name of healthcare facilities	Reason (s)
Blood Bank Refrigerator, Incubator, Centrifuge Binocular, Transportation box, AC etc. (related to Blood storage Unit)	One to 14 years	SDH, Barh (Patna), SDH, Mahua and CHC, Bhagwanpur (Vaishali)	Expired reagents and non-installation of equipment
Radiant warmer, Oxygen concentrator, Phototherapy machine *etc*. (related to Sick New Born Care Unit (SNCU))	More than 2 years	SDH, Mahua (Vaishali)	Shortage of manpower
Two X-Ray Machines (300 mA)	9 to 18 months	CHC, Singheshwar (Madhepura)	Non-availability of X-Ray technician
Examination Couch, Nebuliser, Adult/Infant weighing machine, ANC examination table, Kidney tray big/small *etc*.	Two years	Bhawanichak (Jehanabad), Mahakar and Jagatpur (Nalanda) and Parmanandpur (Madhepura)	No reason was found on the record

(Source: Records of the concerned healthcare facilities)

This was corroborated by the ***Images 4.5*** to ***4.7*** of the idle equipment, taken (28.04.2022) during joint physical verification as depicted below:

Image 4.5: Compound Microscope Binocular lying idle in CHC, Bhagwanpur (Vaishali)

Image 4.6: Incubator with Thermostatic Control lying idle and even packed in CHC, Bhagwanpur (Vaishali)

Image 4.7: Table top Centrifuge lying idle and kept in carton box in CHC, Bhagwanpur (Vaishali)

The Department replied (December 2022) that necessary action, to use the idle equipment, was under consideration.

4.3.5 Availability of Machines and Equipment in tertiary healthcare facilities

MCI prescribed (2017) different types of machines and equipment and their required numbers, for each clinical department, in both the IPD, as well as the OPD, in accordance with the enrollment capacity (100, 200 and 500 no. of students in UG courses) of the concerned medical college. The test-checked medical college and hospitals *i.e.* DMCH, GMCH and PMCH, had enrollment

capacities of 120, 120 and 200 students, respectively, in the MBBS course. For assessing the availability of machines and equipment in the test-checked hospitals, the criteria fixed by the MCI, for 100 enrollments in UG courses, had been considered by Audit.

Acute shortages of equipment were noticed in the Departments of each of the test-checked medical college and hospitals. The shortages, against the required number of machines and equipment, ranged between 25 *per cent* and 100 *per cent*, 33 *per cent* and 94 *per cent* and 50 *per cent* and 100 *per cent*, in DMCH, PMCH and GMCH, respectively (***Appendix 4.9***).

Further scrutiny of records showed that a number of the machines and equipment, available in the test-checked hospitals, were not functional (DMCH: 33, out of 274; GMCH: 26, out of 128; and PMCH: 33, out of 281), for want of necessary repairs. These machines and equipment were not covered under Annual Maintenance Contracts (AMCs)/Comprehensive Maintenance Contracts (CMCs). Further, neither had the concerned Superintendents raised any demand, in regard to repair of these machines and equipment, in their budget proposals, nor had the Department provided funds for the same.

The Department replied (December 2022) that: (i) machines and equipment were being supplied in the hospitals through BMSICL (but did not furnish the reasons for shortage of the required equipment) and (ii) an agency had been authorised by the BMSICL (July 2022), for upkeep and maintenance of the equipment.

The reply was in conformity with the audit observation, regarding shortage of equipment.

The Department further stated (October 2023) that as the building of GMCH, Bettiah, is under construction, equipment which are required urgently, are indented.

4.3.6 Idle machines

In two test-checked MCHs (DMCH and PMCH), BMSICL had supplied (January-February 2021) two machines (one in each), for collection of single donor platelets and plasma (Spectra Optia Apheresis System)[27], at a cost of ₹ 28.29 lakh (DMCH: ₹ 14.85 lakh and PMCH: ₹ 13.44 lakh). Audit noticed that neither had the hospitals demanded these machines, nor had they put these machines into operation (as of May-June 2022), even after a lapse of 16 months of their supply.

Upon being enquired, the Medical Officer-in-charge of the blood bank in DMCH stated that the machines could not be put to use due to: (i) non-availability of necessary license for operation of the machine (ii) lack of skilled and trained technicians and (iii) lack of specialist pathologist. Superintendent, PMCH, stated that the said machine had not been demanded by the hospital authorities and it had been supplied by BMSICL without demand.

[27] *'Automated blood collection system' is used to collect plasma by the automated apheresis method. 'Continuous flow technology' is used to separate the whole blood into its major components.*

Therefore, the machines were supplied without ensuring the required infrastructure and without any demand by the respective hospitals.

The Department intimated (December 2022) that the process for obtaining license was in progress and, after obtaining the license, these machines would be operationalised.

The Department further stated (October 2023) that the licence for operating the machine had been received and machine was functional.

4.3.7 Non-functional machinery and equipment in IGIC

Audit observed that neither had the Department prepared EEL, nor had the Institute assessed the requirement of machines and equipment, at its own level.

Further, 107 (23 *per cent*), out of the 471 machines/ equipment available (July 2022), were non-functional. Reasons for these machines/ equipment being non-functional were mainly: (i) expiry of shelf lives and (ii) non-coverage under AMC/ CMC.

The Department admitted the audit observation and stated (December 2022) that a committee had been constituted to check which equipment and machines were useful/ obsolete. The report of the committee would be sent to BMSICL, for necessary action.

Recommendation 14: State government may ensure to provide the required equipment and make them functional in healthcare facilities, in accordance with MCI/NMC norms.

4.3.8 Unutilised equipment and ambulance in RBTS, Muzaffarpur

Scrutiny of records related to different services, *viz.* Pathology, Radiology and other services provided by the hospital, revealed that critical medical equipment, such as X-ray machine (₹ 4.41 lakh), ECG machine (₹ 1.77 lakh), Ultrasound machine (₹ 7.18 lakh) and ambulance (₹ 2.69 lakh), had been kept unutilized, since their purchase in 2006 and 2010 (Ultrasound machine). The X-ray Machine, ECG Machine and Ultrasound Machine, had been kept in store from eight to 13 years and had not even been installed (June 2022). Non-utilisation of these equipment had deprived the beneficiaries from their intended benefits and led to unfruitful expenditure of ₹ 16.05 lakh. This was also pointed out in ***Paragraph 2.8.4.1*** of Performance Audit on 'Medical Education in Bihar', which featured in CAG's Audit report (General, Social and Economic Sectors) for the year ended March 2018. However, no action has been taken by the Department.

The Department stated (December 2022) that, for fulfilling the criteria of Central Homeopathy Council, equipment were purchased, but the same could not be utilized, due to non-availability of technical manpower.

4.3.9 Availability and Management of Ventilators during COVID-19

During Fys 2019-20 to 2021-22, 7,57,917 (98 *per cent*), out of 7,72,994 cases, detected as COVID-19 positive in the State, were cured and 15,077 (two *per cent*)

patients had died. Availability of ventilators played an important role in the treatment of patients, during this pandemic.

During test-check of records of the sampled districts/ hospitals, a number of ventilators were found to be idle/non-functional, as mentioned in **Table 4.11**.

Table 4.11: Idle/non-functional Ventilators *(as of March 2022)*

Healthcare facility	Financial Year/(s) of supply	No. of ventilators supplied	No. of functional ventilators	No. of Non-functional ventilator (*per cent*)	No. of idle ventilators (*per cent*)
PMCH, Patna	NA*	25	21	4 (16)	0
DH, Hajipur (Valishali)	2019-20 and 2020-2021	8	0	0 (0)	8 (100)
DH, Biharsharif (Nalanda)	2020-21	5	5	0 (0)	0 (0)
DH, Jehanabad	NA	NA	NA	NA	NA
DH, Madhepura	2020-21 and 2021-22	5	0	0 (0)	5 (100)
GMCH, Bettiah	2017-18 to 2021-22	89	45	0 (0)	44 (49)
Total:		**132**	**71 (54)**	**4 (3)**	**57 (43)**

*(Source: Records of test-checked hospitals) *NA= Records not available.*

As evident from the **Table 4.11**, only 71 (54 *per cent*), out of total 132 ventilators available in test-checked healthcare facilities, were found to be functional and 57 (43 *per cent*) were lying idle (during periods ranging from February 2019 to May 2022), due to non-availability of technicians and non-functional ICUs. Further, out of these 57 idle ventilators, 53 had been lying idle since February 2021, indicating the ineffective management of this vital item of equipment.

The Department replied (December 2022) that, in GMCH, Bettiah, 45, out of 89 ventilators received from BMSICL, were used during COVID-19 and the remaining ventilators were kept in reserve. In Vaishali district, ventilators were not in use, due to non-availability of space, trained staff and ICU.

Recommendation 15: State government may ensure proper utilisation of idle ventilators through deployment of adequate manpower.

Chapter-V
Healthcare Infrastructure

Chapter-V

Healthcare Infrastructure

There were substantive shortages in the required number of healthcare facilities, at all levels, from HSCs to RHs and the Department had not prepared any comprehensive health policy/plan aligned with the NHP, 2017, for bridging the gaps of infrastructure in the existing healthcare facilities. Such condition with instances of dilapidated healthcare facilities, as well as lack of amenities, continued to hamper the delivery of healthcare services, in the state.

5.1 Introduction

Healthcare infrastructure is an important indicator for assessing the health care policy and welfare mechanism in a State. Infrastructure provides the basic support for the delivery of public health activities. To deliver quality health services in the public healthcare facilities, planning for adequate and properly maintained building infrastructure is of critical importance, as also defined under NHM. Examination of records of healthcare facilities disclosed several deficiencies/inadequacies relating to infrastructure, as discussed in the succeeding paragraphs.

5.2 Inadequate availability of healthcare facilities *vis-à-vis* prescribed norms

Primary healthcare services are extended to the village level beneficiaries through Health Sub-Centres (HSCs), functioning under Primary Health Centre (PHC). As per the National Rural Health Mission (NRHM) guidelines and IPH standards, there should be one HSC for a population of 5,000, one PHC for a population of 30,000 and one Community Health Centre (CHC) for a population of one lakh. Further, IPH Standards envisage the establishment of Additional Primary Health Centres (APHCs), in addition to block-level PHCs, covering a population of 30,000 under each block. Further, a Sub-Divisional Hospital (SDH) and District Hospital (DH) should be established in each Sub-division and District, respectively.

As per Census 2011, the population of Bihar was 10.41 crore and the projected population of the State, in 2021-22, was 12.49 crore[1]. During audit, though year-wise target and achievement, relating to all levels of healthcare facilities were asked for, the Department had provided[2] year-wise status (from 2016-17 to 2021-22) of existing number of HSCs, APHCs and CHCs. Against this, the status of the availability of HSCs, PHCs/APHCs, RHs, CHCs, SDHs and DHs, in Bihar, as of March 2022, is depicted in **Table 5.1**.

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1 *As per the Ministry of Statistics and Programme Implementation (MoSPI), GoI.*

2 *2016-17: APHCs-1,277, CHCs-81, HSCs-9,749; 2017-18-APHCs-1,349, CHCs-132, HSCs-9,749; 2018-19: APHCs-1,399, CHCs-171, HSCs-9,749; 2019-20: APHCs-1,399, CHCs-232, HSCs-9,929; 2020-21: APHCs-1,399, CHCs-248, HSCs-9,949; 2021-22: APHCs- 1,399, CHCs-256, HSCs-10,258.*

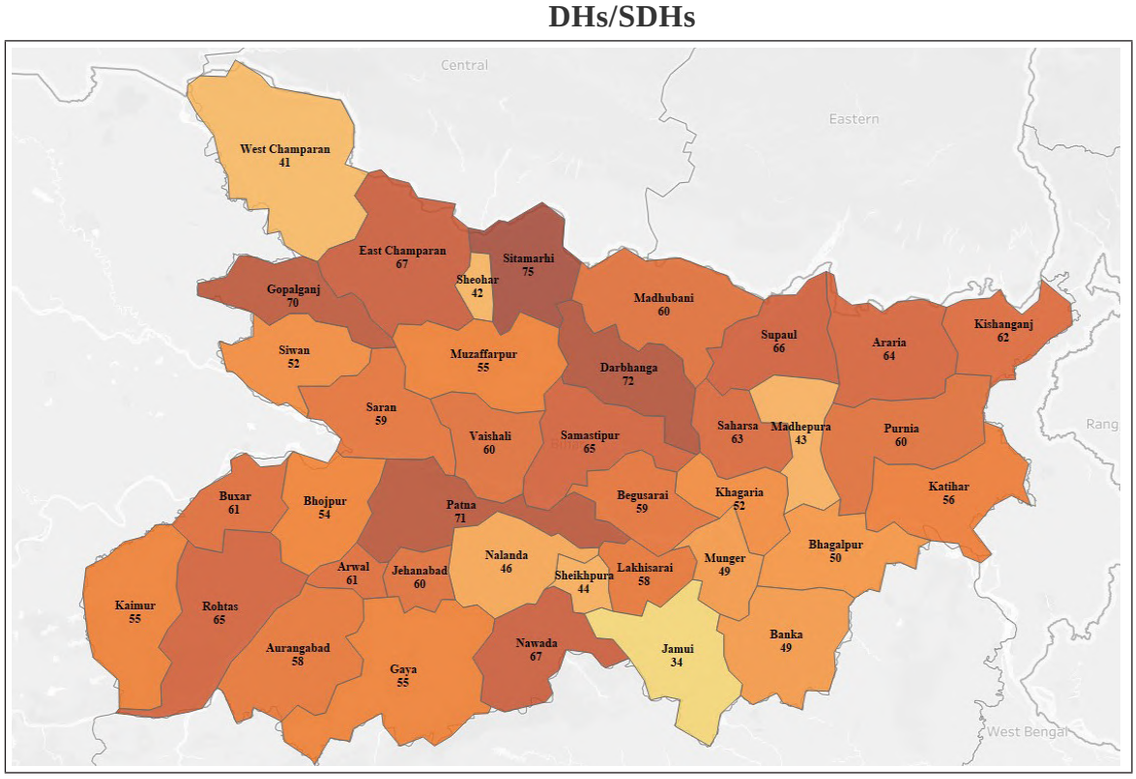
Table 5.1: Requirement and availability of healthcare facilities, as per IPHS norms (as of March 2022)

Type of healthcare facility	No. of healthcare facilities required	No. of healthcare facilities available	Shortfall (in *per cent*)
Health Sub Centre	24,980	10,258	14,722 (57)
Primary Health Centre	4,163	533	2,231 (54)
Additional Primary Health Centre		1,399	
Community Health Centre	1,249	256	926 (73)
Referral Hospital		67	
Sub-Divisional Hospital	101	54	47 (47)
District Hospital	38	35	3 (8)

(Source: Data provided by SHSB)

Table 5.1 shows that there were significant shortages of healthcare facilities, from HSC level to RH/CHC level. Therefore, the Department had not been able to fulfil the primary purpose of having adequate number of healthcare facilities for the targeted population. District-wise requirement, availability and shortfall of DHs/SDHs/CHCs/PHCs/HSCs, as per prescribed population norms had been shown in ***Appendix-5.1***. District Hospitals and SDHs were not available in three[3] and 9 districts[4], respectively. There were shortfalls in the availability of CHCs and APHCs/ PHCs, ranging from 56 to 89 *per cent* and 10 to 72 *per cent,* respectively against the population norms, as shown in **Chart 5.1**.

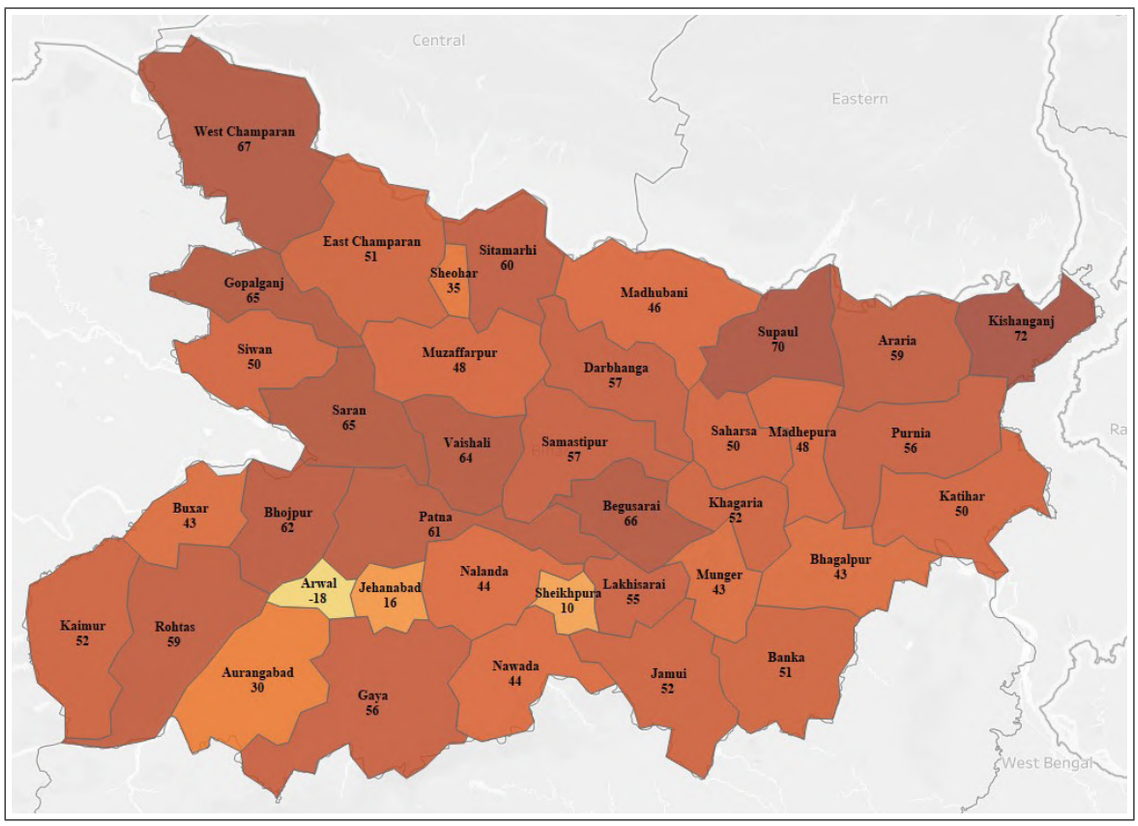
Chart 5.1: Shortfall (in *per cent*) in HSCs, PHCs/APHCs, RHs/CHCs, DHs/SDHs



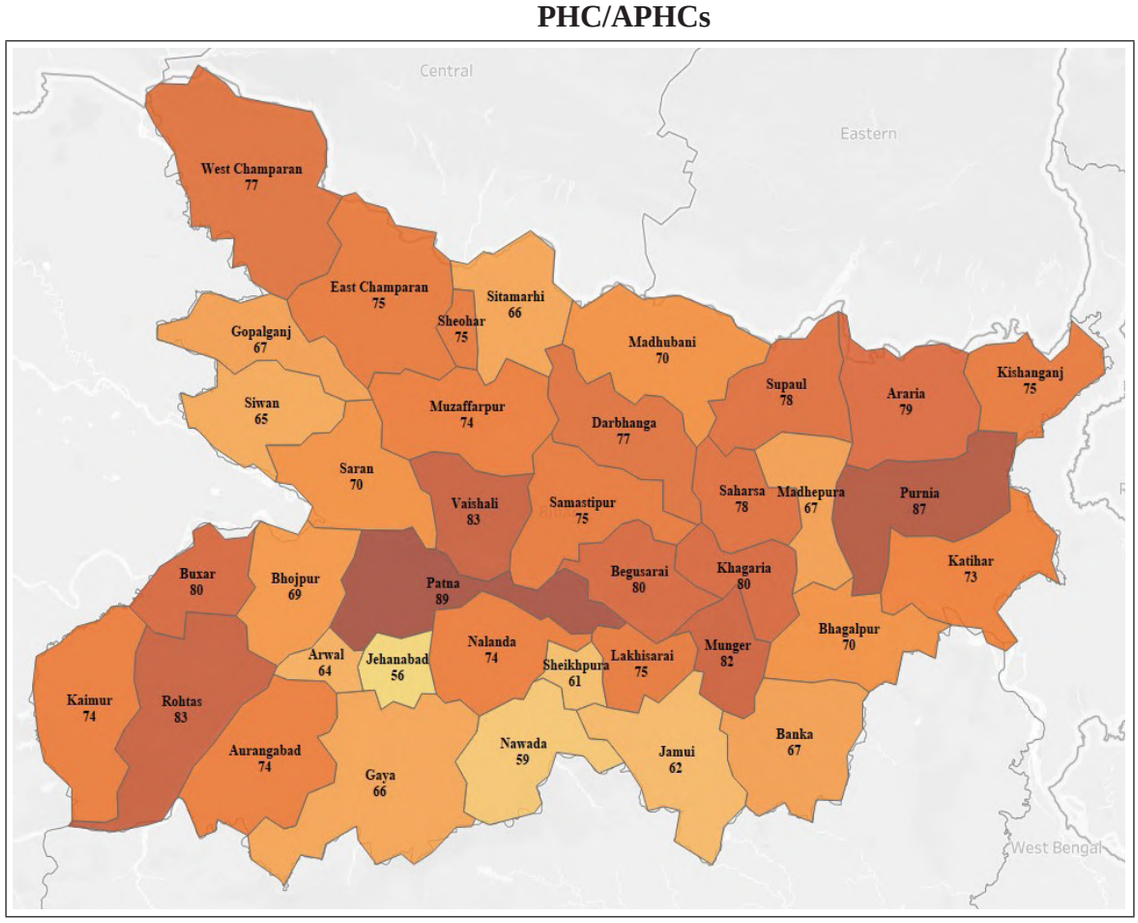
HSCs

[3] *Darbhanga, Purnea (from August 2021) and West Champaran.*

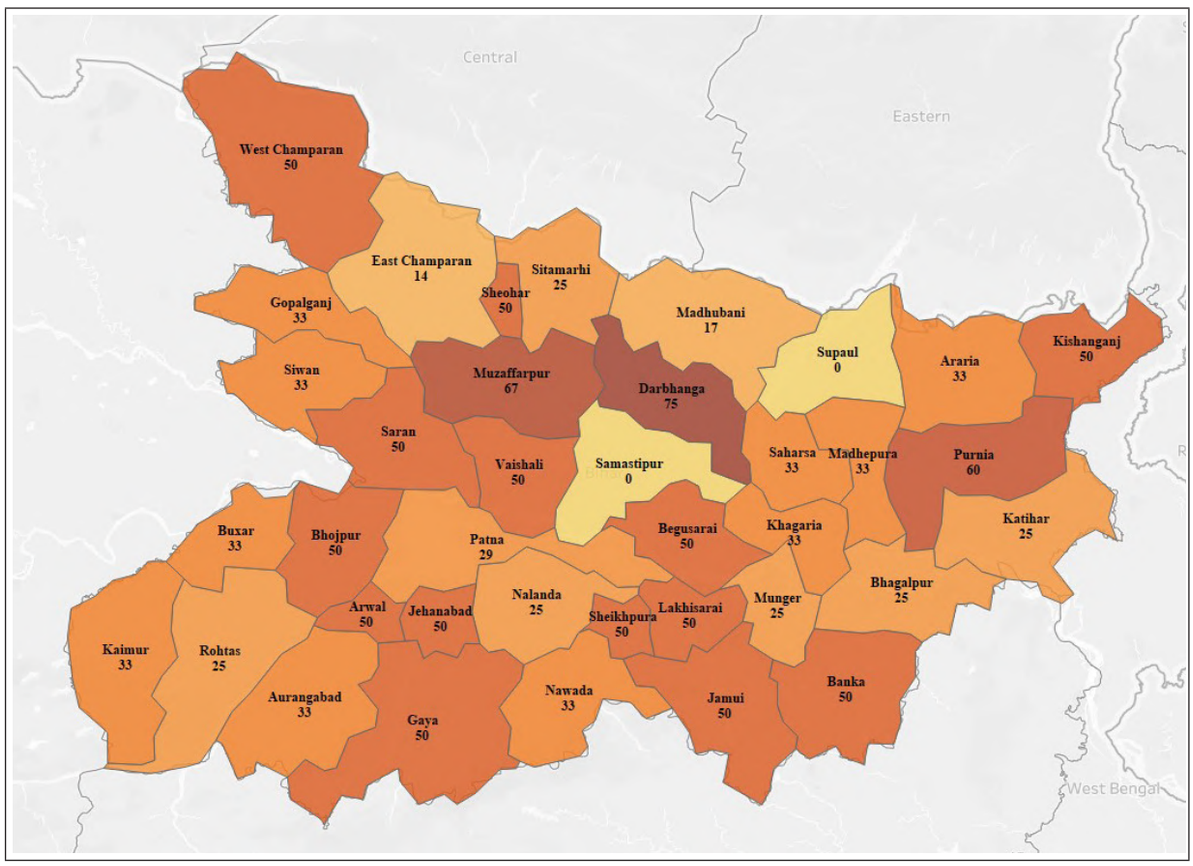
[4] *Arwal, Banka, Jamui, Jehanabad, Kishanganj, Lakhisarai, Muzaffarpur, Sheikhpura and Sheohar.*



PHC/APHCs



RHs/CHCs



DH/SDHs

(Source: Data provided by SHSB)
Colour Code: Scaled on light to dark colour. Darker the colour, higher the shortages.

The Department replied (December 2022) that the number of SDHs had been fixed at 61, which were in existence. It added (August 2023) that: (i) 57, out of 61 SDHs, were functional and (ii) as per criteria, SDHs were not required at the district headquarters, where DHs and Medical College and Hospitals (MCHs) exist. The Department, however, did not provide supporting records relating to the requirement of 61 SDHs, with the respective criteria and did not respond to the observation regarding shortfall in other categories of healthcare facilities.

5.3 Infrastructure Availability

5.3.1 Planning for creation of health infrastructure

The Government of Bihar (GoB) was required to either prepare a comprehensive health policy, aligned with the National Health Policy (NHP), or to adopt the National Health Policy. The primary aim of the NHP, was to inform, clarify, strengthen and prioritise the role of the government in shaping health systems in all its dimensions-investments in health, organisation of healthcare services, prevention of diseases and promotion of good health through cross-sectoral actions, access to technologies, developing human resources, encouraging medical pluralism, building a knowledge base, developing better financial protection strategies, strengthening regulation and health assurance. As per NRHM guidelines, the Health Department, GoB, had to conduct a gap-analysis, to assess

the requirement of new healthcare facilities/institutions and gaps in infrastructure/ equipment, in the existing healthcare facilities. Based on the gaps so identified: (i) a long-term perspective plan was to be prepared, to assess requirement of funds and (ii) the long-term perspective plan, so prepared, was to be transformed into Annual Plans, for the purpose of implementation.

Although, a gap-analysis had been carried out by the Department under the Kayakalp[5] and LaQshya[6] schemes, the consolidated gap analysis report was not furnished to Audit, despite requisitions. Further, the GoB had not prepared any comprehensive health policy/plan, aligned with the National Health Policy, 2017, to address the gaps of infrastructure/equipment in every healthcare facility.

No reply was furnished by the Department, in regard to the above mentioned audit observation.

Further, ***Paragraph 2.8*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated audit observations related to the building infrastructure of DHs.

5.3.2 Construction of Sub-Divisional Hospitals

The Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) was required to carry out construction of 15 SDHs, in two phases (seven and eight SDHs, in the first and second phase, respectively). In the first phase, although administrative approvals (AA) for construction of seven SDHs was accorded for ₹ 9,132.16 crore (March 2017), works of only three[7], out of seven SDHs had been completed. In the second phase, AA for construction of eight SDHs was accorded for ₹ 11,848.00 crore (February 2019), however, only two[8] SDHs were completed and work was in progress for construction of the remaining six SDHs (as of February 2022). The work was not completed, mainly due to the non-availability of land and laxity of the contractors.

The Department replied (December 2022) that the gaps in the availability of 61 SDHs had been also sanctioned and the gaps would be filled up in the future.

5.3.3 Construction of Community Health Centres

GoB decided (December 2006) to upgrade 533 block level PHCs into CHCs (by constructing new buildings), to fulfill the gap of health infrastructure. However,

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[5] *The "Kayakalp" initiative was launched by the Ministry of Health and Family Welfare, GoI, on 15 May 2015, to complement efforts for cleanliness and hygiene in public healthcare facilities.*

[6] *The LaQshya scheme, implemented in 2017, was intended to bring about improvements in the intra-partum and immediate post-partum care, taking place in the labour room and maternity operation theatre.*

[7] *Completed: Belsand, Benipatti and Teghra; Not started: Mahnar and Bakhri and Work in progress: Haveli Kharagpur and Madhaura.*

[8] *Completed: Raxaul and Paligan and Work in progress: Sikrahana, Biraul, Gogri, Virpur, Triveniganj and Danapur.*

only 256, out of 533 PHCs, were upgraded into CHCs (as of March 2022). Non-achievement of the target of upgradation was attributable to the following:

- As of September 2017, the Department had accorded (March 2007 to February 2010) sanction for upgradation of only 399, out of 533 PHCs into CHCs, without sanctioning upgradation of the remaining 134 PHCs.
- The Bihar State Building Construction Corporation Limited (BSBCCL) was entrusted (April 2008) with the responsibility of executing upgradation works for 201 of 399 PHCs. As of March 2022, it had been able to complete the upgradation works of 191 PHCs only.
- In addition, the Department provided (April 2011 to November 2015) funds of ₹ 257.02 crore, to BMSICL, for upgradation of the remaining 198 (out of 399) PHCs into CHCs. But the process of starting the upgradation work had been initiated at only in 93 PHCs and BMSICL had been able to complete work in only 67 PHCs with 63 buildings having been handed over, after completion, as of March 2022. Further, work was in progress in 14 PHCs, while construction works has not been started in 12 PHCs, as of March 2022. BMSICL had not been able to complete the work due to non-availability of land and slow progress of the works already initiated. Further, the process to start the upgradation work had not been initiated in respect of the remaining 105[9] PHCs as of March 2022.
- As per GoB's resolution (December 2006), PHCs, situated at the block level, should be upgraded into CHCs. During audit, it was observed that the Department accorded (September 2014) approval for upgradation of PHC, Ratni Faridpur in the Jehanabad district, into a CHC, at an agreement value of ₹ 2.90 crore (completed and handed over in August 2019). Although the Department had already decided (January 2014) to upgrade APHC, Shakurabad, situated under the Ratni Faridpur block, into a CHC and the building was completed (August 2018) at a cost of ₹ 3.45 crore and handed over (December 2018). During joint physical verification, it was observed (April 2022) that the rooms of CHC, Ratni Faridpur, were occupied by the doctors and staff, for residential purpose. Therefore, due to improper planning, two CHCs were constructed in the same block, at a distance of four km and one of them was not being used as a healthcare centre.

The Department replied (December 2022) that: (i) out of 198 CHCs to be constructed by BMSICL, 173 had been approved and 56 had been completed and (ii) the Government had accorded upgradation of APHC, Shakurabad and PHC, Ratni Faridpur into CHCs, in November 2014 and September 2014, respectively, as per IPH Standards.

[9] *Upgradation works entrusted to BMSICL (198)-Upgradation works initiated (93).*

Hence, owing to the delay in sanction for upgradation of PHCs into CHCs, slow progress of work by the executive agencies and non-availability of land, a huge gap in the availability of CHCs[10] continued in the State.

5.3.4 Construction of Additional Primary Health Centres

The Department had accorded (September 2006) sanction for construction of 1,544 new APHCs but the BMSICL had initiated (October 2017) the process for 154 APHC buildings only. Out of which 59 APHCs had been completed and handed over, 75 APHCs had been completed, construction work was in progress in 26 APHCs and the work of 53 APHCs had not been started, as of March 2022. The construction works were delayed due to retendering and non-availability of land, although, in the proposal sent to the Development Commissioner, it had been mentioned that land was available for the construction of APHCs.

During scrutiny of records, it was observed that GoI approved ₹ 102.06 crore {Records of Proceedings (ROP) of 2017-18}, for construction of 81 APHCs and funds amounting to ₹ 5.00 crore had been received (January 2018) by the GoB for this purpose. GoB had, however, sanctioned (up to March 2018) the construction of only 56 and AA of ₹71.28 crore, for construction of 56 APHCs was accorded.

It was, further noticed that despite more than four years having been elapsed since the AA having been accorded, BMSICL had been able to construct only 18 out of the 56 sanctioned APHCs, while works of eight APHCs were in progress and works relating to construction of 30 APHCs were not commenced, as of March 2022. It was also observed that only 12, out of 18 constructed APHCs, had been handed over, as of March 2022.

The Department replied (December 2022) that: (i) the concept of the APHC was only in Bihar (ii) as per PHC standards, all APHCs were to be converted into PHCs (iii) altogether, 73 APHCs had been completed, work of 29 APHCs was under progress and (iv) in the remaining 51 APHCs, work had not been started.

5.3.5 Construction of Health Sub-Centres

The Department decided (December 2006) to construct 7,765 HSCs in the State. It was observed that, as of March 2022, out of the construction work of 160 HSCs, taken up (February 2019) by BMSICL, at a cost of ₹ 38.76 crore, 85 HSCs had been completed, work relating to 27 HSCs was in progress and work relating to 48 HSCs had not been started. The main reasons for non-commencement of work were non-availability of land and retendering.

Due to non-construction, the healthcare facilities were being run in a poor condition, in their existing buildings, with lack of repair and maintenance, as reflected in ***Image 5.1***.

[10] *Only 256 out of 533.*

Image 5.1: Rented building of HSC, Dhanadihri, Ratni Faridpur (Jehanabad) in a dilapidated condition (13.05.2022).

The Department replied (December 2022) that the gap would be filled in future.

5.4 Availability of beds in healthcare facilities

As per Indian Public Health Standards issued by GoI, a PHC should have minimum six beds and a CHC should have minimum 30 beds. Further, Sub-Divisional Hospital (SDH) should be created in each sub-division and the total number of beds therein should be based on the population, bed days per year[11] and bed occupancy rate[12].

During audit, it was observed that there was acute shortage of beds, in the healthcare facilities in the State, as shown in **Table 5.2**.

Table 5.2: Requirement and availability of beds in healthcare facilities in the State (as on 31 March 2022)

Type of healthcare facility	No. of healthcare units/ Number of beds required	No. of beds available	Shortfall *(in per cent)*
Additional Primary Health Centre	1,399/8,394	4,563	7,029 *(61)*
Primary Health Centre	533/3,198		
Community Health Centre	323/9,690	7,560	466 *(5)*
Referral Hospital		1,664	
Sub-Divisional Hospital	45/27,375*	1,823	25,552 *(93)*
District Hospital	35/27,375*	4,487	22,888 *(84)*

(Source: information furnished by the Department)

***** *As per IPHS, the assumption of the annual rate of admission is one per 50 population and the average duration of stay is 5 days. Bed occupancy has been assumed to be 80 per cent, as mentioned in IPHS*

Table 5.2 indicates a significant shortage (up to 93 *per cent)* of beds, especially in SDHs. In PHCs/APHCs, there was 61 *per cent* shortage of beds and in RHs/CHCs/, there was five *per cent* shortage of beds.

Audit also observed that, during FY 2017-18, the Department proposed ₹ 14.20 crore for procurement of 5,000 beds. GoI, however, did not approve the proposal, due to

[11] *As per IPHS, the average duration of stay in a hospital is taken as five days.*

[12] *Total patient bed days/ (Functional beds in Hospital X Calendar days in month) X 100 bed patient days.*

non-submission of supporting details, along with a gap analysis and implementation plan.

In seven[13], out of the 15 test-checked APHCs, beds for patients were not available at all. In the remaining eight APHCs, two to 14 beds were available. In 25[14], out of the 30 test-checked HSCs, there were no beds for patients.

The Department replied (December 2022) that there is a need to increase the number of beds as per population norms. It added (August 2023) that beds, as per requirement, were available in DH, Jehanabad. Supporting documents, were however, not provided.

5.5 Lack of basic amenities in PHCs, APHCs and HSCs

As per Rural Health Statistics for the year 2020-21, published (April 2022) by the Ministry of Health and Family Welfare, GoI, there was a lack of basic amenities in 1,932 PHCs/APHCs and 10,258 HSCs, in the State. Some of them are highlighted as below:

- Electricity supply was not available in 31 *per cent* (600) PHCs/APHCs and 41 *per cent* (4,243) HSCs.
- 44 *per cent* (846) PHCs/APHCs were not functioning on 24X7 basis[15].
- Only 29 *per cent* (566) PHCs/APHCs had a labour room, only 276 (14 *per cent*) had an Operation Theatre (although mandatory, as per guidelines) and only 28 *per cent* (533) had at least four beds, against the requirement of six beds.

Some of these deficiencies, as mentioned below, were also observed during test-check of 13 APHCs and 27 HSCs:

- 21 (78 *per cent*) HSCs did not have toilets and ambulance service was not available in any of the test-checked APHCs ***(Appendix 5.2)***.
- Drinking water facility and electricity supply were not available in five (38 *per cent*) and four (31 *per cent*) APHCs, as well as in 20 (74 *per cent*) and 17 (63 *per cent*) HSCs, respectively. Only one APHC (Derhsaiya) was running on 24×7 basis ***(Appendix 5.2)***.

Poor condition of buildings, toilets and other infrastructure, are indicated in the ***Images 5.2*** to ***5.5***, taken during joint physical verification:

[13] *Vaishali: Prataptand and Sandesh; Nalanda: Mahkar; Madhepura: Badhari; Patna: Shahjahanpu, Sirsi and Sadisopur.*

[14] *Jehanabad: May, Bhawanichak, Gonwan, Dhanadihari, Sarta; Vaishali: Sahori, Asoi, Panapur, Pojha; Nalanda: Kathauli, Doiya, Rajanbigha, Jagatpur, Bindidih, Neerpur; Madhepura: Parmanandpur, Chitti, Bhawanipur, Bhairbanna; Patna: Chiraiya, Rupasmahaji, Daughra, Bahpura, Kundali, Salarpur.*

[15] *As per IPH Standards, for ensuring Janani Suraksha Yojana, it would be necessary to have adequate number of 24X7 delivery services centres.*

Image 5.2: Damaged roof of the toilet of PHC, Noorsarai (23.05.2022)

Image 5.3: APHC, Uttraparti, running in poor condition, in a rented building (05.05.2022)

Image 5.4: HSC, Kadilpur, running in the open, under a plastic shed(14.05.2022)

Image 5.5: IPD of PHC Ghailarh (Madhepura), in open space under a tin shed (17.05.2022)

Further, ***Paragraphs 2.2.7 and 2.4.20*** of the Performance Audit of "Functioning of District Hospitals", featured as Chapter II in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020, had indicated lack of basic amenities in the test-checked DHs.

The Department (December 2022) accepted the audit observation and stated that phase-wise improvement would be done in the future. The Department further replied (August 2023 and October 2023) that: (i) the old building of PHC, Ghailarh (Madhepura), had been dismantled and a new building of the CHC was being constructed (ii) for APHC, Uttraparti, the rented building had been repaired (iii) for HSC, Kadilpur, a new building had been constructed and (iv) for PHC, Noorsarai, a new building was being constructed, after alternate arrangement of toilet.

During cross-verification (December 2023), it was observed that: (i) construction of new buildings of PHC, Ghailarh and Noorsarai were in progress and the patients were still being treated in the old buildings (ii) the rented building of APHC, Uttraparti, had not yet been repaired and (iii) HSC, Kadilpur, had been shifted and was functional in the Panchyat Bhawan, Sherpur.

Recommendation 16: State government may ensure that Health Department conducts a proper review of all civil works, for their timely completion, through the concerned agencies.

5.6 Health and Wellness Centres

5.6.1 Upgradation of HSCs/APHCs into Health and Wellness Centres

The National Health Policy, 2017, emphasised filling up the wide gaps in infrastructure development, to revamp public health infrastructure. As per the operational guidelines (February 2018) for Ayushman Bharat-Health and Wellness Centres (AB-HWCs), GoI announced that 1,50,000 HWCs (7,411 in Bihar) would be created, by transforming the existing HSCs and PHCs, into centres for delivering Comprehensive Primary Healthcare (CPHC). The existing HSCs and PHCs were to be converted into HWCs, with the principle of providing "time to care" to be no more than 30 minutes. Work to upgrade the HWC was to be commenced in the year 2018-19 and was to be completed up to 2021-22[16] including infrastructure strengthening[17], at the cost ₹ 7 lakh for each HWC.

Audit observed that, as on March 2022, only 4,129 (52 *per cent*) HWCs were in existence, against the target of 7,974 in the State as shown below in **Table 5.3**.

Table 5.3: Target and achievement of upgradation of HWCs, in the state during FYs 2018-19 to 2021-22

Financial Year	Target	Achievement	Percentage of achievement
2018-19	510	503	99
2019-20	2,182	210	10
2020-21	2,408	1,008	42
2021-22	2,874	2,408	84
Total	**7,974**	**4,129**	**52**

(Source: Information furnished by SHS)

Further, the target for upgradation of HWCs had not been achieved in the test-checked districts also, as mentioned in **Table 5.4**.

Table 5.4: Target and achievement of upgradation of HWCs, in the test-checked districts, during FYs 2018-19 to 2021-22

District	Target of upgradation of HWCs	Achievement of upgradation of HWCs (*per cent)*
Jehanabad	97	75 (77)
Madhepura	192	116 (60)
Nalanda	266	188 (71)
Patna	219	68 (31)
Vaishali	242	103 (43)
Total	**1,016**	**550 *(54)***

(Source: ROP and records of test-checked districts)

The Department replied (December 2022) that the gap would be filled in future.

[16] *2018-19: 15 per cent; 2019-20:25 per cent; 2020-21: 35 per cent and 2021-22: 25 per cent.*

[17] *Infrastructure strengthening included repair of existed building, window and door, construction of ramp, purchase of furniture, arrangement of separate toilets for male and female, branding through painting, purchase of equipment, seating arrangement in OPD area etc.*

5.6.2 Availability of Basic Infrastructure in Health and Wellness Centres

Section 6 of the Operational guidelines on Ayushman Bharat (Comprehensive Primary Healthcare through Health and Wellness Centres) mentions that major civil infrastructure upgrade would largely be required for developing the HSCs as HWCs. The essential requirements of HWCs include well ventilated clinic room, storage space, designated space for laboratory, separate male and female toilets *etc*.

Against these essential requirements, availability of the infrastructure, in 13[18] test-checked HWCs, was as mentioned in **Table 5.5**.

Table 5.5: Availability of infrastructure in test-checked HWCs (during March 2022 to June 2022)

Sl. No.	Essential infrastructure required	No. of HWCs where infrastructure was available (in *per cent*)
1	Well ventilated clinic room, with examination space	Dahpar, Prataptand and Sondho *(23)*
2	Storage space for storing medicines, equipment, documents *etc*.	Dahpar, Gonawan, Jagatpur, Prataptand, Mahakar, Nawada, Rajanbigha and Sondho *(62)*
3	Designated space for lab/diagnostic	Derhsaiya, Prataptand and Sondho *(23)*
4	Separate male and female toilets	Derhsaiya, Prataptand and Sondho *(23)*
5	Water supply and electric supply	Dahpar, Derhsaiya, Gonawan, Prataptand, Nawada, Sadisopur, Sirsi and Sondho *(62)*

(Source: Test-checked HWCs)

Further, the required space/room for Yoga, rainwater harvesting facility, deep burial pit for bio-medical waste, drainage and power backup were not available in any of test-checked HWCs (except HWC, Dahpar). This was also substantiated during joint physical verification in the HWCs Mahakar, Rajanbigha and Jagatpur in Nalanda district, wherein toilets, drinking water facility and waiting facility were not available. In HWC, Chainpura (Jehanabad), electricity connection and drinking water facility was not available.

The Department replied (August 2023) that in Jehanabad district, basic facilities had been provided in HWCs. Specific response, for other districts, however, was not provided.

5.6.3 Operationalisation of Health and Wellness Centres

- The Department had issued a resolution (October 2019) and included 109 drugs/medicines and 27 medical devices/consumables in the Essential Drug List (EDL) for HWCs. During audit of test-checked HWCs, it was observed that these essential drugs/medicines were not available in four[19], out of nine HWCs. In the remaining five[20] HWCs, only 14 to 49 medicines were available (February 2020). In May 2020, these five HWCs had no drugs/medicines and four HWCs had 11 to 48 drugs/medicines. Similarly, in August 2021, three[21]

[18] *Vaishali: Prataptand and Sondho; Patna: Sirsi and Sadisopur; Jehanabad: Bhawanichak, Chainpura, Derhsaiya, Gonwan and Nawada; Nalanda: Dahpar, Jagatpur, Mahakar and Rajanbigha.*

[19] *Gonwan and Bhawani Chak (Jehanabad), Sirsi and Sadisopur (Patna).*

[20] *Prataptand and Sondho (Vaishali), Nawada, Derhsaiya and Chainpura, (Jehanabad).*

[21] *Gonwan and Bhawani Chak (Jehanabad) and Sadisopur (Patna).*

HWCs had no drugs/medicines and in six[22] HWCs, nine to 47 drugs/medicines were available.

- Twelve[23] HSCs among the test-checked HSCs, were developed into HWCs and five[24] among them had no diagnostic facilities.
- As per Operational guidelines for HWCs 66 equipment, consumables and miscellaneous supply items i.e. Basin, Torch, Dressing Drum, Weighing Scale, Surgical Scissors *etc*. were to be made available in HWCs. Audit, however, observed that only 11 to 35 equipment, consumables and miscellaneous supply items were available in the test-checked HWCs.
- As per Operational guidelines for HWCs, there would be a Mid-level Health Provider i.e. Community Health Officer (CHO) in the centres. In addition to CHO, two multi-purpose workers (Female) and one multi-purpose worker (Male) were also to be posted in HWC. Further, in HWCs at APHC would require two Medical Officers, Staff Nurse, Lab technician, Pharmacist and Lady Health Visitor.

  During audit, it was observed that CHOs were posted only in 1,019 (24 *per cent*), out of 4,129 upgraded HWCs in the state (as on March 2022). Therefore, 3,110 HWCs were functioning without CHOs. Further, CHOs were not posted in any of the test-checked HWCs, one Medical Officer each was posted in the test-checked four HWCs[25], Multi-Purpose Workers (Female) was posted in two HWCs and Multi-Purpose Worker (Male) was posted in one HWC.
- The SHS directed (March 2022) all CS-cum-CMOs that as only 1,019 CHOs were posted in HWCs, 2,042 Staff Nurses, posted in the APHCs, would perform duty for three days in a week in HWCs beyond duty in APHCs.

5.6.4 Irregularities in the construction of HWCs

- In Vaishali district, DHS Vaishali had executed 29[26] works of repair/renovation of APHCs/HSCs, for their upgradation as HWCs. The concerned work divisions prepared the estimates and these works were executed by the DHS. Joint physical verification (April and June 2022) of 10 executed ***(Appendix 5.3)*** works disclosed that, in nine of these works, either certain items of work had not been executed or the works had not been executed as per specifications but full payment (₹ 9.05 lakh) had been made to the concerned contractors for all nine works. Further, neither had any agreement been executed, nor had the respective measurement books (MBs) been maintained, to substantiate the execution of all works.

The Department stated (December 2022) that, after pointing out by Audit, all the works had now been completed, as per the agreement and the MBs were provided

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22 *Prataptand and Sondho (Vaishali), Nawada, Derhsaiya, Chainpura, (Jehanabad) and Dapar (Nalanda).*

23 *HSCs: Bahpura, Bairbana, Bhawanichak, Bindidih, Gonwan, Jagatpur, Kohra, Maura Ramnagar, Nawada, Parmanandpur, Rajanbigha and Soharathi.*

24 *HSCs: Gonwan, Jagatpur, Maura Ramnagar, Parmanandpur and Rajanbigha.*

25 *Prataptand and Sondho (Vaishali), Mahakar and Rajanbigha (Nalanda).*

26 *Building Division, Hajipur (18 estimates), Local Area Engineering Organisation (LAEO) Division-II, Mahnar (9 estimates) and LAEO Division-I, Hajipur (2 estimates).*

(August 2023). During cross-verification (December 2023), it was observed that some works had still not been executed in five[27] of the test-checked HWCs (out of nine HWCs, for which payment had been made). Thus payments been made to contractors, for works that had not been executed.

5.7 AYUSH Health and Wellness Centres

- As per AYUSH Health and Wellness Centres operational Guidelines issued (May 2020) by the GoI, the healthcare facilities would be selected by State for upgradation as AYUSH HWCs, which were already functional with available infrastructure to suit HWC requirements including space for the practice of Yoga and demonstrative herbal garden for about 15 species. The main objectives were to established holistic wellness model based on AYUSH principles and practices, to empower masses for "self-care" to reduce the disease burden, out of pocket expenditure and to provide informed choice to the needy public.
- Audit noticed that in the SAAP for FY 2020-21, SAS proposed to upgrade 108 centres (45 AYUSH dispensaries and 63 Health Sub-centres) into HWCs. Scrutiny of the verification reports of these HWCs, conducted by the SAS revealed that, there was no possibility of growing herbal medicines in 70 health centres, no space was available for conducting yoga classes in 38 health centres, out of these 108 health centres. Despite these issues, the Department proposed upgradation of these health centres in HWCs.
- Further, it was observed that this proposal was approved (June 2020) by GoI for ₹ 17.22 crore and accordingly an amount of ₹ 8.61 crore (central share- ₹ 5.17 crore and state share- ₹ 3.44 crore) was released and works were to be completed by March 2021. However, the SAS spent only ₹ 0.33 crore and remaining ₹ 8.28 crore were lying with SAS, as on March 2022. It was also noticed that the work on 40, out of 108 HWCs was under progress. Due to non-establishment of required HWC people were deprived of choice to select AYUSH system of medicine.
- The Department did not provide (December 2022) specific reply on this audit observation.

5.8 Infrastructure in tertiary healthcare facilities

Tertiary healthcare facilities are required to provide healthcare facilities, in accordance with the intake capacity for admissions in the Bachelor of Medicine and Bachelor of Surgery (MBBS) courses of the respective colleges. The Medical Council of India (MCI)/National Medical Commission (NMC) had, accordingly fixed the minimum standard of infrastructure, for each tertiary healthcare hospital.

Audit analysed the availability of infrastructure and services in each tertiary healthcare facility, with a view to assessing the adequacy and efficacy of the available buildings, public utilities, road connectivity *etc*.

DMCH and PMCH were established more than 50 years ago, and GMCH Bettiah, was established in 2018 and construction work was of the hospital was still under

[27] *Ghoshwar, Ismailpur, Suratpur, Baidynathpur and Piroi.*

progress (May 2022). Infrastructure related shortcomings, observed in these three Medical College and Hospitals, are as under:

- **Building** In case of DMCH and PMCH, the buildings were very old and there was urgent need of repair and maintenance. GMCH, Bettiah, had come into existence in the year 2018 and was being operated with the district hospital infrastructure, including manpower. Construction of the new building was yet to be completed (June 2022). IPD services of the hospital had been commenced (April 2021) in its own building, while the OPD services continued in the old building of the district hospital.

Image 5.6: Dilapidated building of the surgery department (DMCH) (29.03.2022)

- **Inadequacy of safety measures** In DMCH, there were no boundary walls in the hospital premises, posing a security risk to newborns and admitted patients, from stray animals. This was accepted by the Hospital Manager, during joint physical inspection. In addition, there were several open electric switchboards, with hanging electric wires, which posed a risk to all patients, visitors and staff.

Image 5.7: Stray animals roaming in the Medicine Department of DMCH (29.03.2022)

- **Lack of basic amenities** In all the three test-checked hospitals, drinking water facility was not available and toilets of the departments/wards of DMCH and PMCH were not in good condition[28] at the time of joint physical verification (March 2022 to July 2022). After being pointed out (May 2022), drinking water facility had been made available (July to August 2022) by the hospital administration in IPD of DMCH.

[28] *The toilets were dilapidated and in need of construction/ repair, in addition to this cleanliness was also not being maintained.*

Image 5.8: Dirty toilet and broken gate of toilet in PMCH (23.05.2022)

However, toilet facility (separate for male and female) was not available in OPD and drinking water facility was not sufficient as only a hand pump was available for patients in OPD area of DMCH. As such, patients and their attendants had to make their own arrangements for water.

- **Drainage system** Except GMCH, the wastewater of the entire hospital/ departments was being discharged through open drains and the dirty water was found to have been accumulated in the hospital premises. Further, the entire hospital premises of DMCH suffered from water logging, during the rainy season. Even indoor patients had to face the problem of water logging in the wards. Department/ hospital had, however, not taken remedial action in this regard.

Image 5.9: Open drainage system in PMCH (23.05.2022)

Image 5.10: Open drainage system in DMCH (29.03.2022)

The Department agreed with the audit observation and stated (December 2022) that construction of new buildings of PMCH, Patna and GMCH, Bettiah, was in progress and, after completion of the construction work, the shortcomings would be resolved. Regarding DMCH, the Department stated (October 2023) that Administrative Approval for redevelopment of the hospital had been accorded (June 2023) and tender was in progress.

5.9 Strengthening of infrastructure in AYUSH

The main objective of AYUSH services was to enhance coverage of healthcare system through upgrading AYUSH hospitals and dispensaries, PHCs, CHCs, DHs and setting up of 10 bedded/30 bedded/50 bedded integrated AYUSH hospitals. Further, it also aims to opertionalise a network of AYUSH HWCs to provide services, based on holistic wellness model.

5.9.1 Construction of 50-bedded integrated AYUSH Hospital

In response to the proposal of Health Department, GoB, AYUSH Mission Directorate, GoI approved (2015-16) a 50 bedded AYUSH Hospital, to be established at Patna, at a cost of ₹ 6.00 crore and sanctioned ₹ 1.03 crore for this purpose. Later on in 2019-20, the cost of the Hospital was revised to ₹ 8.53 crore and GoI sanctioned ₹ 2.00 crore and released its 60 *per cent* share equal to ₹ 1.82 crore of the sanctioned amount of ₹ 3.03 crore. The Department transferred ₹ 3.03 crore (including state share) to BMSICL for the construction of hospital. Meanwhile, the land acquired by the State Government for construction of hospital building was encroached and as such, work could not be commenced, as of May 2022. Entire funds amounting to ₹ 3.03 crore released for this purpose were lying with BMSICL (May 2022).

In addition to this, the Department, through SAAPs for FYs 2019-20 and 2020-21, proposed establishment of two 50-bedded AYUSH Hospitals at Patna and Saharsa, and two 50 bedded hospital at Saharsa and Gopalganj, respectively. However, these proposals were not accorded to by the GoI, as requisite Detailed Project Reports (DPRs) were not submitted by the Department. Therefore, due to non-compliance to the pre-requisites, these AYUSH Hospitals could not be approved and established.

The Department stated (December 2022) that ₹ 868 crore had been sanctioned for creating infrastructure in AYUSH stream and the 50 bedded hospital work would be completed by the end of December 2022. The Department further stated (October 2023) that 75 *per cent* of construction work had been completed for the 50-bedded AYUSH hospital in Patna.

The reply corroborates the audit findings, as the sanctioned and released funds had not been expended.

5.10 Monitoring Mechanism

5.10.1 Non-functional Rogi Kalyan Samiti

The RKS of a hospital functions through a Governing Body (GB) and an Executive Committee (EC). The Governing Body working as the apex body is responsible for comprehensive policy formulation and oversight/monitoring, while the Executive Committee is responsible for assisting in the implementation of policy decisions and conduct of patient oriented services.

As per the Memorandum of Association of the RKS, the Governing Body was to review the progress and working of RKS, at least once in every quarter *i.e.* at least four times in a year, while the Executive Committee was to meet at least once in every month *i.e.* at least twelve meetings should have been held in a year.

Out of the three test-checked hospitals, it was noted that RKS had not been constituted in GMCH, Bettiah.

In two other test-checked hospitals, details of meetings of GB and EC, held during FYs 2016-17 to 2021-22, are as shown in **Table 5.6**.

Table 5.6: Details of GB and EC meetings conducted

Financial Year	RKS DMCH		RKS PMCH	
	No. of GB meetings held	No. of EC meetings held	No. of GB meetings held	No. of EC meetings held
2016-17	1	4	2	0
2017-18	1	4	1	0
2018-19	2	3	1	0
2019-20	1	1	1	0
2020-21	2	0	5	0
2021-22	1	0	4	0
Total	**8**	**12**	**14**	**0**

(Source: Test-checked MCHs)

As per the prescribed frequency at least 24 meetings of GB and 72 meetings of EC, should have been organised in each hospital during FYs 2016-17 to 2021-22. Audit however, observed that only eight meetings of GB (33 *per cent*) and 12 meetings of EC (17 *per cent*) were held by RKS DMCH. Similarly, 14 meetings of GB (58 *per cent*) and no meetings of EC were held by RKS PMCH during FYs 2016-17 to 2021-22, indicating the indifference of the hospitals in regard to ensuring the provision of patient oriented services through RKS, despite the availability of significant funds with RKS, as discussed in the ***Paragraph 6.9.2***.

The Department replied (December 2022) that: (i) meetings of the Governing Body and Executive Committee would be organized, as per fixed periodicity, in future and (ii) due to COVID-19, the meetings of Governing Body and Executive Committee for DMCH, could not be held in 2020-22. The reply of the Department was not tenable, as the periodicity, fixed for organising GB and EC, had never been followed in DMCH.

5.10.2 Online Hospital Management System (Sanjeevani) under NAM

The framework for implementation of the National AYUSH Mission (NAM) stipulated a dedicated Management Information System Monitoring and Evaluation Cell[29], to be established at the State level.

It was, however, noticed that no such cell had been established by SAS (as of December 2021).

Although, the State had submitted a proposal for setting up of a "website and online Hospital Management System", in the SAAP of FY 2019-20, but the proposal was deferred by the Mission Directorate, GoI. Meanwhile, a proposal of ₹ 5.09 crore, for setting up of an online Hospital Management System (*Sanjeevani*), for 181 units (54 District Joint dispensaries and 127 State dispensaries) was sent in the SAAP for

[29] *Consisting of Health Management Information System (HMIS) with three HMIS managers at national level and one HMIS manager at state level for monitoring and Evaluation of data.*

FY 2021-22 and was approved (August 2021) by GoI. But no progress was found during audit (December 2021) for implementation of *Sanjeevani*.

Thus, the State had remained without a dedicated information system, as well as an evaluation cell, to monitor the existing and planned units, as envisaged in the guidelines.

The Department stated (December 2022) that *Sanjeevani* was being implemented in all AYUSH healthcare facilities, including District Joint Dispensaries. The reply was not tenable, as, without a dedicated online system, monitoring as well as evaluation of the scheme, could not be conducted properly.

Recommendations 17: State government may ensure to prepare a comprehensive health policy/plan, to bridge gaps in infrastructure, in the existing healthcare facilities.

Chapter-VI
Financial Management

Chapter-VI

Financial Management

The financial management of the healthcare system in the State was not optimal, as there were persisting and substantial savings with the Department, as well as accumulating unspent balances of NHM funds, at the end of each financial year. The healthcare sector spending was less than the targets stipulated under the National Health Policy, 2017.

6.1 Introduction

A key requirement of any healthcare system is to ensure that adequate public funds are directed to its organizations, in line with healthcare system objectives. Such funding seeks to give financial capacity and incentive to the governments and health authorities, to fulfill their objectives. National Health Policy (NHP), 2017, advocates target of health financing for health system strengthening, to achieve the goal of attainment of health and well-being for all at all ages.

Funding by Government resources is categorised in two parts i.e. funds under the State Budget, from State resources and financial assistance from GoI, under the National Health Mission (NHM) and the National AYUSH Mission (NAM), under Central Sponsored Schemes (CSS). The ratio of GoI and GoB funding share, in regard to CSS, is 60:40.

Examination of records disclosed deficiencies/inadequacy of funds for the health care sector, as elucidated in the following paragraphs.

6.2 Budget provision and expenditure on Health Sector

State provides funds to the healthcare facilities and institutions under Grant No. 20 in two components, *viz.* Revenue[1] and Capital[2]. Budgetary provisions and expenditure there against, in the Health Department, during FYs from 2016-17 to 2021-22, are shown in **Table 6.1**.

Table 6.1: Budget provision and expenditure during FYs 2016-17 to 2021-22

(₹ in crore)

Financial Year	Provision		Total Provisions	Expenditure (*per cent*)		Total Expenditure (*per cent*)	Savings (per cent)		Total Savings (*per cent*)
	Revenue	Capital		Revenue	Capital		Revenue	Capital	
2016-17	8,100.75	1,120.29	9,221.04	4,749.79 (59)	859.06 (77)	5,608.85 *(61)*	3,350.96 (41)	261.23 (23)	3,612.19 (39)
2017-18	7,145.09	1,171.20	8,316.29	5,717.10 (80)	552.04 (47)	6,269.14 *(75)*	1,427.99 (20)	619.16 (53)	2,047.15 (25)
2018-19	8,222.16	1,615.38	9,837.54	6,344.28 (77)	1,134.01 (70)	7,478.29 *(76)*	1,877.88 (23)	481.37 (30)	2,359.25 (24)
2019-20	9,283.81	2,111.78	11,395.59	6,960.84 (75)	852.20 (40)	7,813.04 *(69)*	2,322.97 (25)	1,259.58 (60)	3,582.55 (31)
2020-21	11,414.36	1,808.25	13,222.61	8,520.45 (75)	645.72 (36)	9,166.17 *(69)*	2,893.91 (25)	1,162.53 (64)	4,056.44 (31)
2021-22	14,639.07	3,158.69	17,797.76	10,846.78 (74)	865.52 (27)	11,712.30 *(66)*	3,792.29 (26)	2,293.17 (73)	6,085.46 (34)
Total	**58,805.24**	**10,985.59**	**69,790.83**	**43,139.24 (73)**	**4,908.55 (45)**	**48,047.79 (69)**	**15,666 (27)**	**6,077.04 (55)**	**21,743.04 (31)**

(Source: Appropriation Accounts of the concerned financial year)

[1] *Revenue expenditure consists of all those expenditures, which do not result in creation of physical and financial assets. It mainly relates to expenses incurred for the normal functioning of the Government departments and various services.*

[2] *Capital expenditure includes expenditure on the acquisition of land, building, machinery and equipment etc.*

Table 6.1 shows that:

(i) total budget provisions of the Health Department gradually increased during FYs 2016-17 to 2021-22, except in FY 2017-18, in which budget provisions declined from 2016-17.

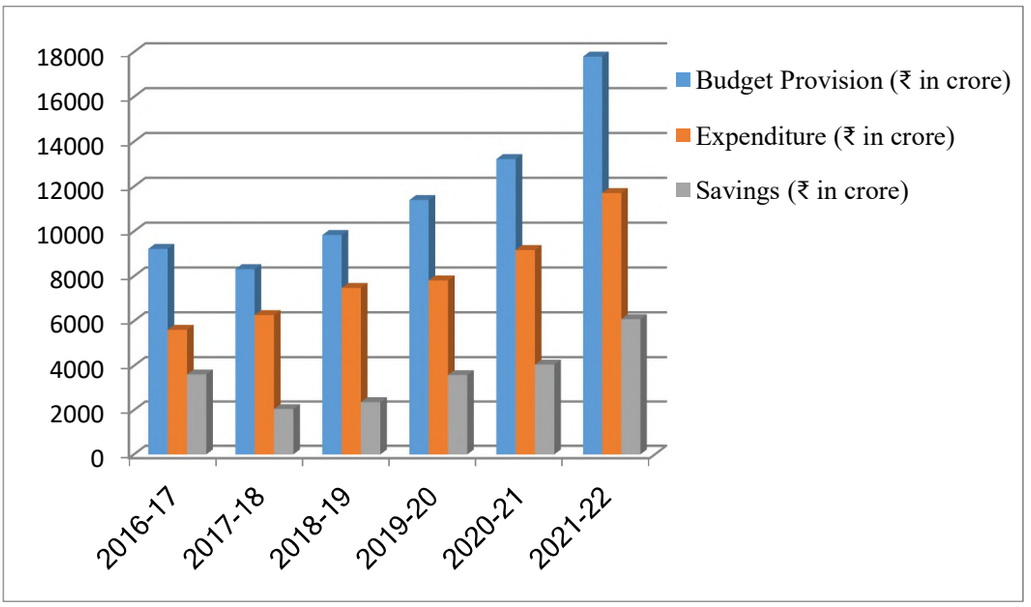
(ii) Expenditure percentage increased gradually from FYs 2016-17 to 2018-19 but declined during FYs 2019-20 to 2021-22.

(iii) Out of the budget provisions of ₹ 69,790.83 crore during FYs 2016-17 to 2021-22, only 48,047.79 crore (69 *per cent*) were spent by the Department, leading to savings of ₹ 21,743.04 crore (31 *per cent*).

(iv) Capital expenditure and revenue expenditure were only 45 *per cent* and 73 *per cent* of the concerned budget provisions during FYs 2016-17 to 2021-22.

Chart 6.1 depicts the budget provisions, expenditure incurred and savings.

Chart 6.1: Total budget provisions, expenditure incurred and savings of the Health Department, during FYs 2016-17 to 2021-22



(Source: Appropriation Accounts of the concerned FY)

The savings were mainly attributable to: (i) the absence of gap-analysis for raising demands for the budget and (ii) non-receipt of indents/demands from districts, on time.

Funds related to the construction and renovation of hospital buildings provided under the capital head remained unutilised, mainly due to slow completion of projects, delay/ non-finalisation of tender, delay in acquisition of land and non-sanction of schemes, as mentioned in ***Paragraphs 5.3.2, 5.3.3, 5.3.4*** and ***5.3.5***.

The Department accepted the audit observation and stated (December 2022) that savings were mainly related to the salaries-head and due to deployment of less manpower.

Recommendation 18: State government may ensure that budget provisions of the Health Department are prepared on a realistic basis, considering the demands raised on the basis of gap analysis, at the district level.

6.3 Funds receipt and spent on Health Sector by GoI and State Government under National Health Mission

In order to place demand for funds for implementation of NHM, the SHS prepared State Project Implementation Plan (SPIP). SPIP helps state to identify and quantify its targets required for programme implementation for the proposed year. To finalise SPIPs, meeting of National Programme Coordination Committee (NPCC) is conducted and suggestions made in the NPCC meeting are recorded in the form of Record of Proceedings (RoPs). After the finalisation of RoP, the state can demand funds for any specific purpose to the Ministry.

During FYs 2016-17 to 2021-22, the ratio of the GoI and GoB shares, in regard to NHM funds, was 60:40. Funds received during a financial year, availability of total funds, expenditure incurred and closing balance under NHM, are shown in **Table 6.2**.

Table 6.2: Availability of funds and Expenditure their against under NHM

(₹ in crore)

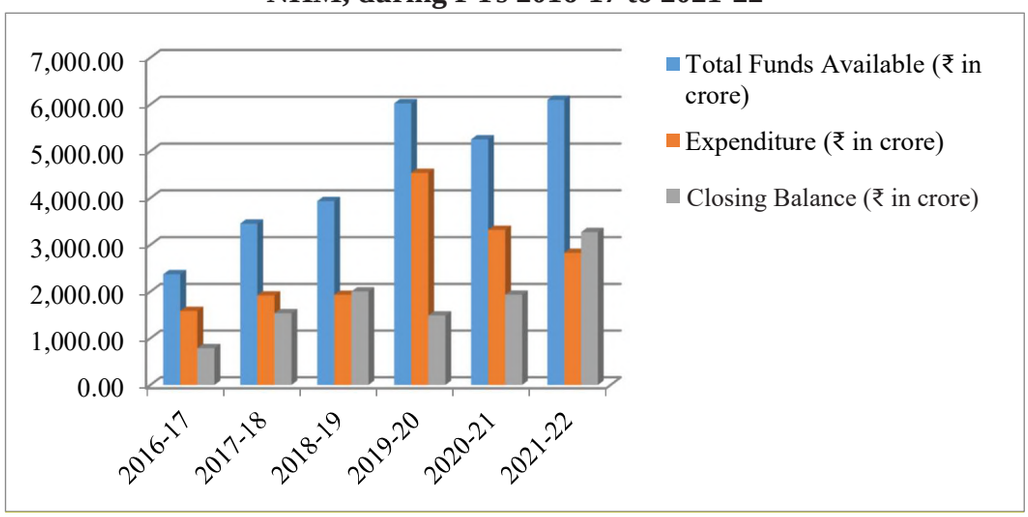
Financial Year	Opening Balance	Funds received during the year (from GoI)	Funds received from other sources*	Total funds available	Expenditure incurred *(per cent)*	Closing Balance
2016-17	629.46	769.36	972.08	2,370.90	1,583.48 *(67)*	787.42
2017-18	787.42	1,085.33	1,580.11	3,452.86	1,916.99*(56)*	1,535.87
2018-19	1,535.87	1,206.12	1,191.52	3,933.51	1,930.30*(49)*	2,003.21
2019-20	2,003.21	1,248.23	2,772.52	6,023.96	4,536.23 *(75)*	1,487.73
2020-21	1,487.73	1,469.00	2,296.02	5,252.75	3,318.97 *(63)*	1,933.78
2021-22	1,933.78	2,488.25	1,676.63	6,098.66	2,827.43 *(46)*	3,271.23
Total		**8,266.29**	**10,488.88**		**16,113.40**	

(Source: Data of SHSB)

**Other sources included funds received from State Government, interest earned and from other schemes.*

Table 6.2 indicates: (i) a decreasing trend of expenditure under NHM funds, during FYs 2016-17 to 2018-19 (from 67 *per cent* to 49 *per cent*) (ii) an increase to 75 *per cent* in FY 2019-20 and (iii) thereafter, decrease during FYs 2020-21 and 2021-22 (from 63 *per cent* to 46 *per cent*). **Chart 6.2** depicts total funds available, expenditure incurred and closing balances during FYs 2016-17 to 2021-22.

Chart 6.2: Total funds available, expenditure incurred and closing balance of NHM, during FYs 2016-17 to 2021-22



(Source: Data of SHSB)

Decrease in expenditure was mainly due to delayed submission of the Project Implementation Plan (PIP), land acquisition related issues, delay in finalisation of tenders, impact of the COVID-19 pandemic after 2020 *etc*.

The Department admitted (December 2022) that decrease in expenditure under NHM for the FYs 2020-21 to 2021-22 was due to the spread of the COVID-19, which interrupted implementation of NHM. The reply of the Department was not tenable, as the utilisation of funds had remained between 49 *per cent* and 67 *per cent* during FYs 2016-17 to 2018-19, prior to the COVID-19 period also.

Recommendation 19: State Government may ensure timely finalisation of tenders and completion of projects, so that available funds are utilised effectively.

6.4 Comparison of Allocation and Expenditure

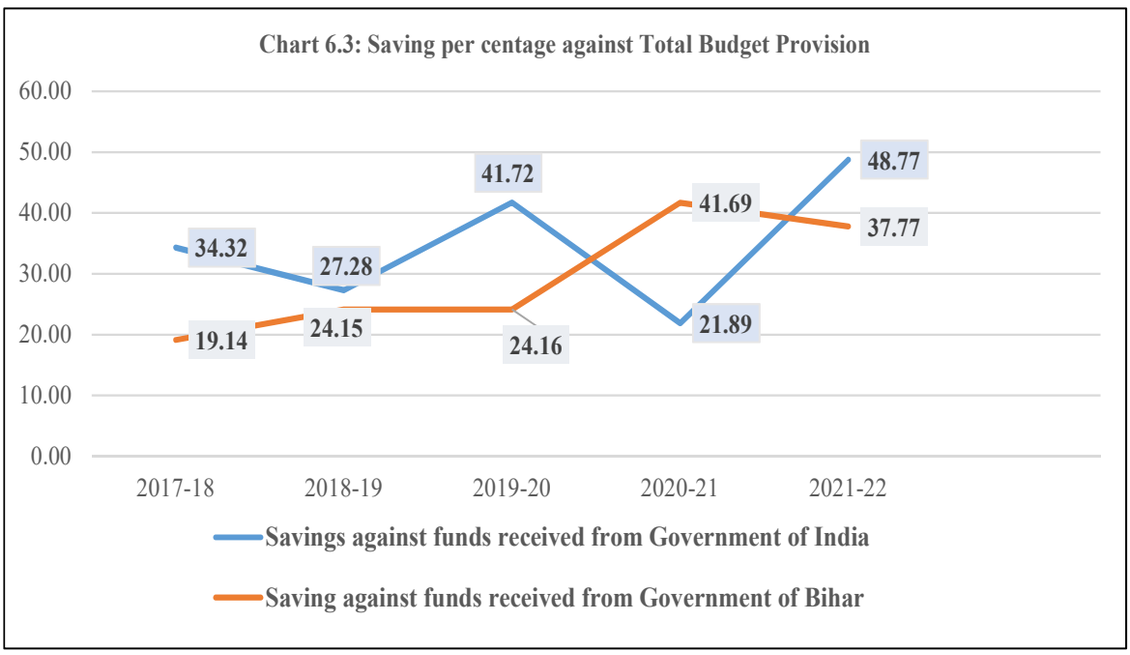
A comparison of the budget and expenditure for the funds received from GoI and allocations in the State Government budget and percentage of unspent funds, for the years 2016-22, is given in **Table 6.3.**

Table 6.3: Overall Budget and Expenditure

(₹ in crore)

Year	Government of India				Government of Bihar			
	Total Budget Provision	Expenditure	Savings	Saving percentage	Total Budget Provision	Expenditure	Savings	Saving percentage
2016-17	3,071.35	769.52	2,301.83	74.95	1,204.82	754.62	450.20	37.37
2017-18	2,085.85	1,370.08	715.77	34.32	1,452.89	1,174.86	278.03	19.14
2018-19	2,355.00	1,712.45	642.55	27.28	1,461.55	1,108.52	353.03	24.15
2019-20	3,163.34	1,843.65	1,319.69	41.72	1,990.87	1,509.88	480.99	24.16
2020-21	3,190.00	2,491.83	698.17	21.89	2,273.07	1,325.40	947.67	41.69
2021-22	4,741.50	2,429.18	2,312.32	48.77	2,985.70	1,858.06	1,127.64	37.77

(Source: Appropriation Accounts of the concerned FY)



The percentage of utilization of budget during FYs 2016-17 to 2021-22 shows a mixed trend and was lowest in 2016-17 (GoI) and in 2020-21 (GoB). This indicated that the State has not made a realistic assessment before preparing the funds requirement in budget for the health sector.

Chart 6.4: Budget Allocation and Expenditure of GoI share

(₹ in crore)

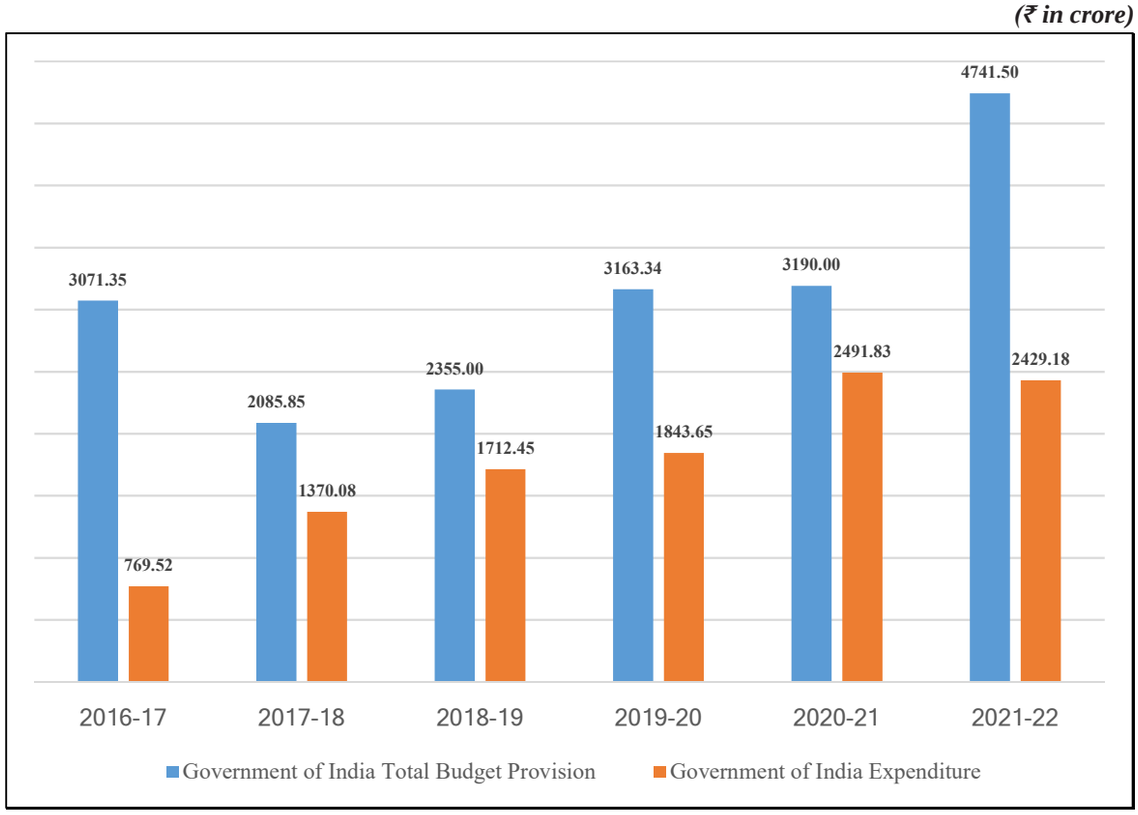
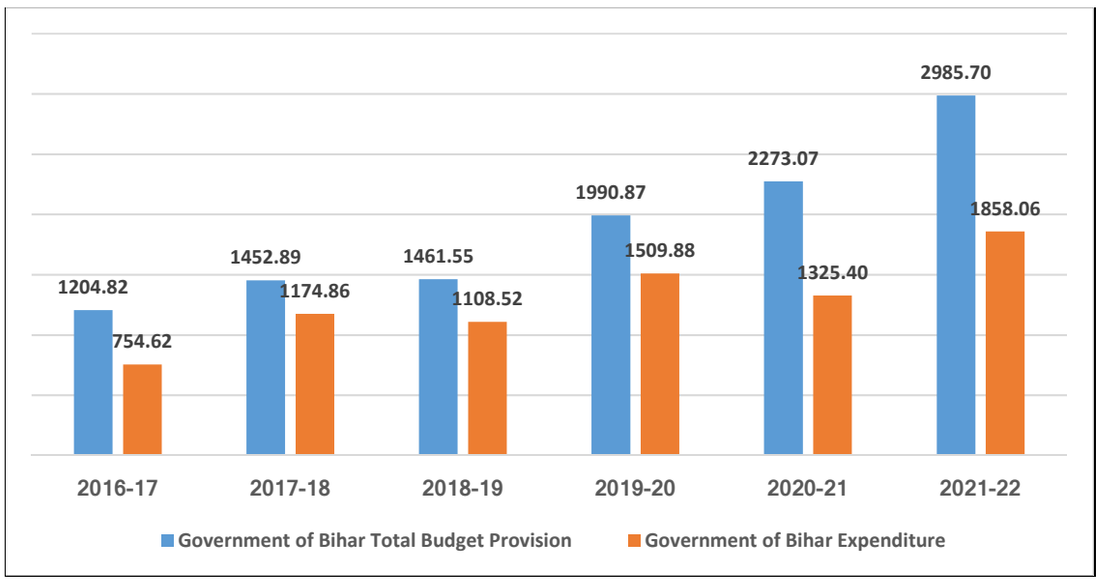


Chart 6.5: Budget Allocation and Expenditure of State share

(₹ in crore)



6.5 Expenditure on Health Sector by the State *vis-à-vis* National Health Policy norms

To ensure adequate investment, the NHP, 2017, proposes a target of raising public health expenditure to 2.5 *per cent* of the Gross State Domestic Product in a time-bound manner. It envisages that: (i) resource allocation to States be linked with the development indicators, absorptive capacity and financial indicators of the States (ii) States be incentivised for incremental increase of State resources for public health expenditure (iii) funds available under Corporate Social Responsibility (CSR) also be leveraged for well-focused programmes aiming to address health goals and (iv) States' healthcare sector spending be increased to more than eight *per cent* of the budget by 2020.

Expenditure on the healthcare sector, against the Gross State Domestic Product (GSDP) and the Budget of the State, during FYs 2016-17 to 2021-22, is given in **Table 6.4**.

Table 6.4: Expenditure for the health sector *vis-à-vis* GSDP and Budget of GoB

(₹ in crore)

Financial Year	GSDP	Total budgetary provisions	Expenditure on healthcare sector	Percentage of healthcare sector expenditure against GSDP	Percentage of health expenditure on healthcare sector against total budgetary provisions
2016-17	4,21,051	1,69,351.63	5,608.85	1.33	3.31
2017-18	4,68,746	1,87,343.96	6,269.14	1.34	3.35
2018-19	5,27,976	2,09,489.83	7,478.29	1.42	3.57
2019-20	5,82,516	2,28,487.18	7,816.04	1.34	3.42
2020-21	5,87,154	2,45,522.62	9,166.17	1.56	3.73
2021-22	6,75,448	2,65,396.87	11,712.30	1.73	4.41

(Source: MoSPI and Appropriation Account)

As evident from **Table 6.4**, the percentage of expenditure on healthcare against the GSDP ranged between 1.33 *per cent* and 1.73 *per cent* only, whereas the percentage of healthcare expenditure against the Budget of the state, was between 3.31 *per cent* and 4.41 *per cent,* less than the required expenditure, as a percentage of GSDP and State Budget, respectively. Further, the Department did not make efforts for getting funds under CSR or invite NGOs/private/corporate sector, for adoption of neighborhood schools/colonies/slums/tribal areas/backward areas, for healthcare awareness and services.

The Department stated (December 2022) that the percentage of health expenditure, against GSDP and aggregate expenditure, were on an upward trajectory. The reply was not tenable, as 31 *per cent* savings were reported during FYs 2016-17 to 2021-22 and the expenditure was well below the targeted percentage.

6.6 Budget Provision for Primary Healthcare Services

National Health Policy (NHP), 2017, advocates allocating a major proportion (up to two-thirds or more) of resources to primary healthcare, followed by secondary healthcare and tertiary healthcare. The State has provided only 30 *per cent* to 41 *per cent* of total funds to primary healthcare, during FYs 2016-17 to 2021-22, as shown in **Table 6.5**.

Table 6.5: Budget provision for primary healthcare during FYs 2016-17 to 2021-22

(₹ in crore)

Financial Year	Total Budget Provisions	Budget Provision for Primary Healthcare	Percentage
2016-17	9,221.04	3,796.50	41
2017-18	8,316.29	2,633.04	32
2018-19	9,837.54	3,366.76	34
2019-20	11,395.59	3,368.29	30
2020-21	13,222.61	4,481.53	34
2021-22	17,797.76	5,395.58	30
Total	**69,790.83**	**23,041.70**	**33**

(Source: Appropriation Accounts of the respective year)
(Note: Budget provision for primary healthcare includes 70 per cent of budget provision under NHM as mandated in NHM guidelines)

Audit also observed that the Department had not carried out required studies related to cost-benefit and cost-effectiveness, although advocated in NHP 2017, at each level of healthcare facilities. Thus, the efficiency of public expenditure for health could not be assessed.

The Department replied (December 2022) that: (i) the allocation of resources to Primary Healthcare was need-based and was dependent on how execution of activities were prioritized and (ii) studies related to cost-benefit and cost-effectiveness, carried out at different levels of healthcare, would be improved further.

The reply of the Department was not as per the audit observation, as the need of resources had not been assessed by the Department, by conducting gap-analysis, according to the NHM guidelines. Gaps existing in infrastructure, at the primary healthcare level, have been pointed out in ***Paragraph 5.3*** of ***Chapter-V***, indicating that more expenditure was required for providing health services effectively.

6.7 Funding and utilisation under COVID-19

The Department allotted (October 2020) ₹ 18.65 crore to CS-cum-CMOs of three out of five test-checked districts[3], for strengthening[4] of medical facilities and isolation centres, to control the COVID-19 pandemic. During audit (May 2022), it was observed that expenditure of only ₹ 8.19 crore[5] had been incurred in these districts. Further scrutiny of records disclosed that:

- CS-cum-CMO, Madhepura, sub-allotted (March 2021), the funds to DH/other hospitals, after a lapse of five months. Due to the delayed sub-allotment, almost the entire amount (₹ 8.11 crore out of ₹ 8.17 crore) was surrendered at the end of the financial year 2020-21.
- In Jehanabad, unexpended funds, amounting to ₹ 2.34 crore (57 *per cent*), were surrendered at the lapse of the financial year 2020-21.
- Further, GOB allotted (September 2021) ₹ 41.50 lakh to CS-cum-CMO, Madhepura, towards: (i) setting up of laboratories for testing COVID patients (ii) maintenance of machines and (iii) payment to contractual staff. Out of these allotted funds, ₹ 11.59 lakh only had been expended till the end of financial year 2021-22, for the prescribed purpose and the remaining ₹ 29.91 lakh remained deposited in the account of CS-cum-CMO, Madhepura.

The above instances demonstrate inefficient financial management, resulting in surrender of ₹ 10.46 crore and blockage of funds amounting to ₹ 29.91 lakh, in the three test-checked district.

The Department stated (December 2022) that, in the Madhepura district, expenditure had been incurred as per requirement and remaining funds were surrendered. The reply was not tenable, as the funds were sub-allotted to healthcare facilities only in the month of March 2021. Further, no replies were furnished, in regard to other districts.

Recommendation 20: State Government may ensure adequate allocation of funds for primary healthcare, as well as enhancement in healthcare sector spending, in line with the National Health Policy, 2017.

6.8 Availability of funds and expenditure the reagainst under AYUSH

The funding pattern of NAM was in the ratio of 60:40 between the Centre and States, during FYs 2016-17 to 2021-22. Different components of the mission were to be funded on a gap-filling basis, based on the proposals submitted by the State and reflected in the SAAP. The State had to take necessary actions to utilise the funds provided to it, within the financial year, provided that in the event of failure to utilise the funds, partly or fully during the year, details thereof were to be reported to the Ministry.

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[3] *Madhepura: ₹8.17 crore; Jehanabad: ₹4.07 crore and Nalanda: ₹6.41 crore (Patna and Vaishali did not provide data/information/records).*

[4] *Prevention of COVID-19, regular operation of testing laboratory for providing medical facilities, providing medicines to patients etc.*

[5] *Madhepura:₹0.06 crore; Jehanabad:₹1.73 crore and Nalanda: ₹6.40 crore.*

Availability of funds, expenditure incurred and savings recorded during FYs 2016-17 to 2021-22 is indicated in **Table 6.6**.

Table 6.6: Availability of funds, expenditure incurred and savings recorded during FYs 2016-17 to 2021-22

(₹ in crore)

Financial Year	Funds available		Expenditure incurred *(per cent)*		Savings *(per cent)*	
	Central Share	State Share	Central Share	State Share	Central Share	State Share
2016-17	17.53	11.69	0.00	0.00	17.53 (100)	11.69 (100)
2017-18	0.00	0.00	0.00	0.00	0.00	0.00
2018-19	0.00	0.00	0.00	0.00	0.00	0.00
2019-20	26.61	17.24	0.40 (2)	0.05 (0.3)	26.22 (99)	17.19 (100)
2020-21	5.17	3.40	0.32 (6)	0.00	4.84 (94)	3.4 (100)
2021-22	16.86	11.24	0.00	0.00	16.86 (100)	11.24 (100)
Total	**66.17**	**43.57**	**0.72 (1)**	**0.05 (0.11)**	**65.45 (99)**	**43.52 (99.89)**

(Source: Records of State AYUSH Society)

As shown in **Table 6.6**, negligible expenditure i.e. one *per cent* of the central share and 0.11 *per cent* of the state share had been expended during FYs 2016-17 to 2021-22. During the meeting with Mission Directorate, NAM (December 2021), it was mentioned that the State had reported very low/negligible expenditure on the scheme.

The reasons for such a low expenditure were mainly delay in constituting SAS and non-constituting the DASs at the State and district levels, respectively which ultimately resulted in delay in construction of infrastructure and procurement of drugs.

The Department accepted (December 2022) the audit observation and stated that funds would be utilised through procurement of drugs and equipment. The reply showed the lackadaisical attitude of the Government, towards implementing the AYUSH mission.

Recommendation 21: State Government may ensure that available funds are utilised in line with time bound targets, as framed under the guidelines of NAM.

6.9 Budget and Expenditure in selected Tertiary Healthcare facilities

6.9.1 Funds provided and expenditure incurred there against

A summary of the annual budget proposals, prepared by the hospitals, along with the funds provided by the Department and expenditure incurred there against, during FYs 2016-17 to 2021-22, is given in **Table 6.7**.

Table 6.7: Budget proposals, funds allocated and expenditure incurred by the test-checked hospitals

(₹ in crore)

MCH	Financial Year	Budget proposal	Funds allocated	Expenditure incurred (*per cent*)	Savings/ Surrender (*per cent*)
Darbhanga Medical College and Hospital, Darbhanga	2016-17	88.4	88.86	86.44 (98)	2.42 (2)
	2017-18	96.77	93.33	88.84 (95)	4.49 (5)
	2018-19	99.42	105.35	99.03 (94)	6.32 (6)
	2019-20	105.93	95.41	84.17 (88)	11.24 (12)
	2020-21	106.25	115.44	94.34 (82)	21.10 (18)
	2021-22	154.35	169.56	150.83 (89)	18.73 (11)
	Total	**651.12**	**667.95**	**603.65 (90)**	**64.3 (10)**
Govt. Medical College and Hospital, Bettiah	2019-20	NA*	12.92	7.63 (59)	5.29 (41)
	2020-21	21.09	29.17	19.97 (68)	9.20 (32)
	2021-22	43.98	40.69	34.05 (84)	6.64 (16)
	Total	**65.07**	**82.78**	**61.65 (74)**	**21.13 (26)**
Patna Medical College and Hospital, Patna	2016-17	NA	179.02	155.26 (87)	23.76 (13)
	2017-18	NA	192.81	177.50 (92)	15.31 (8)
	2018-19	235.93	220.81	206.60 (94)	14.21 (6)
	2019-20	251.19	223.8	208.09 (93)	15.71 (7)
	2020-21	276.44	229.13	209.49 (91)	19.64 (9)
	2021-22	290.47	253.7	229.17 (90)	24.53 (10)
	Total	**1,054.03**	**1,299.27**	**1,186.11 (91)**	**113.16 (9)**

(Source: Records of test-checked MCHs) **Records were not available*

Audit noticed 100 *per cent* persistent savings, in the certain heads *viz*. Training, Publishing and printing *etc*. of expenditure, ***(Appendix 6.1)***, in all the test-checked Medical College and Hospitals (MCHs), at the end of each financial year, during FYs 2016-17 to 2021-22. However, the Department kept releasing funds under these heads, which remained unutilised and were surrendered on the last day of that financial year.

In its reply, the Department stated (December 2022 and October 2023) that: (i) for GMCH, Bettiah, the budget would be prepared as per actual requirements (ii) for DMCH, allotments under the head 'publishing & printing', as well as, for 'training', were made during FYs 2021-22 and 2022-23, without demand of the Superintendent and (iii) PMCH could not assess the actual number of the patients at the time of preparation of budget.

The reply of the Department was not acceptable, as 100 *per cent* savings itself indicated that budgets had not been prepared as per actual requirements and the Department had also released funds, without demands from the hospitals, indicating improper financial management.

6.9.2 Non-utilisation of Rogi Kalyan Samiti funds

The Rogi Kalyan Samiti (RKS) is a health centre-based society, required to be established in healthcare facilities under the National Rural Health Mission/National Health Mission. Its main objectives include: (i) making the hospital administration and management accountable for ensuring the availability of high quality equitable

services, to the users, without economic hardships and (ii) enabling the community to monitor the functioning of healthcare facilities.

Audit observed that RKS was not constituted in GMCH, Bettiah. In remaining two medical college and hospitals, RKS funds were being utilised for the intended purposes, but in minimal amount only, as detailed in **Table 6.8**.

Table 6.8: Funds available under RKS and expenditure incurred, during FYs 2016-17 to 2021-22

(₹ in crore)

Financial Year	DMCH		PMCH	
	Funds available	**Expenditure incurred during the year (*per cent*)**	**Funds available**	**Expenditure incurred during the year (*per cent*)**
2016-17	3.03	0.14 *(5)*	14.46	0.72 *(5)*
2017-18	3.59	0.04 *(1)*	16.67	1.04 *(6)*
2018-19	4.11	0.46 *(11)*	17.77	1.37 *(8)*
2019-20	4.21	0.69 *(16)*	18.83	1.20 *(6)*
2020-21	3.89	0.29 *(7)*	19.77	1.23 *(6)*
2021-22	3.77	0.27 *(7)*	22.09	0.92 *(4)*

(Source: Records of test-checked MCHs)

As can be seen from **Table 6.8**, RKS funds had not been utilised as the Superintendent (Member Secretary of the RKS) of the concerned MCH, did not ensure to convene required number of meetings of RKS (***Paragraph 5.10.1***).

The Department stated (December 2022 and October 2023) that: (i) in order to provide facilities (*e.g.,* drugs, pathological test, cleanliness, drinking water *etc*.) to the patients of PMCH, the hospital management received expenditure head-wise funds, every year, from Department and expenditure from RKS had been incurred only for those heads of expenditure in which allotment had not been made by the Department (ii) in DMCH, the drinking water facility was being provided out of RKS funds and (iii) RKS (as replied in October 2023) had been constituted (November 2022) in GMCH, Bettiah.

The reply of the Department shows that it had taken more than four years to constitute the RKS of GMCH, Bettiah, since the establishment (September 2018) of the hospital. Further, despite availability of RKS funds, adequacy of infrastructure, drugs and equipment, in PMCH and DMCH, was poor, as discussed in ***Paragraph 4.2.3***, ***4.3.5*** and ***5.8***.

6.10 Allocation of resources in Indira Gandhi Institute of Cardiology (IGIC)

A summary of the annual budget proposals, funds provided by the Department and expenditure incurred there against, during FYs 2016-17 to 2021-22, is indicated in **Table 6.9**.

Table 6.9: Budget proposals, allotments and expenditure incurred, during FYs 2016-17 to 2021-22

(₹ in crore)

Financial Year	Budget proposal	Allotment	Expenditure	Savings/ surrender (in *per cent*)
2016-17	NA*	31.97	25.23	6.74 (21)
2017-18	NA	37.80	30.27	7.53 (20)
2018-19	NA	47.69	34.06	13.63 (29)
2019-20	50.18	47.17	38.51	8.67 (18)
2020-21	51.06	46.78	44.16	2.61 (6)
2021-22	68.46	70.83	56.90	13.93 (20)
Total	**169.70**	**282.22**	**229.13**	**53.09 (19)**

*(Source: Records of IGIC) *Data relating to the budget proposal for the financial year from 2016-17 to 2018-19 was not made available to Audit.*

As shown in **Table 6.9**, there were persistent savings under certain 'Object Head' of expenditure (100 *per cent* in some cases, as shown in ***Appendix 6.2***) such as TA, Legal Charges, Training *etc.,* against the funds released to the hospital, during FYs 2016-17 to 2021-22. Funds more than proposals, were released to the hospital, during FY 2021-22.

The Department admitted the same and stated (December 2022) that corrective measures would be taken in future.

6.11 Failure in verification of bank guarantee

In DMCH, work relating to security guard services was awarded (November 2020) to an agency[6]. As per the conditions of the tender, the agency was required to deposit a bank guarantee for ₹10.00 lakh, towards the performance security. The purpose of the performance security is to provide financial protection to the contracting entity in the event that the contractor fails to perform its contractual obligations. The validity of this guarantee was to be for a period up to six months from the date of termination of the contract. Audit noticed, in this regard, that: (i) although, the agency had deposited a performance guarantee of the required amount, its validity had expired in February 2021 and (ii) neither had the agency extended the validity of the performance guarantee, nor had DMCH obtained a new performance guarantee, of the same value, from the agency. Further, the agreement was in vogue as of May 2022.

The Department stated (October 2023) that the concerned agency had stopped its services (August 2022) and the BG had been extended till August 2022. The reply indicated the lackadaisical attitude of the hospital management, towards verifying the bank guarantee.

[6] *M/s Biswas Security Services India Pvt. Ltd.*

Chapter-VII
Implementation of Centrally Sponsored Schemes

Chapter-VII

Implementation of Centrally Sponsored Schemes

Timely payment under the Janani Suraksha Yojana was not made to the beneficiaries. Due to delayed/non-constitution of state/district AYUSH society, the implementation of the National AYUSH Mission was very slow.

Government of India (GoI) provides financial assistance for various programmes under the aegis of National Health Mission (NHM) and the National AYUSH Mission (NAM), under Central Sponsored Schemes (CSSs). The ratio of GoI and GoB funding share, in respect of CSS, is 60:40. The observations noticed on implementation of different CSSs are discussed in succeeding paragraphs.

7.1 Immunisation of newborns under National Reproductive and Child Health Programme

Immunisation activities are important component of the National Reproductive and Child Health Programme, one of the key areas under NRHM since 2005. As per the National Immunisation Schedule[1], Bacillus Calmette Guerin (BCG), Oral Polio Vaccine (OPV)-zero dose and Hepatitis-B vaccines, are to be mandatorily administered to newborns and the concerned healthcare facilities should ensure their adequate availability.

Audit could not derive assurance that mandatory vaccines had been administered to the newborns at the time of their birth, as there were cases of improper maintenance of labour room registers and non-maintenance of separate data for infants at the immunisation sections of the test-checked healthcare facilities (except in PHC, Ratni Faridpur, wherein, at least two to six *per cent* of children had been deprived of these mandatory vaccines during FYs 2016-17 to 2021-22) as shown in **Table 7.1**.

Table 7.1: Details of children not vaccinated in PHC, Ratni Faridpur

Financial Year	No. of inborn children	BCG	OPV	Hepatitis-B
		Children not vaccinated (*per cent* with respect to newborn children)		
2016-17	547	15 (3)	15 (3)	15 (3)
2017-18	651	11 (2)	11 (2)	11 (2)
2018-19	707	13 (2)	13 (2)	13 (2)
2019-20	660	24 (4)	24 (4)	24 (4)
2020-21	1,023	34 (3)	34 (3)	34 (3)
2021-22	1,111	68 (6)	68 (6)	68 (6)
Total	**4,699**	**165 (4)**	**165 (4)**	**165 (4)**

(Source: Test-checked healthcare facility)

[1] *National Immunisation Schedule defines the time during which routine immunisation is to be carried out.*

Non-administration of mandatory vaccines to newborns indicated negligence on the part of concerned authorities, as vaccines were available during the period in the healthcare facility.

No reply to this audit observation was provided by the Department.

7.2 Implementation of Janani Suraksha Yojana

Janani Suraksha Yojana (JSY) is a 100 *per cent* centrally sponsored scheme for promoting institutional deliveries, with the objective of reducing maternal and neonatal mortality and providing immediate pecuniary help to mothers. The scheme integrates cash assistance[2] to mothers to meet the cost of delivery and post-delivery care. The assistance should be disbursed in the institution level itself before discharging the intended beneficiary.

Audit observed that, in the test-checked SDHs, RHs/CHCs and PHCs, on an average, 95 *per cent*, 85 *per cent* and 84 *per cent* of the beneficiaries, respectively, had been able to receive payments under the scheme, during FYs 2016-17 to 2021-22.

Reasons for non-payment, as stated by the test-checked healthcare facilities, were non-submission of bank account details and other documents (admission slip, photos of mother and child) by the beneficiaries.

Further examination of the details of the 2,378 sampled beneficiaries in nine[3] test-checked healthcare facilities, during FYs 2016-17 to 2021-22, showed delays in disbursement of payments to beneficiaries. The range of delay was 31 to 60 days in 403 *(*17 *per cent)*, 61 to 180 days in 436 (18 *per cent)* and more than 180 days in 148 (six *per cent)* of the test-checked cases. In 258 (11 *per cent)* cases, no payments were made. Thus, the purpose of providing immediate pecuniary help to the mothers, for better healthcare after the birth of their child, was not fulfilled.

The Department admitted (December 2022) that, in the Madhepura and Patna districts, there were delays in payments due to non-submission of bank account numbers by beneficiaries.

The reply of the Department was not acceptable, as the State Health Society (SHS) had directed (March 2014) district authorities to ensure opening of bank accounts of the intended beneficiaries through ASHA.

The Department further replied (October 2023) that districts had been directed to ensure opening of bank accounts of JSY beneficiaries, in time, and ensure payments to the beneficiaries, on priority basis.

Recommendations 22: State government may ensure that arrangements are made to ensure timely payment to the beneficiaries under the Janani Suraksha Yojana.

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[2] *Assistance of ₹ 1,400 to each beneficiary in rural areas and ₹ 1,000 to each beneficiary in urban areas.*

[3] *SDHs: Mahua (sampled months of FYs 2018-19 to 2021-22) and Barh (sampled months of FYs 2019-20 and 2020-21); RH: Chandi; CHCs: Kako (sampled months of FY 2016-17 to 2020-21); Singheshwar (sampled months of FYs 2018-19 to 2021-22); PHCs: Goraul (sampled months of FYs 2018-19 to 2021-22); Noorsarai (sampled months of FY 2016-17 to 2020-21); Ratni Faridpur and Sikaria.*

7.3 National Programme for Communicable/Non-communicable diseases

Communicable diseases, also known as infectious diseases or transmissible diseases, are illnesses that result from the infection, presence and growth of pathogenic (capable of causing disease) biologic agents in an individual human or other animal host. On the other hand, Non-communicable diseases are known as chronic diseases, which do not spread from person to person.

7.3.1 Communicable disease

As per framework for implementation of NHM (2012-17), it will focus on communicable disease control programme and disease surveillance.

Audit observed that specific strategic targets regarding control of communicable diseases, had not been envisaged in the vision document.

The epidemiological situation analysis of some of the significant communicable diseases widely spread in the State, is discussed in succeeding paragraphs.

7.3.1.1 Revised National Tuberculosis Control Programme

As per framework for implementation of NHM (2012-17), the goal is to decrease mortality and morbidity due to Tuberculosis (TB) and reduce transmission of infection until TB ceases to be a major public health problem in India.

India has approximately 28 lakhs TB cases, accounting for about one-fourth of the world's total TB cases. As evident from **Table 9.1** (Sl. No. 5), case notification[4] rate of TB (per lakh population) of the State (100), was far behind the national average (177). Audit further noticed that the treatment success rate for TB patients of Bihar was 72 *per cent*, which was also less than the national average (79 *per cent*). Public Private Mix (PPM) Co-ordinator[5] and Senior Treatment Supervisor[6] (STS), are required for the implementation and monitoring of the National Tuberculosis Programme (NTP) through case notification, treatment initiation and completion rate. Audit observed that during the year 2020, all the sanctioned posts (38) of PPM Co-ordinator were vacant across 38 districts and only 158 (29 *per cent*), against sanctioned 538 STSs, were available.

In the test-checked five districts, one to 17 (four to 65 *per cent*), out of 26 drugs required for treatment of TB, were not available during FYs 2016-17 to 2020-21. Similarly, facility for two to six (33 *per cent* to 100 *per cent*), out of six[7] diagnostic tests required, were not available in the test-checked districts, during FYs 2016-17 to 2020-21. This was mainly due to poor resource management of TB cases.

The Department replied (December 2022) that: (i) the total case notification rate of Tuberculosis, in the State, was 123 (ii) the post of PPM coordinator was still vacant in all districts (iii) there were vacancies for the post of STS, and one STS was in-charge of two or more blocks and (iv) to address the gap of drugs, local procurement was being done.

[4] *The number of TB cases (new and relapse) notified to the national health authorities during a specified period of time per 100,000 population.*
[5] *Posted at District level in District Tuberculosis Centres.*
[6] *Posted at Block level in PHCs.*
[7] *Electrolyte monitoring test, Creatinine, Thyroid, Liver Enzymes, HIV and Pregnancy.*

The reply of the Department was not convincing, as the state was still well short of achieving the target, as well as the national average, in terms of the total case notification rate of Tuberculosis.

7.3.1.2 Kala-Azar Elimination Programme

Concerned with the increasing incidences of Kala-azar in the country, the GoI launched a Centrally Sponsored Kala-azar Programme in the endemic states in 1990-91, with a strategy to stop the transmission by reducing vector populations, early detection and complete treatment of cases, and health education programme for community awareness.

Bihar has a high incidence of Kala-Azar. Out of 54 affected districts in India, 33 districts are from Bihar. Kala-Azar is caused by a parasite called Leishmania Donovani, which is transmitted by sand fly[8]. GoI had targeted[9] Kala-Azar elimination, with the target of reducing the annual incidence to <1 per 10,000 population, at the block level. However, the achievement of the State (2 per 10,000) was far below the national target. Audit noted that 17,059 (75 *per cent*), out of total 22,781 cases detected in India during FYs 2016-17 to 2020-21, were from Bihar. Further scrutiny of the Record of Proceedings (ROPs) of NHM, for the FYs 2019-20 to 2021-22, disclosed that the proposed budget and approval thereagainst, for Kala-Azar preventive strategies, was on a decreasing[10] trend.

The Department did not respond to the audit observations.

7.3.1.3 Flexible pool for Non-communicable disease (NCD)

As per framework for implementation of NHM, screening and detection for breast and cervical cancers in all women, mental disorders, epilepsy and stroke, diabetes and hypertension *etc*. should be ensured.

As envisaged in the Bihar SDG Vision document, by 2030, the premature mortality from non-communicable diseases is to be reduced by one third, through prevention and treatment. All residents of the State should have access to primordial, primary, secondary and tertiary care, for non-communicable diseases, by the year 2030, despite their capacity to pay.

Audit noticed shortcomings in diagnostic facilities and management of cases related to NCD in the test-checked DHs, as dealt in *Paragraph 2.4.24* of *Chapter II* of the Performance Audit of "Functioning of District Hospitals", featured in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020.

Audit also noticed substantive shortages of Government primary and secondary healthcare facilities, as well as hospital beds, as discussed in ***Paragraphs 5.2* and**

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[8] *Phlebotomine Argentipus.*

[9] *As mentioned in the Annual Report of the Ministry of Health and Family Welfare, GoI, for the year 2019-20.*

[10] *2019-20: (proposed budget- ₹ 41.71 crore, approved budget- ₹ 41.71 crore); 2020-21: (proposed budget- ₹ 41.56 crore, approved budget- ₹ 41.56 crore) and 2021-22: (proposed budget- ₹ 34.36 crore, approved budget- ₹ 34.17 crore).*

3.2.1 of this report. Further, the State had only 11[11] Government tertiary healthcare facilities, with four (out of 11) situated in Patna district itself. Therefore, only eight districts (including Patna district), out of the 38 districts in the State, had Government tertiary care hospitals. The causes responsible for delay in the creation of infrastructure and lack of infrastructural amenities are broadly discussed in **Chapter-V** of this Report.

The Department did not respond to the audit observation.

7.4 Implementation of National AYUSH Mission

Department of AYUSH, Ministry of Health and Family Welfare, GoI, launched (September 2014) National AYUSH Mission (NAM), to be implemented through States/UTs. The basic objective of NAM is to promote AYUSH medical systems, through cost-effective AYUSH services, strengthening of educational systems, enforcement of quality control of Ayurveda, Siddha and Unani & Homoeopathy (ASU&H) drugs and sustainable availability of ASU&H raw materials.

For the implementation of NAM, the State AYUSH Society (SAS), Bihar was established (March 2018). The Society functions through its Governing Body (apex body) and Executive Body, chaired by the Chief Secretary, GoB, and the Principal Secretary, Health Department, GoB, respectively. Prior to constitution of the SAS, State Annual Action Plan (SAAP) was formulated and submitted to GoI by the Health Department, GoB.

7.4.1 Delay in constitution of State AYUSH Society (SAS) and delayed/ non-constitution of District AYUSH Societies (DASs)

Ministry of Health and Family Welfare, GoI directed (October 2014) GoB to constitute SAS at the earliest, in order to implement NAM successfully in the State. Further, as per operational guidelines of NAM, for proper planning and execution of activities of NAM, every district should had a District AYUSH Society (DAS) with a Governing Body headed by the District Magistrate of concerned district.

Audit however, observed that the State constituted (March 2018) SAS, after lapse of almost three and half years. Health Department, GoB decided (September 2020) to constitute DASs for successful implementation of the mission in each district. It was, however, observed that DASs had not been constituted (as of March 2022) in any of the test-checked districts. Reason(s) for delayed constitution of SAS, as well as non-constitution of DASs was not found on record. As such, implementation of the mission was very slow, which is also corroborated by negligible expenditure (less than, one *per cent*) being incurred during the FYs 2016-17 to 2021-22, as detailed in ***Paragraph 6.8***.

The Department replied (December 2022) that DASs had already been constituted in 13 districts and was in process in remaining districts. The reply itself showed that the Department was very slow in constituting the DASs. This has ultimately resulted in slow pace of execution of the scheme.

[11] *One AIIMS and 10 State Government tertiary care hospitals.*

7.4.2 Delay in establishment of State Project Management Unit (SPMU) and non-establishment of District Project Management Units (DPMUs)

As per operational guidelines of NAM issued by GoI, in order to strengthen the AYUSH infrastructure at the State level, the Programme Management Units (PMUs) *viz.* State Project Management Unit (SPMU) at the State level and District Project Management Units (DPMUs) at district levels, were to be established.

Audit observed that SPMU was established (March 2018) after almost three and half years of establishment of NAM. Further, DPMUs had not been established in any of the test-checked districts. Delay in establishment of SPMU and non-establishment of DPMUs resulted into slow progress in the implementation of AYUSH which is also corroborated by negligible expenditure (less than, one *per cent*) being incurred during the FYs 2016-17 to 2021-22, as detailed in ***Paragraph 6.8***.

7.4.3 Non-implementation of AYUSH components

As per framework for implementation of NAM, issued by GoI, Quality Control of ASU&H Drugs and Medicinal Plants were one of the main components of the mission.

During scrutiny of records, Audit observed the following:

- The NAM provided for setting up of a drug testing laboratory (DTL), for strengthening of the testing facility of ASU&H drugs to check the production and marketing of sub-standard drugs. The SAS sought (SAAP 2019-20) ₹ 4.25 crore, for setting up the DTL but the Mission Directorate, GoI, deferred the proposal, as the DPR and other necessary details had not been submitted along with the proposal. Thus, in the absence of a DTL, SAS could not ensure the objective of availability of quality drugs to the public.

The Department did not furnish a reply on the establishment of DTL.

- The State Medicinal Plants Board, Bihar, was established (November 2003) with the objective of development, conservation and promotion of medicinal plants. The State had prepared SAAP (2019-20) for the Medicinal Plants Component (MPC) and sent a proposal of ₹ 3.03 crore to the GoI for approval. The GoI sanctioned (2019-20) ₹ 2.87 crore against the proposal and released (FY 2019-20) its share (60 per cent) of ₹ 1.72 crore. The State, however, could not identify any farmer involved in the cultivation of medicinal plants, supported by the National Medicinal Plants Board (NMPB) under NAM and thus, could not spent the funds provided.

The Department did not provide any specific reply on the audit observation.

Chapter-VIII
Adequacy and Effectiveness of the Regulatory Mechanisms

Chapter-VIII

Adequacy and effectiveness of the regulatory mechanisms

Office of the State Drug Controller (SDC) remained largely non-functional, due to acute shortage of manpower. Samples of drugs were either not being tested, or were being tested with delays. The targeted number of inspections of sellers' as well as manufacturers' establishments were not being conducted due to lack of manpower. Clinical establishments were running without registrations or with expired registrations, in violation of the Clinical Establishments Act, 2010.

8.1 Introduction

Regulation is an important function in the healthcare sector. Role of the regulatory bodies is to protect healthcare consumers from health risks, to provide a safe working environment for healthcare professionals and to ensure that public health and welfare are served through health programmes.

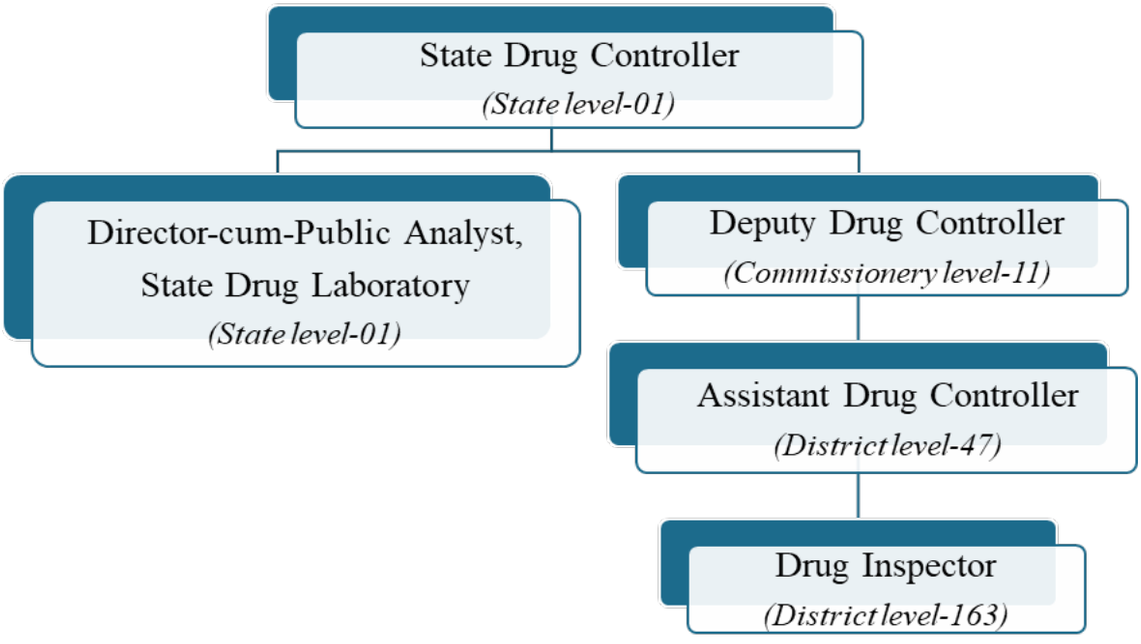
Regulations are necessary to standardise and supervise healthcare, ensuring that healthcare bodies and facilities comply with public health policies and that they provide safe care to all patients and visitors to the healthcare system.

8.2 State Drug Controller (SDC)

Office of the SDC, a regulatory agency, under the Health Department, is responsible for implementation and enforcement of the Drugs and Cosmetics Act, 1940 and the Drugs and Cosmetics Rules, 1945. It regulates the manufacturing and sales of drugs and cosmetics in the State.

The functional structure (organogram) of SDC alongwith sanction strength of its hierarchy, is mentioned in **Chart 8.1**.

Chart 8.1: Organogram of the State Drug Controller



(Source: State Drug Controller)

The main functions of the SDC include: (i) grant of manufacturing and sales licences for allopathic drugs and homoeopathic medicines (ii) grant and renewal of licences for the operation of blood banks (iii) monitoring of the quality of medicines and cosmetics, through routine and statutory sampling (iv) detection of spurious, adulterated and misbranded drugs and cosmetics (v) conducting investigation of complaints and (vi) launching prosecution against offenders *etc*.

During audit, irregularities, such as lack of inspections, inability to carry out required quality tests of drugs, improper allotment of different types of licences *etc*., were observed and are discussed in the succeeding paragraphs.

8.2.1 Lack of inspections of selling/manufacturing establishments

As per Rules 51 and 52 of the Drugs and Cosmetics Rules, 1945, Drug Inspectors are required to inspect all establishments licensed for manufacturing and sale of drugs, within the areas assigned to them, at least once in a year, or at the time of renewal of their license (Rule 33-eea), to satisfy themselves that the conditions for licensees are being observed. During test-check of records of the State Drug Controller (SDC), Audit observed the following deficiencies:

- **Inspections of sellers' establishments**: Details of inadequate number of inspections, conducted against the prescribed number of inspections, during FYs 2016-17 to 2021-22, are given in **Table 8.1**.

Table 8.1: Lack of inspections conducted by Drug Inspectors under SDC (up to November 2021)

Financial Year	No. of test checked districts	Total no. of sellers	No. of inspections conducted	Percentage of inspections conducted	Shortage (*Per cent*)
2016-17	13	10,677	2,872	27	7,805 (73)
2017-18	14	13,279	4,345	33	8,934 (67)
2018-19	10	10,701	4,238	40	6,463 (60)
2019-20	12	15,289	6,239	41	9,050 (59)
2020-21	17	20,777	8,649	42	12,128 (58)
2021-22 ***(up to 11/21)***	17	23,249	6,851	29	16,398 (71)
Total		**93,972**	**33,194**	**35**	**60,778 (65)**

(Source: Records of State Drug Controller)

As can be seen from **Table 8.1**, only 27 *per cent* to 42 *per cent* of sellers were inspected during FYs 2016-17 to 2021-22 (up to November 2021).

Thus, due to inadequate inspections of sellers' establishments, it could not be ascertained that provisions of the Act and Rules, were being complied with and quality drugs were being provided to the patients.

- **Inspections of manufacturers' establishments**: During test-check of records of SDC, it was observed that State had 319 manufacturing establishments. However, the SDC had not developed any system for annual inspection of manufacturing establishments in the State. Records of eight[1] manufacturing

[1] *M/s New Patliputra Gas Munfacturers, Bhagalpur; M/s AMSIRT Genetica, Samastipur; Ms. Mahadeo Chemical, Fatuha (Patna); M/s New Lab Industry, Patna; M/s Westerlin Drugs Pvt Ltd, Fatuha; M/s Sri Radhe Pharma, Begusarai; M/s J K Enterprises, Patna and M/s Astor Medicines Pvt. Ltd., Hajipur.*

establishments were checked and it was noticed that these establishments had not been inspected at any point of time, except at the time of their renewal.

This implied that due to non-conduct of annual inspections of manufacturing units, it could not be ascertained that quality drugs were being sold in the market.

In reply, the Department accepted that stated (December 2022) that: (i) the required number of inspections could not be conducted, due to shortage of manpower and (ii) as per new rules, incorporated in 2017, such premises would be inspected not less than once in three years or as needed, as per a risk based approach.

8.2.2 Shortage of Manpower

Audit observed that there was acute shortage of manpower in SDC (as of December 2021), as shown in **Table 8.2**.

Table 8.2: Sanctioned strength and Persons-in-Position, in SDC (as of December 2021)

Post	Sanctioned Strength	Persons-in-Position	Vacant posts	Percentage of vacancy
State Drug Controller	1	1 *(in charge)*	0	0
Deputy Drug Controller	11	Nil	11	100
Assistant Drug Controller	47	35	12	26
Drug Inspector	163	105	58	36

(Source: Records of State Drug Controller)

As can be observed from **Table 8.2**, there were shortages against various posts of the SDC, ranging between zero to 100 *per cent*. The shortage of manpower was one of the main reasons for the lesser number of inspections of sellers' and manufacturers' establishments (compared to the stipulated number of inspections), which had eventually led to an ineffective monitoring mechanism.

The Department stated (December 2022) that: (i) in the light of the audit observation, it had advertised (November 2022) for filling the vacant posts through BPSC and (ii) the matter of filling the promotional posts (*i.e.* Assistant Drug Inspector and Deputy Drug Inspector), was pending with Hon'ble Supreme Court. The Department further stated (October 2023) that requisition for appointment of 55 Drug Inspectors had been sent to BPSC.

Audit also observed that Bihar Drug Control Laboratory, Patna, was the only Drug Testing Laboratory in the State. In this laboratory, 27 (84 *per cent*), out of the sanctioned 32 posts were vacant, as of December 2021. Certain important posts *viz*., the posts of Deputy Director, Bacteriologist, Government Analyst and Senior Scientific Assistant were vacant and only two, out of eight posts of Technician had been filled up. The Department had not taken any action in this regard, even after repeated requests by the office, in this regard.

The quality of testing was likely to be affected, due to testing being conducted without the necessary resources.

In reply, the Department stated (December 2022) that efforts were being made for filling up the vacant posts.

8.2.3 Shortage of necessary equipment

During audit (December 2021) of the records of the Bihar Drug Laboratory, Patna, it was noticed that there was acute shortage of nine type of necessary equipment in the Laboratory (***Appendix 8.1)***. Although, the laboratory requested (April 2017) the Department to provide these necessary equipment, for its strengthening and also issued subsequent reminders[2] in this regard. The requested equipment were, however, not made available.

It was further observed that, in the absence of necessary equipment, the laboratory was carrying out only assay[3] tests (which covered only 121 types of drugs, against total 2,636 to be tested). Other important investigations, such as 'Advance Assay Analysis' testofoily samples, 'related substances', 'Identification' *etc.*, mentioned in the Indian Pharmacopoeia[4] were not being carried out. Accordingly, test reports were being issued based on incomplete testing of the samples received in the laboratory. This casts a doubt on the samples certified as 'being of standard quality' by the laboratory, as well as the reliability of the tests conducted by the laboratory.

In reply, the Department stated (December 2022) that it had requested BMSICL to provide machines and equipment to the laboratory at the earliest, so that drug samples could be tested in a proper manner.

8.2.4 Equipment lying idle

During audit of Bihar Drug Control Laboratory, Patna, it was noticed that 10[5] equipment, received between July 2002 and December 2002, remained idle, from the dates of their receipt/installation. Most of these items were related to the Microbiology Department and were lying idle since 2002, due to non-posting of microbiologist.

The Department did not provide any specific reply the audit observation.

8.2.5 Inordinate delay in testing/analyzing samples

As per Rule 45 of the Drugs and Cosmetics Rules, the Government Analyst is required to analyse or test the sample sent to him and to furnish reports of the results of test or analysis, within a period of sixty days of the receipt of the sample.

During test-check of records of the sampled months, for FYs 2016-17 to 2021-22, it was observed that the State Drug Laboratory had failed to adhere to the stipulated time schedule, as detailed in **Table 8.3**.

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[2] *20/8/2018, 20/5/2019, 27/2/2020, 4/9/2020 and 12/8/2021.*

[3] *'Assay' is an investigative (Analytic) procedure, for qualitatively assessing or quantitatively measuring, the presence, amount, or functional activity, of a target entity.*

[4] *Indian Pharmacopoeia contains procedures for analysis and specifications for the determination of quality of pharmaceutical substances, excipients (colouring agents, preservatives and fillers) and dosage forms.*

[5] *Bio-Oxygen Demand (B.O.D.) Incubator, Incubator, Horizontal Autoclave with Digital Temperature Indicator, Laminar Air Flow, Colony Counter, P.H. Meter Digital, Pyrogen testing apparatus, High-pressure Liquid Chromatography (HPLC), UV- Spectrophotometer and Digital Polarimeter.*

Table 8.3: Delays in analysis of samples in the test-checked months

Sl. No.	Month	Total no. of samples analysed during the month	No. of samples analysed within				No. of samples analysed after 541 days
			Stipulated time (60 Days)	61-180 days	181-300 days	301-540 days	
1	**May 2016**	93	8	8	1	30	46
2	**August 2017**	114	2	12	11	40	49
3	**November 2018**	311	61	121	52	38	39
4	**May 2020**	260	26	35	47	119	33
5	**February2020**	306	63	50	51	122	20
6	**August 2021**	266	65	36	49	44	72
Total		**1,350**	**225*(17)***	**262*(19)***	**211*(16)***	**393*(29)***	**259*(19)***

(Source: Records of State Drug Controller) Note: Figures appearing in parentheses denote percentage

It is evident from **Table 8.3** that only 17 *per cent* samples had been analysed within the stipulated time. Further, 48 *per cent* samples had been analysed after 300 days from the date of their receipt.

Keeping in view the timeline of analysis/ test the drugs, inordinate delays in analysis could compromise the ability to take proper action against the defaulting suppliers, in case the quality of the samples was found below standard.

The Department did not provide any specific reply to the audit observation.

8.2.6 Expiry of samples without analysis

During test-check of the records of Bihar Drug Control Laboratory, Patna, it was observed that a large number of samples received in the lab had expired without being tested/analysed. Details related to receipt, analysis and expiry, of the samples, during FYs 2016-17 to 2018-19 are given in **Table 8.4**.

Table 8.4: No. of samples received, analysed and expired, during FYs 2016-17 to 2018-19

Sl. no.	Financial Year	No. of samples received	No. of samples analysed	No. of samples expired without been tested/ analysed *(per cent)*
1.	**2016-17**	4,851	1,225	3,442 (71)
2.	**2017-18**	4,175	1,089	2,109 (50)
3.	**2018-19**	4,010	2,864	868 (22)
	Total	**13,036**	**5,178**	**6,419*(49)***

(Source: Records of State Drug Controller)

Table 8.4 indicates that, during FYs 2016-17 to 2018-19, about 49 *per cent* of the samples expired, without being analysed, which carried the risk of continued sale of spurious/not of standard quality (NSQ) drugs, thereby exposing patients to serious health related risks.

The Department did not provide specific response to the audit observation.

8.2.7 Appointment of State Drug Controller and Drug Inspector (AYUSH)

- **State Drug Controller (AYUSH):** As per Rule 162 A of the Drugs and Cosmetics Rules, 1945, State Drug Controller (SDC), AYUSH (state licensing authority for AYUSH), should possess a degree in B Pharma (Ayurveda) from a recognised university, with at least five years' experience in Ayurveda/Siddha/ Unani drug manufacturing or testing of AYUSH drugs.

During FYs 2016-17 to 2020-21, the SDC acted as the State Licensing Authority for AYUSH also. Subsequently, in March 2021, the State Government appointed the State Drug Controller (AYUSH).

Audit observed that the State Drug Controllers, appointed by State Government during FYs 2016-17 to 2021-22, did not possess the stipulated qualifications.

The Department replied (December 2022) that, as an alternate arrangement, a senior Drug Inspector had been posted as the State Drug Controller (AYUSH).

- **Drug Inspectors (AYUSH)**: The State Government appoints Drug Inspectors under Rule 33G of the Drugs and Cosmetics Rules, 1945. The requisite qualifications[6] of a Drug Inspector are defined under Rule 49 of the Drugs and Cosmetics Rules, 1945.

During audit, it was observed that none of the Drug Inspectors (AYUSH) possessed the required qualifications. Therefore, their appointment was in violation of the provisions of the Drugs and Cosmetics Act, 1940.

The Department accepted the audit observation and stated (December 2022) that creation of 12 posts of Drug Inspector (AYUSH) was under process.

8.2.8 Deficiencies in quality control of Manufacturing establishments (AYUSH)

Rule 162 of the Drugs and Cosmetic Rules, 1945, authorized the Drug Inspector to: (i) inspect the manufacturing establishments of Ayurvedic (including Siddha) or Unani drugs (ii) to take samples of the drugs manufactured in the premises (iii) send the samples so taken, for testing or analysis and (iv) to institute prosecutions in regard to violation of the Act and the Rules made thereunder.

Audit observed that the SDC (AYUSH) had not empanelled any lab for testing of the samples collected during inspection, as prescribed under the Act. There were 158 AYUSH manufacturing establishments in the State (as of November 2021). However, samples of AYUSH drugs were not being tested during FYs 2016-17 to 2021-22, due to non-empanelment of any AYUSH laboratory for testing.

Thus, the quality of the AYUSH drugs was not being monitored at all.

The Department accepted (December 2022) the audit observation and stated that laboratories would be empanelled.

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[6] *Practical training in the manufacture of Ayurvedic (including Siddha) or Unani drugs or degree in Ayurvedic or Siddha or Unani or a degree in Ayurvedic pharmacy or diploma in Ayurveda, Siddha or Unani systems.*

Recommendations: 23, 24 and 25

State Government may ensure:

- ***periodic inspections of manufacturers'/sellers' establishments.***
- ***deployment of sufficient and qualified manpower in the offices of the State Drug Controller and State Drug Controller (AYUSH), for their effective functioning.***
- ***timely testing of Allopathic and AYUSH drugs, to mitigate the possibility of risks from spurious/NSQ drugs.***

8.3 Miscellaneous Irregularities

The following miscellaneous irregularities were also observed during audit:

- SDC did not have a training facility/infrastructure, to train the technical cadres, in order to update their knowledge of pharmacology and training had not been imparted to the technical cadres *viz*. Analyst, Chemists, DIs *etc.* during FYs 2016-17 to 2021-22 (up to November 2021).
- SDC, Patna was not maintaining a register of NSQ drugs and action taken thereon indicating ineffective monitoring of NSQ drugs.
- Registers relating to Application, Renewal, Cancellation and Grant of Licenses of Manufacturing Units (including AYUSH) and Blood Banks were not maintained properly and updated regularly.

The Department replied (December 2022) that test-reports of sub-standard medicines were maintained with the district drug inspectors and, as per provision, action against sub-standard drugs was taken by the district drug inspectors. The reply was not acceptable, as non-availability of information regarding NSQ drugs, at the SDC level, might result, in ineffective monitoring and control over drug distribution throughout the State. Also, any documentary evidence of the action taken by the Department, was not provided to Audit.

Recommendations 26 and 27:

State Government may ensure:

- ***upgradation of training infrastructure to ensure regular training to technical staff, for updating their skills.***
- ***proper maintenance and regular updation of records relating to Application, Renewal, Cancellation and Grant of licences, to Manufacturing Units and Blood Banks.***

8.4 Implementation of the Clinical Establishments Act

GoI had enacted the Clinical Establishments Act, 2010, to provide for registration and regulation of all clinical establishments (Public and Private), including single doctor clinics of a recognised system of medicine in the country.

Government of Bihar framed Bihar Clinical Establishments (Registration and Regulation) Rules, 2013 and constituted Bihar State Council for compiling and updating the Registers of clinical establishments and representing the state

in the National Council *etc*. Further, GoB constituted District Registering Authorities (DRAs), in each district, for registration of clinical establishments and implementation of the Act and Rules.

Irregularities, observed regarding functioning of these authorities and council, are discussed in the succeeding paragraphs.

8.4.1 Clinical establishments running without obtaining registration

As per Section 11 of the Clinical Establishments Act, 2010, no person shall run a clinical establishment unless he had been duly registered, in accordance with the provisions of this Act. The authority may issue provisional certificate for a period of one year under Section 17 and a permanent certificate for a period of five years under Section 30 of the Act. Further, Rule 22 of the Bihar Clinical Establishments Rules, 2013, provided that the authority shall not undertake any enquiry prior to the grant of provisional registration and shall, within a period of ten days, from the date of receipt of such application, grant to the applicant, a certificate of provisional registration, either by post or electronically. Further, as per Rule 30 of the Bihar Clinical Establishments Rules, 2013, whoever carries on a clinical establishment without registration, shall, on first contravention, be liable to a monetary penalty up to ₹ 50,000.

During audit, it was noticed that in four[7], out of five test-checked districts, the DRAs had never inspected any clinical establishments. This had resulted in clinical establishments running without getting registered or with expired registrations.

Audit noticed that: (i) in three, out of the five test-checked districts, although 235 clinical establishments[8] were running without obtaining registration certificates, the DRAs had not imposed any penalties against these establishments. These penalties work out to ₹ 1.17 crore (235X ₹ 50,000=₹ 1,17,50,000) (ii) in Madhepura district, contrary to the Rules, the DRA had issued 90 (69 *per cent),* out of 130 provisional certificates, with delays[9] ranging between of 16 days and two years and (iii) all the government clinical establishments were being operated without obtaining clinical registrations, in these districts.

In reply, the Department stated (December 2022) that, in the Madhepura district, clinical establishments had been registered. However, the reply was not supported by any documentary evidence. Further, corrective action, in regard to any other districts, was yet to be taken.

8.4.2 Non-realisation of delay charges

As per Rule 25 of the Bihar Clinical Establishments Rules, 2013, clinical establishments are required to apply for renewal of provisional registration, prior to 30 days of expiry of the validity of the certificate. In case the application for

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[7] *Jehanabad, Madhepura, Nalanda and Vaishali.*

[8] *Jehanabad: 40; Madhepura: 104 and Vaishali: 91.*

[9] *Delay, in days, has been calculated as per application receipt date and date of issue provisional certificate.*

renewal is not submitted within the stipulated period, the concerned authority has to impose penalty of ₹ 100 per day, till the date of renewal of registration.

During scrutiny of records of the four[10] test-checked districts, it was noticed that: (i) the concerned Civil Surgeon-cum-Chief Medical Officers (CS-cum-CMOs) had not imposed penalty amounting to ₹ 0.84 crore[11] for non-registration and delayed registration of clinical establishments, as shown in ***Appendix 8.2*** and (ii) although the concerned establishments had submitted applications, for renewal of their registrations, with delays, the concerned District Registration Authority had renewed their registrations, without imposing any penalty for delay.

This had resulted into a loss of ₹ 0.84 crore to the State exchequer.

The Department replied (December 2022) that, in the Madhepura district, penalty for delay had been realised and deposited in the concerned head. Further, in the Vaishali district, the concerned establishments had been directed to deposit the fee and ₹ 1.31 lakh had been deposited by one establishment. However, the replies were not supported by any documentary evidence.

8.4.3 Miscellaneous irregularities incompliance of the provisions under Clinical Establishments Act

(A) As per Section 10 (1) of the Clinical Establishments (Registration and Regulation) Act, 2010, and Rule 12 of the Bihar Clinical Establishments (Registration and Regulation) Rules, 2013, the State government was required to set-up District Registering Authority (DRA) in each district, for registration of clinical establishments. The functions of DRA included: (i) grant, renewal, suspension or cancellation of registration, of any clinical establishment (ii) investigation of complaints of breach of the provisions of the Act or the Rules made thereunder (iii) taking immediate action, for preparation and submission of quarterly reports of those establishments, whose registrations had been cancelled, suspended or rejected by the State Council and (iv) reporting to the State Council, on a quarterly basis, the action taken against non-registered clinical establishments, operating in violation of the Act.

Audit noticed that: (i) DRAs, in four (except Patna), out of five test-checked districts, had not maintained/updated on a regular basis, the list/data related to the clinical establishments, running without registration (ii) In these districts, data relating to only those clinical establishments, who had applied for provisional registration, was being maintained (iii) quarterly reports, relating to registrations issued/cancelled/suspended/rejected, were not being submitted to the State Council and (iv) penal action was not being taken against the clinical establishments, for applying for registration/renewal of registration, with delays.

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[10] *Jehanabad, Madhepura, Nalanda and Vaishali.*

[11] *Jehanabad: ₹ 1.30 lakh; Madhepura:₹ 11.60 lakh; Nalanda: ₹ 0.11 lakh and Vaishali: ₹ 71.83 lakh.*

In the absence of maintenance/updation of the above mentioned lists/data, DRAs were not well aware about clinical establishments running without even provisional certificates.

The Department accepted the audit observation and replied (December 2022) that, in the Madhepura district, compliance was being carried out and records had been updated. However, documents, in support of the reply, were not provided.

(B) As per Rule 27 of the Bihar Clinical Establishments Rules, 2013, DRAs are required to: (i) mandatorily publish, the names of the clinical establishments, in the public domain within a period of 45 days from the date of grant of provisional registration of the establishments and (ii) publish within a period of 15 days, the names of the clinical establishments whose (Provisional or Permanent) registration had expired.

Audit however, noticed that the required information had never been displayed in the public domain, in three[12], out of five test-checked districts, except on one occasion (January 2020), in the Vaishali district.

The Department had not responded to the audit observation.

Recommendation 28: State Government may ensure that District Registration Authorities monitor clinical establishments under their area and enforce the provisions of the Clinical Establishments Act.

[12] *Jehanabad, Madhepura and Nalanda.*

Chapter-IX
Sustainable Development Goals

Chapter-IX

Sustainable Development Goals

There were shortcomings in maternal and child healthcare services vis-à-vis prescribed norms and standards, which ultimately affected the achievement of the desired SDG targets. Further, the State was also deficient in achievement of strategic indicators of family planning, in resource management for treatment and identification of TB cases. The test-checked healthcare facilities were not aware about the strategic targets of SDG-3.

9.1 Introduction

The United Nations adopted (September 2015) the 'Agenda 2030'. For this purpose, the Sustainable Development Goals (a set of 17 goals, defined in a list of 169 SDG targets), to be achieved in the next 15 years, were formulated. Sustainable Development Goal-3 is mainly related to the health sector and aims to ensure healthy lives and well being for all, at all ages. The SDG has associated targets, aiming to reduce the maternal mortality ratio; end preventable deaths of newborns and children; end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases; reduce mortality from non-communicable diseases; ensure universal access to sexual and reproductive healthcare services; achieve universal health coverage and ensure access to safe, affordable and effective medicines and vaccines for all.

At the central level, NITI Aayog has been entrusted with the role of overseeing the adoption and monitoring of the SDGs in the country and co-ordinating sustainable development. At the State level, Planning and Development Department is the nodal department to coordinate for SDG related works. The Department had, accordingly, framed (July 2017) a strategic document, namely "Bihar SDG Vision document, 2017", for achieving the goals and targets by 2030. Targets and achievements, against key health indicators, as well as a situation analysis of strategies of the state, for achieving SDG-3, are discussed in the succeeding paragraphs.

9.2 Achievement against milestones

As per SDG India Index Report (2020-21) of NITI Aayog, Bihar scored 66, out of 100[1] SDG index score, for SDG-3. Out of the neighboring states, *viz.* Jharkhand (74), Uttar Pradesh (60) and West Bengal (76), only Uttar Pradesh had scored below Bihar. Targets and achievements, against key health indicators, by the State, during FY 2020-21, *vis-à-vis* the SDG targets and achievements, on which the score was decided, are shown in **Table 9.1**.

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[1] *The targets and achievements are assessed on the scores ranging between 0–100. States are classified into four categories, based on their SDG India Index score: Aspirant (0–49); Performer (50–64); FrontRunner (65–99) and Achiever (100).*

Table 9.1: Targets and achievements against key health indicators

Sl. No.	Indicator[2]	SDG target *(Achievable by 2030)*	Achievement *(FYs 2015-17)*		Achievement *(FY 2019-21)*	
			Bihar	India	Bihar	India
1	Maternal Mortality Rate (MMR) *(per lakh live births)*	70	165	122	118 (SRS)	97 (SRS)
2	Neo-Natal Mortality Rate (NMR) *(per 1,000 live births)*	12	36.7	29.5	34.5	24.9
3	Under five Mortality Rate (U5MR) *(per 1,000 live births)*	25	58.1	49.7	56.4	41.9
4	Percentage of children in the age group of 9-11 months fully immunised[3]	100	NA*	NA	94	91
5	Total case notification rate of Tuberculosis[4] *(per lakh population)*	242	NA	NA	100	177
6	Total Fertility Rate *(TFR)*	2.1	3.4	2.2	3	2
7	Monthly per capita out-of-pocket expenditure on health (in *per cent*) as a share of Monthly per capita Consumption Expenditure *(MPCE)*	7.83	NA	NA	14.5	13
8	Total physicians, nurses and midwives per 10,000 population	45	NA	NA	17	37
9	Suicide rate *(per one lakh population)*	3.5	NA	NA	0.5	10.4
10	Percentage of institutional deliveries out of the total deliveries reported	100	NA	NA	84.8	94.4

(Source: Bihar SDG Vision document, Sample Registration System (SRS) of office of the Registrar General, India (for the years 2015-17 and 2018-20) and SDG India Index, NFHS-5) *NA-Records were not available.

As evident from **Table 9.1**, achievement of Bihar, in regard to key health indicators, except 'suicide rate and immunisation', were below the average national achievement except U5MR and percentage of children in the age group of 9-11 months fully immunised, during FY 2020-21. The achievement of MMR was much lower than the average national achievement. Category-wise situation analysis, of key strategies related to Maternal Health, Child Health, Family Planning *etc*. and achievements thereof, are discussed in the succeeding paragraphs.

The Department replied (December 2022) that targets and achievements of key health indicators were modified, based on the recently released SRS data.

9.2.1 Maternal Health

SDG-3 targeted reduction of 'Maternal Mortality Rate' (MMR) to 70 per 1,00,000 live births and 'institutional deliveries out of the total deliveries reported, to be increased up to 100 *per cent,* by 2030. Maternal death[5] is the death of a woman while pregnant or within 42 days of termination of pregnancy or delivery, irrespective of the duration and site of the pregnancy, from any cause related to

[2] *Indicators shown against Sl. No. 1 to 10 are part of the SDG index score of NITI Aayog except Sl. Nos. 2 and 6, which are the part of the Bihar SDG Vision Document.*

[3] *One dose of BCG, three doses of DPT and OPV and one dose of measles vaccine.*

[4] *TB Cases notified against per lakh population (Total cases notified x 1,00,000/total population of Bihar).*

[5] *As mentioned in Special Bulletin on Maternal Mortality in India 2017-19, issued by Office of the Registrar General of India, Ministry of Health and Family Welfare, GoI.*

or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Specific strategies to achieve the required MMR and achievements there against, are shown in **Table 9.2**.

Table 9.2: Strategies and achievements of the State, as per the National Family Health Survey

Strategic indicators	Strategic target *(Achievable by 2030)*	Achievement	
		NFHS-4 (FY 2015-16)	NFHS-5 (FY 2019-20)
Mothers who had antenatal check-up in the first trimester (*per cent*)	90	34.6	52.9
Mothers who had at least 4 antenatal care visits (*per cent*)	80	14.4	25.2
Mothers who consumed Iron Folic Acid (IFA) for 100 days or more when they were pregnant (*per cent*)	60	9.7	18.0
Institutional delivery (*per cent*)	90	63.8	76.2
Mothers who received post-natal care from a health personnel within 2 days of delivery (*per cent*)	90	42.3	57.3
Review of the proportion of maternal deaths reported (*per cent*)	80	NA*	39 (SHSB 2021-22)

(Source: Bihar SDG Vision Document) *NA-Records were not available.

As shown in **Table 9.2**, achievements against the strategic targets of the State were very low, in all the strategic indicators necessary for reducing MMR to the level of 70 per lakh live births.

Audit also noticed deficient implementation of Antenatal Care (ANC), including less antenatal check-ups; non-availability of pathological investigations required for antenatal care; non-ensuring of TT injections to all pregnant women; non-supplementation of IFA tablets, non-increasing trend of institutional deliveries; non-stay of mothers, up to 48 hours, in institutions, after delivery and meager maternal death review during FYs 2016-17 to 2021-22, in the test-checked hospitals, as discussed in ***Paragraph 3.6*** of the Report.

There were significant shortages of drugs, consumables and equipment, required for maternity services in test-checked hospitals, as mentioned in the Chapter *ibid*. Further, significant shortage of resources and lack of mandated maternity services, were also noticed in the Performance Audit of "Functioning of District Hospitals" and featured in ***Paragraph 2.5*** of ***Chapter II*** of CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020 and are summarised in ***Appendix-1.2 (Sl. No. 8)*** of this report.

Thus, the Department could not ensure diligent efforts, aligned with strategic indicators, for achieving the desired SDG targets.

The Department replied (December 2022) that it was concerned about the data of maternal health, as prescribed in NFHS-5. Further, improvement from NFHS-4 to NFHS-5 had been achieved in respect of all health indicators and it would work hard to achieve the Maternal Mortality Rate (MMR) to 70 per 1,00,000 live births by 2030.

9.2.2 Child Health

SDG-3 aims to reduce the neonatal Mortality Rate[6] to 12 per 1,000 live births and U5MR[7] to 25 per 1,000 live births. Targets achieved against the specific strategies mentioned in the Bihar SDG Vision Document, are shown in **Table 9.3**.

Table 9.3: Strategies and achievements by the State, as per NFHS

Sl. No.	Strategic indicators	Strategic target *(Achievable by 2030)*	Achievement	
			NFHS-4 *(FY 2015-16)*	NFHS-5 *(FY 2019-20)*
1	Full immunisation of children of ages 12-23 months	90	61.7	71.0
2	Data of girl IMR to be monitored separately	NA	NA	29 (SRS)
3	Providing ORS to the children with diarrhea	90	45.2	58.2
4	Providing Zinc to children with diarrhea	75	20.1	25.6
5	Children with fever or symptom of ARI[8] in the last two weeks preceding the survey taken to a health facility	80	59.8	69.4
6	Children under age 3 years are breast fed within one hour of birth	80	34.9	31.1
7	Children under age 6 months are exclusively breastfed	90	53.4	58.9
8	Survival rate of babies admitted in the SNCUs	90	NA	64.69**
9	*Per cent* of female child admission out of total admission in SNCUs	45	NA	37.32**

*(Source: Bihar SDG Vision document for strategic target) **Data provided by the SHS, Bihar*
*NA-Records were not available.

Data in **Table 9.3** indicates a substantial increase in the achievement of targets, against the indicators mentioned at Sl. No. 1, 3 and 5, whereas the achievements were on a decreasing trend, in regard to the indicator mentioned at Sl. No. 6. Audit noticed that girl IMR (29) of the State was much higher than the male IMR (26), which affected the overall performance against the indicator. Further, shortcomings in healthcare facilities for newborn and children were also noticed in test-checked DHs, as dealt with in ***Paragraphs* 2.5.4.2** and ***2.5.8*** of Performance Audit on "Functioning of District Hospitals", featured in CAG's Audit Report (Performance and Compliance Audit) for the year ended March 2020.

Specific reply, on the audit observation, was not provided by the Department.

Recommendation 29: State government may ensure that Maternal and child healthcare services are provided according to the relevant norms and standards, to achieve the desired SDG target, related to maternal and child health.

9.2.3 Family Planning

Family planning allows individuals and couples to anticipate and attain their desired number of children and timing of their births. It is achieved through the use of contraceptive method and treatment of voluntary infertility.

[6] *Death of neonatal (newborn child) during the period of less than 29 days after birth.*
[7] *U5MR is the probability that a child born in a specific year/time period will die before reaching the age of 5 years.*
[8] *Acute respiratory infections.*

Total Fertility Rate (TFR[9]): SDG-3 targeted TFR to be brought down up to the mark of 2.1 by 2030, through ensuring universal access to sexual and reproductive healthcare services. Specific strategies to achieve the required levels and achievement of the State there against, are shown in **Table 9.4**.

Table 9.4: Strategies and achievements of targets by the State

Strategic indicators	Strategic target *(Achievable by 2030)*	Achievement	
		NFHS-4 *(FY 2015-16)*	NFHS-5 *(FY 2019-20)*
Reduce Total Fertility Rate	2.1	3.4	3
* Reduce unmet need through family planning method (*per cent*)	< 10	21.2	13.6
* Increase IUCD[10]/PPIUCD[11] (*per cent*)	1.5	0.5	0.8
Increase modern contraceptive prevalence rate *(per cent)*	60	23.3	44.4

*(Source: Bihar SDG Vision Document) *Married women under the age of 15 to 49 years*

Data in **Table 9.4** shows that, as per NFHS-5, achievement of TFR of the State was 3, which was far below the strategic target, as of 2019-20. Thus, the State requires significant improvement in above mentioned strategic indicators.

Female Fertility: Rate of female fertility in Bihar is the highest (3) among all the States in India (2020-21). It was noted that there is also a correlation of fertility with female literacy, as detailed in **Table 9.5**.

Table 9.5.: TFR by level of education of women in India and Bihar (2019)

Total Fertility Rate	Education level of women					
	Illiterate	Educated up to				
		Below primary	Primary	Middle	Class X	Class XII and above
TFR of India	3.0	2.8	2.5	2.1	1.9	1.6
TFR of Bihar	4.1	3.8	3.2	2.8	2.3	2.1

(Source: Sample Registration System, office of the Registrar General, India)

From **Table 9.5**, it is evident that the Health Department should have integrated the Education Department, while formulating its TFR-specific strategy. Evidence of such coordination was, however, not found available on records. Similarly, medical and educational strategic indicators, related to interventions among males, may also be included, on the lines of strategic indicators for females, for equitable distribution of responsibility of family planning in society.

The Department accepted (December 2022) the data depicted in **Table 9.3** and stated that the State was taking various steps and rolling out interventions and strategies, to accelerate access to high-quality family planning, to bring the TFR

[9] *Total Fertility Rate indicates the average number of children expected to be born per woman during her entire span of reproductive period.*

[10] *Intrauterine contraceptive device (IUCD), used as, a reversible method of contraception among married women during the reproductive age, for gapping between pregnancies or limiting the family size.*

[11] *Post-partum intrauterine contraceptive device (PPIUCD may be inserted within 48 hours of delivery, for gapping between pregnancies or limiting the family size.*

to 2.1 by 2030. The State was also introducing new schemes and plans to improve access to all age groups, including young and low parity women.

9.2.4 Other strategies

➢ For providing better facilities in higher technical institutions, at the sub-division and district level, GoB had proposed under '*Avsar Badhe Aage Padhein*'[12] of *Saat Nishchay* to establish one Auxiliary Nurse and Midwife (ANM) Institute in every sub-division, one General Nursing and Midwifery (GNM) Institute in every district and some more Medical Colleges in the state.

Audit observed shortage of Government Institutes and Colleges, as shown in **Table 9.6**.

Table 9.6: Shortage of Institutes and Colleges as on March 2022

Institutes/ Colleges	Strategic requirement	Availability (*per cent*)	Under-establishment (*per cent*)	Reason(s) for delay
ANM Institute	101	73 (72)	28 (28)	Identification of land, non-finalisation of tender and non-preparation of DPR *etc.*
GNM Institute	38	26 (68)	12 (32)	
Medical college	18	10 (56)	8 (44)	

(Source: Bihar SDG Vision Document, Bihar Combined Entrance Competitive Examination Board and BMSICL)

Thus, the State being far behind its strategic targets, resulted in acute shortage of healthcare personnel per 10,000 population, as depicted in **Table 9.1** (***Sl. No. 8)***.

➢ Further, an All India Institute of Medical Sciences (AIIMS) was established (July 2012) in Patna to address the regional imbalances in healthcare services, research and training and outpatient and inpatient services had been started in the year of 2013.

➢ GoB had adopted a strategy for regulating private healthcare service providers, by adopting the Clinical Establishments Act, 2010. However, Audit observed several irregularities, relating to non-compliance of provisions of the Clinical Establishments Act, 2010 and the Bihar Clinical Establishments (Registration and Regulation) Rules, 2013, the in test-checked districts, as discussed in ***Paragraph 8.4*** of this report.

➢ To achieve the SDG targets, GoB adopted a strategy of increasing the budgetary allocations and improving expenditure/utilisation of funds for healthcare infrastructure and services. Audit, however, observed that, though the budgetary provisions had increased significantly during FYs 2016-17 to 2021-22, utilisation of funds had ranged only between 61 *per cent* and 76 *per cent,* as discussed in ***Paragraph 6.2***. Further, during this period provision of funds for primary healthcare ranged between 30 *per cent* and 41 *per cent*; percentage of health expenditure against the GSDP ranged between 1.33 *per cent* and 1.73 *per cent*; and aggregate expenditure ranged between 3.31 *per cent* and 4.41 *per cent,* which were well below the figures stipulated under the guidelines of the National Health Policy, 2017 (***Paragraphs 6.6 and 6.5)***.

[12] *Notification No. 673 dated 21 December 2016.*

Thus, GoB was required to enhance provision of funds for health, as well as its health expenditure, in order to achieve the desired SDG targets.

- The Bihar SDG vision document, 2017, had strategic targets and scheme/ programme of NHM which were linked with SDG, mentioned in ROP and were available in public domain. However, Audit observed that test-checked hospitals were not even aware about the strategic targets of SDG-3. Further, targets for the State were not split up into district-wise targets, achievable by different midway time-frame.

The Department did not respond to the audit observation.

Recommendations 30 and 31:

State Government may ensure that:

- ***phased targets are outlined for all districts, in line with the overall targets, as outlined in the Bihar SDG Vision document.***
- ***district-wise status of SDG health indicators is prepared and monitored regularly.***

राज कुमार

Patna **(RAJ KUMAR)**
The 22 October 2024 **Principal Accountant General (Audit), Bihar**

Countersigned

New Delhi **(GIRISH CHANDRA MURMU)**
The 25 October 2024 **Comptroller and Auditor General of India**

Appendices

Appendix-1.1

(Reference: Paragraph-1.7)

Details of test-checked units

SL. No.	Category	Test-checked units
1	BMSICL Regional Warehouses (2)	Fatuha and Muzaffarpur
2	Districts (5)	Biharsharif (Nalanda), Hajipur (Vaishali), Jehanabad, Madhepura and Patna
3	SDHs (4)	Barh (Patna), Mahua (Vaishali), Rajgir (Nalanda) and Udakishanganj (Madhepura)
4	District Joint Dispensaries (4)	Biharsharif, Hajipur, Madhepura and Patna.
5	State AYUSH Dispensaries (12)	Dariapur, Painal, Dewaria and Paliganj (Ayurveda), 10 bedded Homeopathic hospital, Patna (Patna), Benar and Hargawan (Ayurveda), Banaulia (Homeopathic), Gowabigha (Unani) (Nalanda), Sigheshwar Asthan (Ayurveda) (Madhepura), Dharhara and Jalalpur (Ayurveda) (Vaishali)
6	RHs (2)	Chandi (Nalanda) and Makhdumpur (Jehanabad).
7	CHCs (4)	Kako (Jehanabad), Bakhtiyarpur (Patna), Bhagwanpur (Vaishali) and Sigheshwar (Madhepura).
8	PHCs (10)	Bihta (Patna), Daniyawan (Patna), Ghailarh (Madhepura), Goraul (Vaishali), Jandaha (Vaishali), Noorsarai (Nalanda), Ratni Faridpur (Jehanabad), Shankarpur (Madhepura), Sikaria (Jehanabad) and Silao (Nalanda).
9	APHCs/HWCs (17)	Sagarpur, Derhsaiya, Uttarapartti, Chainpur, Sugao (Jehanabad), Bhatrandha, Maura Kabiyahi, Badhari (Madhepura), Dahpar, Sithaura, Mahkar (Nalanda), Sirsi, Shahjahanpur, Sadisopur (Patna), Partaptanr, Sondo, Nasratpur (Vaishali)
10	HSCs (31)	Kohara, Nawada, May, Dhanadihri, Sarta, Gonawan and Bhawani Chak (Jehanabad), Parmanandpur, Chitti (new), Maura Ramnagar, Kabiyahi, Bhawanipur and Bairbanna (Madhepura), Doiya, Kathouli, Neerpur, Dindidih, Rajan Bigha and Jagatpur (Nalanda), Chiraiya, Rupas Mahaji, Kundli, Salarpur, Daughra and Bahpura (Patna), Sahori, Asoi, Pojha, Panapur, Sohrathi and Kadilpur (Vaishali)
11	GMCHs (3)	Darbhanga Medical College and Hospital, Darbhanga; Government Medical College and Hospital, Bettiah and Patna Medical College and Hospital, Patna.
12	AYUSH College & Hospitals (3)	Rajkiya Maharani Rameshwari Bhartiya Chikitsa Vigyan Sansthan (Government Ayurvedic College and Hospital), Mohanpur (Darbhanga); Rai Bahadur Tunki Sah Government Homeopathic College and Hospital, Muzaffarpur and Government Tibbi College and Hospital, Patna.
13	Super speciality Medical Institute (1)	Indira Gandhi Institute of Cardiology, Patna.

(Source: Records of Health Department, Government of Bihar)

Appendix-1.2

(Reference: Paragraph-1.8)

Constraints faced in procurement of records during audit

A. Health Department, Government of Bihar

Sl. No.	Records/information/data requisitioned but not provided
1	List of public and private healthcare facilities with categorization of primary, secondary, tertiary and superspeciality
2	District-wise allotment and expenditure of funds for the last six years
3	Files relating to standard adopted for service delivery in healthcare facilities
4	Files relating to standard adopted for service delivery in Referral Hospitals
5	Files relating to implementation of PNDT Act in the State
6	Files related to other regulatory mechanism and norms for functioning of different type of health facilities/institutions in the State
7	Copy of health policy of GoB, if any.
8	Files/ records relating to strategic plan and target fixed by the department for achieving the SDG-3
9	Files/ records relating to perspective plan and Annual Action plan aligned with strategic plan to achieve the SDG-3
10	Files/ records relating to strategic plan for augmentation of tertiary, secondary, primary care hospital in the State.
11	Files/ records relating to perspective plan and annual action plan for augmentation of healthcare facilities in the State
12	Files related to implementation of SDG-3
13	Organisational setup of the department with a view to consolidate every stage of function
14	Details of grants through which funds are allotted in following formats
15	Budget provision and expenditure of Medical Health, Medical education & training and family welfare(Separate for each component) for 2016-17 to 2021-22
16	Allotment and expenditure to Primary (Sub-centre, APHC, CHC *etc*.), Secondary care hospitals (District Hospitals, sub-divisional hospitals *etc*.), tertiary care (Medical college and hospital and super-specialty) and AYUSH during 2016-22 (Separate for each levels)
17	Grants-in-Aid and expenditure of Autonomous Super speciality Universities/Institutes for 2016-17 to 2021-22
18	What proportion of population norms prescribed by the State Govt for making available the one sub-centre, one PHC, one CHC, one Referral Hospital, one Sub-divisional hospital and one District hospital?
19	Drug & consumables and medical equipment procurement policy and guideline
20	Building maintenance and equipment maintenance policy and guideline
21	Human resource management policy such as appointment through direct recruitment, contractual appointment and departmental promotion policy and guidelines
22	Copy of guideline/direction of the department of patient diet, biomedical waste management, cleaning and laundry and power backup management in different level of hospitals.
23	Files related to weekly/fortnightly/monthly/quarterly/six monthly and yearly meetings held at department level
24	List of private Medical colleges and proposed private medical colleges.
25	Information/data in Proforma/questionnaire/tables issued during previous visit.

Sl. No.	Records/information/data requisitioned but not provided
26	Proforma related to Availability of Human Resource in health care facilities.
27	Proforma related to Availability of Teaching Staff in the Govt. Medical Colleges.
28	Proforma related to Availability of Health Care Facilities in Bihar.
29	Proforma related to Details of total funds allocated to the districts and retained at state level (Table D1 to D3).
30	Proforma related to Details of total funds allocated to the BMSICL/districts and retained at state level for procurement of equipments.
31	proforma related to HR (Table H1 to H7)
32	Files related to construction of APHC and Health Sub centre sanctioned vide resolution no. 1098 dated 06.12.2006. Physical and Financial Progress Report (As on 31.03.2022 and current) related to construction work of CHC/APHC/HSC sanctioned vide resolution no. 1098 dated 06.12.2006.
33	Files related to recruitment/appointment of specialist doctors, medical officers, nursing staff (GNM, ANM, BSc. Nursing, CHO) and Para medical staff.
34	Files related to recruitment/appointment of Tutor, Assistant Professor, Associate professor and Professor.
35	Files related to construction of Ayurvedic Medical College & Hospital Mohanpur, Darbhanga.
36	Files related to PMSSY
37	Files related to construction of Medical College & Hospitals.
38	Files related to construction and implementation of Mental Hospital Koilwar.
39	Files related to sanction/construction of SDHs and DHs
40	Files related to budget estimate, budget provision, budget allocation, release, expenditure and surrender of each Major Head.
41	Files related to Bihar Nursing Council, Paramedical Council, Pharmacy Council.
42	Records of meeting held by above councils and minutes of meetings.
43	Files related to action taken against NSQ drugs.
44	Files related to recruitment of Drug Inspectors.
45	Information in proforma related to budget estimate/provision/expenditure/surrenderwith supporting documents.
46	Reply/Information in the enclosed Questionnaire with supporting documents.
47	Records related to the Bihar Clinical Establishment (Amendment) Act, 2018.
48	Records related to Constitution of the State Council under the Clinical Establishment Act.
49	Records related to meetings conducted by the State Council.
50	Copy of minutes of meetings conducted by the State Council.
51	State Register related to clinical establishments.
52	Monthly returns submitted to the National Council.
53	Copy of letter related to constitution of the District Registering Authority.
54	Quarterly basis report related to issue of provisional or permanent certificate/cancellation/ suspension/rejection of application of clinical establishments, submitted by districts.
55	Quarterly basis report, submitted by districts, relating to action taken on non-registered clinical establishments.
56	Records/list of public health care institutions and private health care institutions in Bihar registered under the Clinical Establishment Act.

Sl. No.	Records/information/data requisitioned but not provided
57	Records related action taken on non-registered clinical establishments.
58	Copy of minimum standards (as quoted under section 10 of Clinical Establishments Act, 2010) determined/fixed.
59	Copy of standard/benchmark on which basis gap analysis in public health institutions/centers, to assess the requirement of infrastructure, human resource, equipment, drugs and other components was conducted.
60	Copy of report of gap analysis.
61	Copy of guidelines related to 'Kayakalp' and 'Laqshya'.
62	Information (along with supporting documents) related to "Bal Hriday Yojna" in the table
63	Monthly progress report (March 2022) of BMSICL related to construction of various health care centers and the concerned utilization certificate
64	Copy of DC bill and utilization certificate (plus/minus memoranda) for the grant (80% of the funds allotted for district level health care centers and 70 *per cent* of fund allotted for medical colleges) provided to BMSICL in pursuance of Health Department's letter no. 545(14) dated 11.06.2019 for purchase of drugs.
65	Copy of utilization certificate (plus/minus memoranda) for the grant provided to BMSICL for purchase of equipments.

B. State Health Society, Bihar

Sl. No.	Records/information/data requisitioned but not provided
1	Records regarding Human Resources
2	Records relating to Quality Assurances
3	Cases of deaths, complications and failures following male and female sterilisation procedures received from District Family Planning indemnity Sub-committees" for compensation claims
4	Information regarding Village Health Sanitation and Nutrition Committee (VHSC)
5	Expenditure in Primary, Secondary and Tertiary Health care facilities

C. BMSICL

1. Details of unutilised/unspent funds for procurement of devices/equipment;
2. Information regarding invitation of tender for Rate Contract (Devices/equipment), indent against from which devices/equipment were supplied/not supplied by the concerned supplier, devices/equipment included in EEL during 2016-22 and total utilization of funds in procurement of equipment;
3. Year wise annual procurement plan for devices/equipment;
4. Details of funds allocated for procurement of medical devices/equipment exclusively to contain COVID-19 outbreak.
5. Tender files/execution file/payment file/Utilisation Certificate (UC) file relating to construction of Trauma center and construction of wellness center.
6. Details of expired drugs during 2016-22.

D. State Drug Controller, Patna

1. List of manufacturing units (Drugs/AYUSH) and blood banks.
2. Details of NSQ drugs reported and action taken report.
3. List of impaneled laboratories for testing of drugs/AYUSH drugs.
4. Sanctioned strength and men-in-position for the period 2016-17 to 2021-22.

E. O/o the District Indigenous Medical Officer, Nalanda

1. Budget Estimate prepared for 2016-17 to 2020-21.
2. Drug stock register pertaining to the years 2016-17 and 2020-21.

F. O/o the Medical Officer, Incharge, PHC Noorsarai (Nalanda)

1. Information/reply relating to Drug & equipment related to Emergency, IPD patients load etc. was not furnished in theproformas provided.
2. OPD, Emergency drug stock register from 2016-17 to 2021-22.
3. ANC/PNC, Vaccination, Covid-19, Budget estimate/demand related records.
4. Records related to immunisation of new born children (16-17 and 20-21) and proforma/ questionnaire for 2016-17 and 2018-19.
5. Labour room register (2016-17 to 2018-19), Discharge register and BHT/Case sheet of five selected months (05/16, 08/17, 11/18, 02/20 and 05/20).

G. O/o the Medical Officer Incharge, RH Chandi (Nalanda)

1. Information/reply in the provided proformas (Drug & equipment related to Emergency, IPD patients load, Family planning etc.).
2. Records and filled up proforma related to immunization of new-born children.
3. OPD/IPD register, Discharge register, Roaster register for Doctors & Nurses.
4. Asset register, Vaccination, Covid-19 related records, ANC Register, Stock register (all type) of HSC Rajanbigha and HSC Jagatpur from 2016-17 to 2019-20.
5. OPD, IPD and Emergency drug stock register from 2016-17 and 2021-22.
6. Emergency, Maternity, OT and General ward related equipment stock register 2016-17 to 2021-22.

H. O/o the ACMO, Nalanda

1. Details regarding payment of incentive provided to TB patients.

I. O/o the District Indigenous Medical Officer, Madhepura

1. Budget Estimate prepared for 2016-17 to 2020-21.
2. Drug stock register pertaining to the year 2016-17 to 2020-21.

J. O/o the Medical Officer Incharge, PHC Ghailarh(Madhepura)

1. Reply of observations
2. OPD, Emergency drug stock register from 2016-17 and 2021-22.
3. ANC/PNC, Vaccination, Covid-19, Budget estimate/demand related records.
4. Records related to immunization of new born children (16-17 and 20-21)
5. Discharge register and BHT/Case sheet of five selected months (05/16, 08/17, 11/18, 02/20 and 05/20).

K. O/o the DHS Madhepura

1. Information/reply relating to already requisitioned via e-mail as well audit requisitioned no. 01 dated 23.03.2022 to 10 dated 02.06.2022.
2. Information regarding SDG.
3. Questionnaire related to COVID-19.
4. Proforma related COVID-19.
5. Information related to Infrastructure.
6. Questionnaire related to HWCs.
7. Financial information related to procurement of drugs/chemical and construction of health care facilities.
8. Information/reply in the provided proformas (Allotement-Exp, Drug & equipment related to Emergency, IPD patients load, Family planning etc.).
9. Information/reply in the provided proformas related minutes of meeting of DQAC/DQAU/ MDR review/CDR review etc.
10. HMIS for the period of 2016-22.

L. O/o the CS-cum-CMO office, Patna

1. Information/data in provided Questionnaires and proformas.

M. O/o the CS cum CMO, Vaishali

1. Scheme wise Allotment and Expenditure Statement under different Heads for the period during 2016-22.
2. Statement of Sanctioned Posts and Men-in-position of all Health Care Facilities in the District.
3. Report/ statement/ Questionnaire provided by Audit with supporting documents.
4. Information in Form-18 issued by Audit.
5. Annual Action Plan and Perspective plan (Five-year plan and Annual Plan).
6. Proforma related to Drug Inspector for Sample Collection/Testing for Area No. 4
7. Questionnaire related to Drug, Equipment, Infrastructure, Finance, Monitoring, Support Service, Planning & Programme Management.
8. Proforma related to Drug, Equipment, Infra, Planning, Finance, Monitoring, Support Service.
9. Proforma related to installation of Solar Plate at various Health Centres.
10. Reply of audit Memos, issued to CMO.

N. O/o the District Health Society, Vaishali

1. Questionnaire related to Drug, Infrastructure, Finance, Equipment, Diagnostic, Planning, Bio Medical Waste, Ambulance, Programme management, etc.
2. Proforma related to Drug, Infrastructure, Equipment, Diagnostic, Planning, Bio Medical Waste, Ambulance, Programme management, etc.
3. Reply of audit memo ((Memo no. 1-5).
4. Attested copy of FMR for the period of 2016-22 (Year-wise).
5. Voucher of Drugs and Equipment.
6. File and information (in audit proforma) related to e-consultation and Telemedicine.

Appendix-1.3

(Reference: Paragraphs-1.10, 3.2.2, 3.2.7, 3.4.8 and 3.5.1)

Audit findings related to the Proformance Audit on "Functioning of District Hospitals"

Report Reference: Report of the Comptroller and Auditor General of India (Proformance and compliance Audit) for the year ended 31 March 2020, Government of Bihar, Report No. 5 of the year 2021

Sl. No.	Brief of audit observation
1.	**Planning** • Data pertaining to 2013 and 2018 disclosed that position of Bihar in terms of health indicators was not at par with the national average. This called for a better planning on the part of State Government to address the requirement of population of the district. However, Audit noted deficiencies in planning. • In comparison to IPHS norms, shortfall of beds ranged between 52 and 92 *per cent*. Except DH, Biharsharif and DH, Patna, even available beds were only 24 to 32 *per cent* of what was sanctioned by GoB (June 2009).GoB had sanctioned the bed strength of these hospitals in the year 2009 and despite lapse of more than 10 years, actual bed strength was not raised to the sanctioned level (March 2020). • Department neither prepared its own norms/standards nor did it adopt those prescribed by the Government of India (GoI) in respect of out- patient and in-patient services and diagnostic services *etc*. As a result, a methodical gap analysis was not carried out. This would, and has, impacted the availability of resources and services in the DHs. • Only, DH, Biharsharif and DH, Hajipur were provisionally registered in January 2016 and May 2016 respectively under Clinical Establishment Act 2010. Other three test-checked DHs were not registered under the Act. Thus, in absence of registration, these hospitals are escaping from requirements of mandatory conditions/minimum standards for running clinical establishments. • Contrary to General Administration Department (GAD) (January 2006), yearly assessment of vacancy and sending proposal to recruiting agency for filling them was not followed. Widespread vacancies of doctors, nurses andparamedics were noticed. ***(Paragraph 2.1.7)***
2.	**Out-patient services (OPD)** • Out of 24 OPD of curative services prescribed in NHM Assessor's Guidebook, only nine to 12 types of services were available which mainly included General Medicine, Gynecology, Pediatric *etc.* Services like Cardiology, Gastro entomology, Nephrology, Endocrinology, Oncology, Skin & Venereal Disease, Psychiatry, Ear, Nose and Throat (ENT) *etc*,were not available. ***(Paragraph 2.2)***

Sl. No.	Brief of audit observation
	• 97 *per cent* patients in General Medicine OPD and 62 *per cent* patients in Gynecology OPD of test-checked hospitals could avail on an average less than or equal to five minutes of consultation time in the test-checked months during 2019-20. Such a short consultation length is likely to adversely affect patient care and may enhance the workload and stress of the consulting physician.
	• Audit observed that only 41 *per cent* patients could fully get prescribed drugsin District Hospitals, as evident from scrutiny of 500 OPD prescriptions during month of July-August 2021.
3.	**Diagnostic services** • Out of required 121 diagnostic facilities as per IPHS, among test-checked DHs, maximum number of diagnostic services was available in DH, Hajipur which was only 33 *per cent* while DH, Madhepura offered minimum diagnostic services which was 26 *per cent*. • None of the test-checked DHs had all essential equipment/machines for diagnostic services and shortage ranged from 62 to 84 *per cent*. ***(Paragraph 2.3)***
4.	**In-patient services** • Out of nine types of IPD services prescribed in IPHS, available services mainly included (March 2020) General Medicine (Biharsharif, Jehanabad and Patna), Ophthalmology (Biharsharif, Hajipur and Madhepura), General Surgery (Hajipur, Madhepura and Patna), Physiotherapy (Biharsharif and Jehanabad), Burn (Hajipur), Dialysis (Biharsharif) and Orthopaedics (Patna). • Accident and Trauma and Psychiatry were not available in any DH. • Out of sampled 14 types of drugs, on an average only seven to 10 were available. • Out of 15 types of equipment as per NHM Assessor's Guidebook, only sevento 14 types of equipment were available during 2019-20. Major shortage of equipment was noticed in DH, Jehanabad (53 *per cent*) and DH, Madhepura (40 *per cent*). Dressing Trolley, ET Tubes (used in resuscitation) and Doppler (used in examination & monitoring of patients) were not available in three test-checked DHs. • Positive and negative isolation wards were not available in any of the test checked DHs. Thus, DHs did not ensure segregation of infectious patient for the sake of public and patient safety. ***(Paragraph 2.4)***
5.	**Operation Theatre (OT)** • Contrary to IPHS requirement of Operation Theatre (OT) for elective major surgeries, emergency surgeries and ophthalmology/ENT for District Hospitals, OT for elective major surgeries was not available in three DHs,OT for emergency surgeries was not available in any test-checked DHs and OT for ophthalmology/ ENT was not available in two test-checked DHs.

Sl. No.	Brief of audit observation
	• Out of 22 types of test-checked drugs as prescribed in NHM Assessor'sGuidebook, on an average only two to eight were available. Even timelyindent of unavailable/ short available drugs was not made in DH-Biharsharif and DH-Jehanabad. • Only seven to 13 types of equipments were available in OTs of test-checkedDHs against the IPHS requirement of 25 types of equipment. • Contrary to NHM Assessor's Guidebook surgical safety checklist, pre-surgery evaluation records and post-operative evaluation records for OTs were not maintained in test-checked except DH, Jehanabad. ***(Paragraphs 2.4.6, 2.4.8 & 2.4.10)***
6.	**Intensive Care Unit (ICU)** • ICU services were available only in DH, Jehanabad. • Only one Nurse was deployed in second and third shift in place of requirement of five in ICU. • Out of 14 types of test-checked drugs, only nine types were available. • Out of eight types of test-checked consumables, only four types were available. • Out of nine types of equipments, only three types of equipments were available. • Contrary to NHM Assessor's Guidebook, regular monitoring of infection control practices of hospital acquired infection like fever and purulent discharge from surgical site, reporting cases of acquired infection and periodical medical check-up was not followed in the DH. ***(Paragraph 2.4.12)***
7.	**Blood Bank** • As per Indian Public Health Standards (IPHS), a DH should essentially have a round the clock blood bank irrespective of the bed strength but nine (including test-checked DH-Patna) out of 36 DHs were without blood bank. • Blood banks at DHs (except Lakhisarai and Sheikhpura) were running without the valid license during 2014-20 as their licenses were expired and could not be renewed due to non-compliance of Central Drugs Standard Control Organisation (CDSCO) observations during inspection and lack of required infrastructure. ***(Paragraph 2.4.15)***
8.	**Maternity** • Details of Antenatal Care (ANC) check-ups of all registered pregnant women were either not properly maintained during 2014-20 (except DH, Hajipurwhere from 2019-20 ANC register was properly maintained). In DH, Hajipur, all four ANC check-ups were ensured in only four *per cent* cases. Thus, monitoring of antenatal check-up was deficient. • In DH, Biharsharif, DH, Hajipur, DH, Jehanabad and DH, Patna only 53, 46, 61 and 39 *per cent* of registered pregnant women were given IFA supplementation during 2014-20 whereas in DH, Madhepura it was 87 *per cent* during 2014-20.

Sl. No.	Brief of audit observation
	• Out of 21 types of test-checked drugs, on an average availability ranged between 21 to 54 *per cent*. • Out of 20 types of test-checked consumables, on an average only seven to14 types were available. Essential consumables such as draw sheets, babywrapping sheets, thread for suture, gown for labouring woman, plastic apron (disposable) and identification tags were mainly not available in test-checked DHs during entire test-checked months. • Out of 28 types of equipment, only 12 to 19 types of equipment were available. • In 43 pre-term deliveries which needed administration of Corticosteroid injection, in 13 cases it was not administered as it was not in stock. However, in 30 cases Corticosteroid was not administered even after availability ofthe injection in stock. Resultantly, two neonates did not survive, and one was born as stillbirth. • Total 21 cases of maternal deaths occurred in three test-checked DHs during the period 2014-20 against which maternal death review was conducted in only seven cases. Reasons for death were not recorded in four out of seven cases. • High stillbirth rate was observed in DH, Madhepura (2.17 *per cent*) andDH, Biharsharif (1.63 *per cent*) *vis-à-vis* State average of 0.96 per 100 livebirths. ***(Paragraph 2.5)***
9.	**Infection Control** • Stray dogs were seen in the campus of DH, Jehanabad. Herd of stray pigswere seen in DH, Madhepura (August 2021). This may be hazardous forstaff, attendants and patients (particularly kids) in the hospital. • In DH, Madhepura, scattered garbage and open drainage were seen. Liquidwaste was poured into the open drain in front of the emergency. These maybe infectious. • In DH, Jehanabad, drain water, garbage, faeces, hospital waste were foundscattered. Space behind the newly established PICU was used for opendefecation. An open drain of the town passed through the middle of the DH that may be hazardous for locality. ***(Paragraph 2.6.1)***
10.	**Bio-medical waste** • All the test-checked DHs were tied up with a particular operator for biomedical waste management. None of the test-checked DHs had system of segregation of hazardous, toxic and infectious waste as per Bio Medical Waste Management Rules 2016. Further, none of the test-checked DHspre-treated the laboratory waste, microbiological waste, blood samplesand blood bags through disinfection or sterilisation. Also, none of the test-checkedDHs segregated liquid chemical waste at source and pre-treated orneutralised them prior to mixing with other effluent. ***(Paragraph 2.6.3)***

Sl. No.	Brief of audit observation
11.	**Drug, equipment, human resource and others** • Short availability of drugs was mainly due to the fact that drugs were not supplied to DHs by Bihar Medical Services & Infrastructure CorporationLimited (BMSICL) because of delay in framing of BMSICL's procurementpolicy, coverage of only nil to 63 *per cent* of EDL drugs under rate contract, delay in supply of drugs by Suppliers. Resultantly, in test-checked DHs, availability of drugs throughout the year could not be ensured. • Short availability of equipment was mainly attributable to non-identificationof essential medical equipment imperative for the functioning of thehospitals, inadequate coverage of medical equipment under rate contract, delay in placement of procurement orders, delay in delivery of medical equipment by the Suppliers *etc*. • Health facilities in State did not work with full sanctioned strength and GoB could not recruit doctors and nurses. Even total vacancies were not published to get them filled. This was evident from shortage of doctors andother staff in district hospitals. • Because of deficiencies, patients approaching district hospitals for OPD services, IPD services, maternity services, surgeries, treatment in were likely to be referred and/or passed on to higher facilities, public or private hospitals. Moreover, patients were to purchase drugs fromoutside and bear out of pocket expenditure. ***{Paragraphs 2.1.7.1 & 2.5.8.5(B)}***

Appendix-2.1

(Reference: Paragraph-2.12)

Availability of Human Resources in Tertiary healthcare units

(Status as on 31.03.2023)

SL No.	Name of Medical College/ Hospital	Sanction Strength					Men-in-position				
		Specialist	Medical Officer	Nurses	Paramedics	Others	Specialist	Medical Officer	Nurses	Paramedics	Others
1	New Gardiner Road Super Specialty Hospital, Patna	11	9	11	10	15	2	7	11	2	11
2	Loknayak Jaiprakash Narayan Hospital, Rajbanshinagar, Patna	46	13	106	44	88	30	10	103	35	16
3	Government Medical College & Hospital, Bettiah	69	15	445	182	250	42	11	149	12	86
4	Bihar College of Physiotherapy & Occupational Therapy (Hospital), Patna	0	4	10	0	51	0	0	0	0	24
5	Government Medical College & Hospital, Purnia	15	15	303	180	131	0	0	68	24	47
6	Vardhaman Institute of Medical Sciences & Hospital, Nalanda	18	15	445	181	172	6	13	166	39	35
7	Darbhanga Medical College & Hospital, Darbhanga	200	16	971	105	640	70	15	716	55	363
8	Jawahar Lal Nehru Medical College & Hospital, Bhagalpur	40	20	644	238	255	73	14	514	63	175
9	Government Medical College & Hospital, Madhepura	67	94	299	176	172	30	33	172	45	1
10	Srikrishna Memorial Medical College & Hospital, Muzaffarpur	255	291	1370	364	387	123	56	650	66	155
11	Anugrah Narayan Magadh Medical College & Hospital, Gaya	194	228	377	34	249	88	71	272	29	52
12	Rajendra Nagar Hospital, Patna	15	5	20	20	0	3	5	15	4	0
13	Indira Gandhi Institure of Cardiology, Patna	42	30	296	135	361	17	30	262	54	266

SL No.	Name of Medical College/ Hospital	Sanction Strength					Men-in-position				
		Specialist	Medical Officer	Nurses	Paramedics	Others	Specialist	Medical Officer	Nurses	Paramedics	Others
14	Nalanda Medical College & Hospital, Patna	217	226	653	101	364	78	55	496	53	130
15	Patna Dental College & Hospital	0	0	3	35	208	0	0	3	19	97
16	Patna Medical College & hospital	247	20	1258	134	1080	129	18	1110	98	393
Total		**1,436**	**1,001**	**7,211**	**1,939**	**4,423**	**691**	**338**	**4,707**	**598**	**1,851**

(Source: Information collected from respective healthcare institutions in May 2023)

Appendix-2.2

(Refer: Paragraph-2.13)

Availability of human resources in test-checked Medical College and Hospitals

Sl. No.	Post	Status as of March 2017			Status as of March 2022		
		SS	PIP	Vacancy (*Per cent*)	SS	PIP	Vacancy (*Per cent*)
Patna Medical College and Hospital, Patna							
1	Superintendent/Dy. Superintendent	3	2	01 (33)	3	1	2 (67)
2	Doctors/Medical Officers	259	141	118 (45)	259	118	141(54)
3	Dietician	1	1	0	1	0	1 (100)
4	Matron, Nurses Grade A etc	1,279	1,077	202 (16)	1,279	1,134	145 (11)
5	Technicians/ Pharmacist/ Dresser (Ex-ray, Lab, ECG etc. O	106	78	28 (26)	106	65	41 (39)
6	Others (Including Group D	1,079	531	548 (51)	1,079	431	648 (60)
	Total	**2,727**	**1,830**	**897 (33)**	**2,727**	**1,749**	**978 (36)**
Darbhanga Medical College and Hospital, Darbhanga							
1	Superintendent/Dy. Superintendent	3	3	0	3	2	1 (33)
2	Doctors/Medical Officers	207	66	141 (68)	207	97	110 (53)
3	Dietician	1	1	0	1	1	0
4	Matron, Nurses Grade A etc	1,081	290	791 (73)	1,081	758	323 (30)
5	Technicians/ Pharmacist/ Dresser (Ex-ray, Lab, ECG etc.	101	46	55 (54)	101	53	48 (48)
6	Others (Including Group D	527	343	184 (35)	527	347	180 (34)
	Total	**1,920**	**749**	**1,171 (61)**	**1,920**	**1,258**	**662 (34)**
		Status as of March 2019			**Status as of March 2022**		
Government Medical College and Hospital, Bettiah							
1	Superintendent/Dy. Superintendent	03	01	02 (67)	03	01	02 (67)
2	Doctors/Medical Officers	158	16	142 (90)	158	76	82 (52)
3	Dietician	1	0	1 (100)	1	0	01 (100)
4	Matron, Nurses Grade A etc	445	10	435(98)	445	151	294 (66)
5	Technicians/ Pharmacist/ Dresser (Ex-ray, Lab, ECG etc.	137	03	134 (98)	137	3	134 (99)
6	Others (Including Group D	215	73	142 (66)	215	70	145 (67)
	Total	**959**	**103**	**856 (89)**	**959**	**301**	**658 (69)**

(Source: Records of test-checked hospitals) Note: SS: Sanctioned strength; PIP: Persons-In-Position

Appendix-2.3

(Reference: Paragraph-2.17)

Delays in appointment of Specialist Doctors

Name of Specialist Doctor post	**No. of vacancies**	**Letter No. /Date of proposal sent to BPSC**	**BPSC Advertisement no.**	**Date of selection**	**No. of candidates selected**	**Date of posting after appointment**	**No. of candidates appointed**
Obstetrician & Gynecologist	483	1385(2)/26.11.13	01/2014	01.03.2016	126	951(2)/29.06.16	117
Anesthetist	518	1385(2)/26.11.13	01/2014	01.03.2016	81	499(2)/12.05.16 & 958(2)/29.06.16	74 2
Skin and Venereal Disease	75	2011(2)/22.11.11	6/2014	22.02.2016	14	497(2)/12.05.16	14
Physician (Basic grade)	135	367(2)/13.03.14	12/2014	01.03.2016	78	495(2)/12.05.16	65
Ear, Nose and Throat (ENT) Specialist	131	367(2)/13.03.14	07/2014	22.02.2016	41	955(2)/29.06.16	36
General Surgeon	494	1385(2)/26.11.13	04/2014	28.12.2015	136	325(2)/30.03.16	127
Eye Specialist	68	367(2)/13.03.14	08/2014	28.12.2015	59	954(2)/29.06.16	43
Radiologist	142	367(2)/13.03.14	11/2014	22.02.2016	18	496(2)/12.05.16 & 957(2)/29.06.16	14 2
Pediatrician	498	1385(2)/26.11.13	03/2014	01.03.2016	113	953(2)/29.06.16	105
Pathologist	53	367(2)/13.03.14	10/2014	22.02.2016	40	956(2)/29.06.16	36
Total:	**2,597**				**706**		**635 (24 *per cent*)**
Name of Specialist Doctor post	**No. of vacancy**	**Letter No. /Date of proposal sent to BPSC**	**BPSC Advertisement no.**	**Date of selection**	**No. of candidate selected**	**Date of posting after appointment**	**No. of candidate appointed**
Obstetrician & Gynecologist	366	7620/06.06.19	03/2019	02.06.20	203	805(2)/29.07.20	180
Anesthetist	618	7549/04.06.19	12/2019	15.05.20	146	806(2)/29.07.20	119
Skin and Venereal Disease	61	7519/03.06.19	13/2019	23.04.20	22	798(2)/29.07.20	18
Physician (Basic grade)	246	7618/06.06.19	05/2019	20.05.20	139	807(2)/29.07.20	109
Ear, Nose and Throat (ENT) Specialist	95	7517/03.06.19	07/2019	27.04.20	45	800(2)/29.07.20	34
General Surgeon	367	7622/06.06.19	14/2019	02.06.20	180	799(2)/29.07.20	148
Eye Specialist	25	7616/06.06.19	08/2019	27.04.20	25	809(2)/29.07.20	22
Radiologist	126	7623/06.06.19	10/2019	08.05.20	33	808(2)/29.07.20	25
Pediatrician	393	7617/06.06.19	06/2019	20.05.20	197	797(2)/29.07.20	165
Pathologist	17	7621/06.06.19	09/2019	08.05.20	17	801(2)/29.07.20	14
Total	**2,150**				**1,007**		**834 (39 *per cent*)**

(Source: Records of Health Department, GoB)

Appendix-2.4

(Reference: Paragraph-2.17.2)

Delays in recruitment by outsourced HR agency

Sl. No.	Advertisement No./ Year	Name of post	No. of posts	Date of advertisement	Date of final examination/ Interview	Date of final selection	Delay (in days)
1	05/2019	District Consultant NTCP	19	25/10/2019	15/12/2019	Pending	888
2	07/2019	Pharmacist	1,311	25/10/2019	Examination not conducted	Pending (court case)	888
3	08/2019	Regional Programme Manager (RPMU)	3	10/11/2019	13/3/2020	Pending	872
4	08/2019	Regional Nursing Consultant (RPMU)	9	10/11/2019	13/3/2020		872
5	08/2019	Regional M&E Officer (RPMU)	4	10/11/2019	14/3/2020		872
6	08/2019	Bio Medical Engineer (RPMU)	5	10/11/2019	14/3/2020		872
7	08/2019	Clinical Psychologist (NMHP)	21	10/11/2019	Examination not conducted	Cancelled	872
8	08/2019	Psychiatric Social Worker (NMHP)	29	10/11/2019			872
9	11/2019	DEIC Manager-cum-Coordinator (RBSK)	38	27/12/2019	13/3/2020	Pending	825
10	2/2020	Counsellor	579	23/2/2020	2/12/2020		767
11	2/2020	District Urban Health Consultant (NUHM)	13	23/2/2020	2/12/2020		767
12	2/2020	District Community Mobiliser	26	23/2/2020	2/12/2020		767
13	2/2020	Audio-metric Assistant (NPPCD)	11	23/2/2020	2/12/2020		767
14	2/2020	Instructor for hearing impaired children (NPPCD)	11	23/2/2020	2/12/2020		767
15	2/2020	Dental Hygienist (NOHP)	10	23/2/2020	2/12/2020		767
16	2/2020	Dental Assistant (NOHP)	10	23/2/2020	2/12/2020		767
17	4/2020	CHO-AYUSH	400	18/3/2020	On hold	Pending (court case)	743
18	4/2020	Clinical Psychologist (NMHP)	21	18/3/2020	Examination not conducted	Pending	743
19	4/2020	Psychiatric Social Worker (NMHP)	29	18/3/2020			743
20	4/2020	Senior Lab Technician (RNTCP)	20	18/3/2020		Cancelled	743
21	5/2020	CHO-Nurses	1,050	20/6/2020		Only 401 selected but appointment letter not issued	649

Sl. No.	Advertisement No./ Year	Name of post	No. of posts	Date of advertisement	Date of final examination/ Interview	Date of final selection	Delay (in days)
22	6/2020	Block Health Manager	59	13/7/2020	1/12/2020	Pending	626
23	6/2020	Block Community Mobilisor	78	13/7/2020	1/12/2020		626
24	6/2020	Block Accountant	50	13/7/2020	3/12/2020		626
25	6/2020	STS	193	13/7/2020	3/12/2020	Pending (court case)	626
26	6/2020	STLS	60	13/7/2020	3/12/2020	Pending	626
27	7/2020	Hospital Manager	94	21/9/2020	23/10/2021		556
28	7/2020	Senior DOTS plus TB –HIV Supervisor	13	21/9/2020	23/10/2021		556
29	7/2020	District Planning Coordinator	15	21/9/2020	23/10/2021		556
30	4/2021	Lab Technician	222	3/2/2021	24/10/2021		421
31	5/2021	ANM	8,853	30/6/2021	26/10/2021		274
32	10/2021	Accountant SPMU	6	4/1/2021	23/10/2021		451
33	10/2021	Accountant RPMU	9	4/1/2021	24/10/2021		451
34	10/2021	Accountant DPMU	38	4/1/2021	24/10/2021		451
35	10/2021	Urban Health Accounts Assistant (DPMU-NUHM)	31	4/1/2021	24/10/2021		451
Total			**13,340**				

(Source: Records of SHS)

Appendix-2.5

(Reference: Paragraph-2.17.2)

Less recruitment by the outsourced HR agency

Sl. No.	Advertisement No./ Year	Name of post	No. of post	Date of advertisement	Date of final examination/ Interview	Date of issue of appointment letter	No. of candidates selected
1	5/2019	Finance-cum-Logistic consultant	24	25/10/2019	15/12/2019	29/07/2020	23
2	5/2019	Feeding Demonstrator	92	25/10/2019	15/12/2019	22/09/2020	29
3	8/2019	Community Nurse Case Manager (NMHP)	23	10/11/2019	13/03/2020	05/01/2021	20
4	8/2019	Psychiatric Nurse (NMHP)	27	10/11/2019	13/03/2020	22/09/2020	1
5	9/2019	CHO-GNM	1,200	24/12/2019	23/01/2020	14/02/2020	915
6	11/2019	Optometrist (RBSK)	9	27/12/2019	13/03/2020	05/01/2021	8
7	11/2019	Physiotherapist (RBSK & NPHCE & NPCDCS)	106	27/12/2019	14/03/2020	22/09/2020	103
8	1/2020	Cold Chain Technician	30	05/02/2020	No Examination conducted	05/01/2021	29
9	11/2020	Staff Nurse	4,102	26/12/2020	05/07/2021	28/08/2021	2,444
10	2/2021	CHO-Nurses	859	13/01/2021	27/02/2021	24/03/2021	508
11	3/2021	Medical Officer-Full time	105	28/01/2021	No Examination conducted	28/06/2021	102
12	3/2021	Medical Officer-Part time	103	28/01/2021	No Examination conducted	28/06/2021	69
13	6/2021	CHO-Nurses	2,100	15/07/2021	13/08/2021	14/09/2021	1,537
Total			**8,780**				**5,788**

(Source: Records of SHS)

Appendix-3.1

(Reference: Paragraph-3.1.6)

Daily patient load on registration counters, in test-checked healthcare facilities

Healthcare facility	Average no. of out-patients during FYs 2016-17 to 2019-20	Average daily patient load (Col.2/311[1])	Number of registration counters required (Col.3/120[2])	Number of registration counters available	Shortfall (Col.5-Col.4)	Per counter patient load, as per norm	Per counter patient load, as existing (Col.3/Col.5)
1	2	3	4	5	6	7	8
SDH, Mahua	79,742	256	2	2	0	120	128
SDH, Baarh	71,933	231	2	1	1	120	231
SDH, Rajgir	82,985	267	2	2	0	120	133
CHC, Bhagwanpur	1,32,863	427	4	1	3	120	427
CHC, Kako	24,365	78	1	1	0	120	78
CHC, Bakhtiyarpur	1,44,942	466	4	1	3	120	466
CHC, Singheshwar	43,988	141	1	1	0	120	141
RH, Chandi	47,577	153	1	1	0	120	153
RH, Makhdumpur	1,55,452	500	4	2	2	120	250
PHC, Goraul	1,25,254	403	3	1	2	120	403
PHC, Jandaha	50,309	162	1	1	0	120	162
PHC, Sikariya	11,445	37	1	1	0	120	37
PHC, Ratnifaridpur	15,183	49	1	1	0	120	49
PHC, Shankarpur	28,580	92	1	1	0	120	92
PHC, Daniyawan	15,102	49	1	1	0	120	49
PHC, Silao	47,952	154	1	1	0	120	154
PHC, Noorsarai	43,256	139	1	1	0	120	139
PHC, Ghailarh	68,805	221	2	1	1	120	221

(Source: Test checked healthcare facilities)

[1] *Average OPD days in a year (excluding Sunday and Holidays).*

[2] *Considering 6 hours in a day working of registration counter and 20 registrations in one hour.*

Appendix-3.2

(Reference: Paragraph-3.1.8)

Inadequate basic amenities in OPDs and registration areas of test-checked healthcare facilities

Sl. No.	Healthcare facility	No. of Registration Counters	Basic amenity					
			Drinking water	Fan	Toilet (Female)	Toilet (Male)	Sitting Facility	Separate Registration Counter for Female
1	SDH Mahua, Vaishali	2	No	No	Yes	Yes	Yes	Yes
2	SDH Rajgir, Nalanda	2	Yes	Yes	No	No	Yes	Yes
3	SDH Udaikishunganj, Madhepura	2	No	Yes	No	No	Yes	Yes
4	SDH Baarh, Patna	1	No	No	No	No	No	No
5	CHC Bhagwanpur, Vaishali	1	Yes	No	Yes	Yes	Yes	No
6	CHC Kako, Jehanabad	1	Yes	Yes	No	No	Yes	No
7	CHC Bakhtiyarpur, Patna	1	No	No	No	No	No	No
8	CHC Singeshwar, Madhepura	1	No	No	No	No	No	No
9	RH Chandi, Nalanda	1	No	Yes	No	No	Yes	No
10	RH Makhdumpur, Jehanabad	2	Yes	No	No	No	No	No
11	PHC Goraul, Vaishali	1	No	No	No	No	No	No
12	PHC Jandaha, Vaishali	1	No	Yes	No	No	No	No
13	PHC Sikariya, Jehanabad	1	Yes	No	No	No	Yes	No
14	PHC Ratnifaridpur, Jehanabad	1	Yes	Yes	Yes	Yes	Yes	No
15	PHC Shankarpur, Madhepura	1	No	Yes	Yes	Yes	Yes	No
16	PHC Daniyawan, Patna	1	No	No	No	No	No	No
17	PHC Silao, Nalanda	1	Yes	Yes	Yes	Yes	Yes	Yes
18	PHC Noorsarai, Nalanda	1	No	Yes	No	No	Yes	No
19	PHC Ghailarh, Madhepura	1	No	No	No	No	No	No

Basic facilities in OPD Area

Sl. No.	Healthcare facility	Drinking water	Fans/ Coolers	Toilet (Female)	Toilet (Male)	Siting arrangement	Help Desk
1	SDH Mahua, Vaishali	No	No	Yes	Yes	Yes	Yes
2	SDH Rajgir, Nalanda	Yes	Yes	No	Yes	Yes	Yes
3	SDH Udaikishunganj, Madhepura	No	No	No	No	Yes	No
4	SDH Baarh, Patna	No	Yes	No	Yes	No	No
5	CHC Bhagwanpur, Vaishali	Yes	No	Yes	Yes	Yes	No
6	CHC Kako, Jehanabad	No	Yes	No	No	Yes	Yes
7	CHC Bhaktiyarpur, Patna	Yes	No	Yes	Yes	No	No
8	CHC Singeshwar, Madhepura	No	Yes	No	Yes	Yes	No
9	RH Chandi, Nalanda	No	Yes	No	Yes	Yes	No
10	RH Makdumpur, Jehanabad	No	Yes	No	No	Yes	No
11	PHC Goraul, Vaishali	Yes	Yes	No	Yes	No	No
12	PHC Jandaha, Vaishali	Yes	No	No	No	No	No
13	PHC Sikariya, Jehanabad	No	Yes	No	Yes	No	No
14	PHC Ratnifaridpur, Jehanabad	Yes	Yes	No	Yes	Yes	Yes
15	PHC Shankarpur, Madhepura	No	Yes	No	No	Yes	No
16	PHC Daniyawan, Patna	Yes	No	No	Yes	Yes	No
17	PHC Silao, Nalanda	No	No	No	Yes	Yes	No
18	PHC Noorsarai, Nalanda	Yes	Yes	No	Yes	Yes	No
19	PHC Ghailarh, Madhepura	Yes	No	No	Yes	No	No

(Source: Test-checked healthcare facilities)

Appendix-3.3

(Reference: Paragraph-3.1.11)

Registration fee collected and deposited in the bank/office, by Balajee Enterprises

(Amount in ₹)

Month	No. of Paid Patient	Amount	Amount taken in cash book	Date of entry in cash book	Date of credit in bank	Delay deposited in bank, calculated monthly basis
April 2017	31,470	1,57,350	1,57,350	13.09.2017	13.09.2017	135
May2017	38,201	1,91,005	1,91,005	17.10.2017	17.10.2017	138
June 2017	36,958	1,84,790	3,71,365	23.10.2017	23.10.2017	114
July 2017	37,315	1,86,575				83
August 2017	33,723	1,68,615	3,56,825	02.11.2017	08.11.2017	68
September 2017	37,642	1,88,210				38
October 2017	40,692	2,03,460	2,03,460	07.12.2017	22.12.2017	51
November2017	45,746	2,28,730	2,28,730	01.02.2018	05.02.2018	66
December 2017	35,160	1,75,800	1,75,800	15.03.2018	15.03.2018	73
January 2018	22,358	1,11,790	3,00,065	09.04.2018	12.04.2018	70
February 2018	37,655	1,88,275				42
March 2018	45,114	2,25,570	6,20,860	18.06.2018	21.06.2018	81
April 2018	35,052	1,75,260				51
May2018	44,006	2,20,030				17
June2018	36,152	1,80,760	1,80,760	14.07.2018	17.07.2018	16
July2018	NA*	2,18,890	4,37,780	09.10.2018	15.10.2018	75
August2018	NA	2,18,890				44
September 2018	46,420	2,32,100	4,50,580	04.12.2018	07.12.2018	67
October 2018	43,696	2,18,480				36
November2018	NA	1,80,120	1,80,120	13.03.2018	16.03.2018	105
December 2018	37,502	1,87,510	5,18,000	20.07.2019	20.07.2019	200
January 2019	30,919	1,54,595				169
February2019	35,179	1,75,895				141
March2019	41,280	2,06,400	2,06,400	05.07.2019	05.07.2019	95
April2019	33,926	1,69,630	3,66,250	05.07.2019	05.07.2019	65
May2019	39,324	1,96,620				34
June2019	35,856	1,79,280	5,94,225	06.12.2019	09.12.2019	161
July2019	40,059	2,00,295				130
August2019	42,930	2,14,650				99
September 2019	37,679	1,88,395	1,88,395	19.02.2020	17.03.2020	168
October 2019	41,998	2,09,990	2,09,990	19.02.2020	17.03.2020	137
November2019	45,993	2,29,965	2,29,965	19.02.2020	17.03.2020	107
December2019	31,988	1,59,940	1,59,940	19.02.2020	17.03.2020	76
January 2020	30,189	1,50,945	1,50,945	19.02.2020	17.03.2020	45
February2020	29,834	1,49,170	2,47,585	13.08.2020	13.08.2020	165
March2020	19,683	98,415				134
April2020	6,396	31,980	71,715	13.08.2020	13.08.2020	104
May2020	7,947	39,735				73

Month	No. of Paid Patient	Amount	Amount taken in cash book	Date of entry in cash book	Date of credit in bank	Delay deposited in bank, calculated monthly basis
June2020	12,477	62,385	4,06,770	25.01.2021	25.01.2021	208
July2020	9,207	46,035				177
August2020	10,325	51,625				146
September2020	14,877	74,385				116
October2020	18,990	94,950				85
November 2020	15,478	77,390				55
December2020	12,908	64,540	3,60,400	09.07.2021	25.06.2021	175
January2021	16,685	83,425				144
February 2021	19,156	95,780				116
March2021	23,331	1,16,655				85
April2021	13,738	68,690	2,07,270	28.10.2021	28.10.2021	180
May2021	3,658	18,290				149
June2021	8,849	44,245				119
July2021	15,209	76,045				88
August2021	17,931	89,655	2,91,705	19.11.2021	20.11.2021	80
September2021	22,460	1,12,300				50
October2021	17,950	89,750				19
November2021	19,428	97,140	2,00,640	03.02.2022	01.02.2022	62
December2021	20,700	1,03,500				31
Total	**15,29,399**	**82,64,895**	**82,64,895**			

(Source: Records of test-checked hospitals) **Records were not available*

Appendix-3.4

(Reference: Paragraph-3.1.11)

Registration fee collected and deposited in bank/office

(Amount in ₹)

Month	Total no. of paid patients	Amount deposited by agency	Amount taken in cash book	Date of entry in cash book	Amount credited in bank	Date of credit in bank	Delay deposit, calculated monthly basis (in days)
February 2020	9,642	48,210	₹ 8,485+ ₹ 8,020= ₹ 16,505 on 17.07.20 and ₹ 4,79,805 on 01.03.21 Total ₹ 4,96,310	01.03.2021	Out of ₹ 4,96,310, ₹ 2,97,800 was deposited in January 2021 and rest amount ₹ 1,98,510 deposited in February 2021	Hence, it was assumed that amount for the period August 2020 was deposited in 18.01.2021 and amount related to September 2020 to December 2020 was deposited in 04.02.2021	322
March 2020	9,312	46,560		01.03.2021			291
April 2020	6,191	30,955		01.03.2021			261
May 2020	8,462	42,310		01.03.2021			230
June 2020	9,239	46,195		01.03.2021			200
July 2020	9,253	46,265		01.03.2021			169
August 2020	9,513	47,965		01.03.2021			138
September 2020	10,850	54,200		01.03.2021			126
October 2020	10,446	52,210		01.03.2021			95
November 2020	9,111	45,585		01.03.2021			65
December 2020	7,171	35,855		01.03.2021			34
January 2021	8,103	40,515	83,135	11.03.2021	83,135	12.03.2021	38
February 2021	8,524	42,620					10
March 2021	10,147	50,760	1,36,300	09.07.2021	1,36,300	09.07.2021	99
April 2021	10,481	52,430					69
May 2021	6,618	33,110					38
June 2021	6,649	33,245	33,245	26.07.2021	33,245	26.07.2021	25
July 2021	8,354	43,500	43,500	27.08.2021	43,500	27.08.2021	26
Total	**1,58,066**	**7,92,490**	**7,92,490**				

(Source: Records of test-checked hospitals)

Amount of ₹ 41,765 for the month of June 2021 was credited in the bank on 27.08.2021, but returned due to insufficient balance and, on the same date, an amount of ₹ 43,500 (difference of ₹ 1,735) was credited, with bank charges, by the agency. Agency also deposited amount of ₹ 425 more than the amount as per no. of patients. Hence, total amount deposited by the agency were ₹ 2,160 (₹ 1,735+₹ 425) more than the amount as per no. of patients.

Appendix-3.5

(Reference: Paragraph-3.1.11)

Registration fee collected from the patients of PMCH and deposited in bank by the agency

(Amount in ₹)

Month	No. of paid patients	Amount	Date of deposit	Delay in deposit, calculated on monthly basis (in days)
June2020	30,170	1,50,850	18.07.2020	17
July2020	21,261	1,06,305	₹ 70,305- 16.09.2020, ₹ 36,000-07.09.2020	37
August2020	23,362	1,16,810	20.10.2020	49
September2020	39,357	1,96,785	19.01.2021	110
October2020	48,635	2,43,175	08.03.2021	127
November 2020	40,714	2,03,570	08.03.2021	97
December2020	44,190	2,20,950	10.03.2021	68
January2021	46,282	2,31,410	17.03.2021	44
February 2021	53,809	2,69,045	26.03.2021	25
March2021	59,582	2,97,910	₹ 1,75,860- 20.03.2021, ₹ 13,050-25.03.2021, ₹ 1,09,000- 15.04.2021	14
April 2021-May 2021	44,160	2,20,800	₹ 30,000-03.05.2021 ₹ 1,90,800-24.06.2021	54
June2021	15,400	77,000	24.06.2021	23
July2021	32,663	1,63,315	₹ 34,000- 22.7.2021, ₹ 33,200- 12.8.2021, ₹ 66,000- 01.9.2021, ₹ 30,115- 10.9.2021	71
August2021	47,156	2,35,780	8.10.2021	68
September2021	48,600	2,43,000	₹94,000- 12.11.2021, ₹1,49,000- 17.11.2021	77
October 2021	48,000	2,40,000	₹ 1,20,000- 20.11.2021, ₹ 1,20,000- 25.11.2021	55
November 2021	46,610	2,33,050	₹ 1,50,000- 26.11.2021, ₹ 70,000- 21.12.2021, ₹13,050- 23.12.2021	52
December 2021	42,000	2,10,000	₹ 99,000- 12.01.2022, ₹ 1,11,000- 13.01.2022	43
June 2020	42,860	2,14,300	₹ 58,000- 21.01.2022, ₹ 32,600- 09.02.2022, ₹ 123,700- 18.02.2022	48
January2022	18,000	90,000	14.03.2022	41
February2022	27,400	1,37,000	₹ 77,000- 4.3.2022, ₹ 60,000- 14.3.2022	13
Total		**41,01,055**		

(Source: Records of test-checked hospitals)

Appendix-3.6

(Reference: Paragraph-3.2.1)

Availability of Beds in DHs (as on 31.03.2023)

Sl. No.	Healthcare facility	No. of Beds in Maternity Ward	Total no. of beds in DH
1	District Hospital, East Champaran	25	201
2	District Hospital, Munger	20	114
3	District Hospital, Bhojpur	40	130
4	District Hospital, Kishanganj	40	127
5	District Hospital, Lakhisarai	30	107
6	District Hospital, Sheikhpura	48	100
7	District Hospital, Jehanabad	40	95
8	District Hospital, Saharsa	24	208
9	District Hospital, Aurangabad	27	113
10	District Hospital, Buxar	DNA*	120
11	District Hospital, Nalanda	48	276
12	District Hospital, Banka	35	123
13	District Hospital, Khagaria	31	109
14	District Hospital, Vaishali	60	120
15	District Hospital, Begusarai	25	100
16	District Hospital, Sheohar	20	64
17	District Hospital, Sitamarhi	42	150
18	District Hospital, Kaimur	DNA	150
19	District Hospital, Katihar	15	59
20	District Hospital, Nawada	DNA	115
21	District Hospital, Gopalganj	32	162
22	District Hospital, Supaul	27	175
23	District Hospital, Siwan	32	100
24	District Hospital, Araria	40	210
25	District Hospital, Patna	33	100
26	District Hospital, Madhubani	16	93
27	District Hospital, Saran	20	158
28	District Hospital, Arwal	DNA	90
29	District Hospital, Samastipur	20	100
30	District Hospital, Rohtas	18	99
31	District Hospital, Bhagalpur	DNA	100
32	District Hospital, Jamui	30	112
33	District Hospital, Madhepura	28	100
34	District Hospital, Muzaffarpur	43	200
35	District Hospital, Gaya	DNA	55
Total		**909**	**4,435**

(Source: Information collected from respective healthcare institution in May 2023) *****Details not available*

Appendix-3.7

(Reference: Paragraphs-3.2.7 & 3.3.4)

Equipment required for Emergency services and OT

Type of healthcare facilities	Name of service	Required equipment
Sub Divisional Hospital	Operation Theater	Auto Clave HP Horizontal, Auto Clave HP Vertical, Operation Table Ordinary Paediatric, Operation Table Hydraulic Major, Operation table Hydraulic Minor, Operating table non-hydraulic field type, Operating table Orthopedic, Autoclave with Burners 2 bin, Autoclave vertical single, Shadowless lamp ceiling type major, Shadowless lamp ceiling type minor, Shadowless Lamp stand model, Focus lamp Ordinary, Sterilizer (Big instruments), Sterilizer (Medium instruments), Sterilizer (Small instruments), Bowl Sterilizer Big, Bowl Sterilizer Medium, Diathermy Machine (Electric Cautery), Suction Apparatus – Electrical, Suction Apparatus - Foot operated, Dehumidifie, Ultra violet lamp philips model 4 feet, Ethylene Oxide sterilizer and Microwave sterilizer **(25)**
Referral Hospital/ Community Health Centre	Operation Theater	Diathermy machine, Dressing drum all sizes, Lamps shadow less: Ceiling lamp, Lamps shadow less: Portable type, Sterilizer, Suction Apparatus, Stand with wheel for single basin, Table operation, hydraulic: Major, Table operation, hydraulic: Minor, Trolley for patients, Trolley for instruments, X-ray view box and Wheel chairs **(13)**
Sub Divisional Hospital	Emergency	BP Apparatus, Multipara torch, Glucometer, ECG, HIV kit, Ambu bag(s), Defibrillator, Laryngoscope, Suction apparatus, Laryngeal Mask Airway (LMA), Crash cart, Drug trolley, Instrument trolley and Dressing trolley **(14)**
Referral Hospital/ Community Health Centre	Emergency	BP apparatus, Multipara meter, Torch, Hammer, Spotlight, Stethoscope, Thermometer, Glucometer, ECGHIV rapid diagnostic kit, Ambu bag, Defibrillator, Layrngo scope with spare batteries, Nebulizer, Suction apparatus, Laryngeal Mask Airway (LMA), Refrigerator, Crash cart/ Drug trolley, Instrument trolley and Dressing trolley **(20)**

(Source: Test-checked healthcare facilities)

Appendix-3.8

(Reference: Paragraph-3.4.2)

Pathological investigations not carried out in healthcare facilities

(FYs 2016-17 to 2021-22)

Healthcare facility	Name of Pathological investigation
SDH, Mahua	Rapid Malaria and Blood Sugar test were not available during sampled months of 2016-21.
CHC, Bhagwanpur	Rapid Malaria test was not available in May 2020 and Blood Sugar test was not available in August 2021.
CHC, Kako	Blood Group and HBs Ag tests were not available during sampled months of 2017-21.
PHC, Goraul	Rapid Malaria test was not available in November 2018 and February 2020. Blood Group test was not available in May 2020 and August 2021. HBsAg was not available in May 2020
PHC, Sikariya	Rapid Malaria test and Blood Sugar test were not available in August 2017, November 2018, February 2020 and August 2021. HBsAg test was not available in February 2020 and August 2021.
PHC, Ratni Faridpur	Rapid Malaria test was not available in May 2016, Blood Group test not available in May 2016, August 2017 and Aug 2021. VDRL/RPR test not available in August 2021
CHC, Singheshwar	Blood Group and VDRL/RPR test facilities were not available during 2016-22
PHC, Ghailarh	Blood Group and VDRL/RPR test facilities were not available during 2016-22
PHC, Noorsarai	VDRL/RPR test was not available during 2016-22
CHC, Bhaktiyarpur	Rapid Malaria, Blood Sugar and HBsAg test was not available during 2019-22
PHC, Shankarpur	Rapid Malaria test was not available during 2016-21 HBsAg test was not available during May 2016 and November 2018
SDH, Barh	Rapid Malaria and VDRL test was not available during 2016-22 and 2018-22, respectively.

(Source: Test-checked healthcare facilities)

Appendix-3.9

(Reference: Paragraphs-3.4.7, 3.4.8 & 3.4.9)

Drugs, consumables and equipment, required for maternity services in PHC and above level healthcare facilities

Level of healthcare facilities	Requirment
SDH, RH/CHC and PHC	**Drugs**- Inj. Oxytocin 5 IU, Cap Ampicilin 500mg, Tab Metronidazole 400 mg, Tab Paracetamol, Tab Ibuprofen, Tab B complex, Inj. Oxytocin 10 IU, Tab. Misoprostol 200 mcg, Inj. Gentamycin, Vit. K, Inj. Betamethasone, Ringer lactate, Normal saline, Inj. Hydrazaline, Nefidepin, Methyldopa, Inj. Megsulf 50%, Inj. Calcium gluconate – 10%, Inj. Ampicillin, Inj. Metronidazole, Inj. Lignocaine – 2%, Inj. Adrenaline, Inj. Hydrocortisone Succinate, Inj. Diazepam, Inj. Pheneramine Maleate, Inj. Carboprost, Inj. Fortwin, Inj. Phenergan **(28)**
SDH, RH/CHC and PHC	**Consumables**- Pair of gloves, Disposable syringes with needle (2 ml), Disposable syringes with needle (5 ml), Draw sheets, Plastic apron (disposable), Cord clamp, Disposable mucus extractor, Baby wrapping sheets, Disposable nasogastric tube, Sanitary pads, Sterile urinary catheter (Foley's), Chromic catgut "0", Disposable syringe with needle (10 ml) (+ 20 ml at district hospital), Povidone iodine solution (500 ml), Cetrimide solution (500 ml), Thread for suture, Cotton rolls (big) (for swabs), Gauze than 10 metre (gauze piece), Identification tag **(20)**
SDH	**Equipment**- Baby incubators, Phototherapy Unit, Emergency resuscitation kit – baby, Standard weighing scale, Newborn care equipment, Double-outlet oxygen concentrator, Radiant warmer, Room warmer, Foetal Doppler, Cardio tocography monitor, Delivery kit, Episiotomy kit, Forceps delivery kit, Crainotomy, Silastic vacuum extractor, Pulse oxymeter baby and adult, Cardiac monitor baby and adult, Nebuliser baby, Weighing machine adult, Weighing machine infant, Open care system(radiant warmer, fixed height, with trolley, drawers, O2-bottles), Resuscitator (silicone resuscitation bag and mask with reservoir hand-operated, neonate, 500 ml), Weighing Scale (spring), Pump suction (foot operated), Thermometer(clinical, digital, 32-34° C), Light examination (mobile, 220-12 V), Hub Cutter-syringe **(27)**

(Source: Test-checked healthcare facilities)

Appendix-3.10
(Reference: Paragraph-3.4.12)
Maternal deaths reported and maternal death review conducted

Healthcare facility	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total	Maternal death review conducted
SDH, Mahua	0	0	0	0	0	0	0	0
SDH, Barh	0	0	0	0	0	RNA*	0	0
SDH, Rajgir	0	0	0	0	RNA*	RNA*	0	0
RH, Chandi	0	0	0	0	0	0	0	0
RH, Makdumpur	RNA*	5	0	0	0	6	11	0
CHC, Bhagwanpur	0	1	0	0	0	0	1	0
CHC, Kako	RNA*	RNA*	2	1	0	0	3	0
CHC, Bakhtiyarpur	0	0	0	0	0	0	0	0
CHC, Singheshwar	2	0	0	2	0	2	6	0
PHC, Goraul	0	1	0	1	0	1	3	1
PHC, Sikariya	0	0	0	0	0	0	0	0
PHC, Ratni Faridpur	0	0	0	0	0	0	0	0
PHC, Shankarpur	0	0	0	0	0	0	0	0
PHC, Daniyawan	0	0	0	0	0	RNA*	0	0
PHC, Silao	0	0	0	0	0	0	0	0
PHC, Noorsarai	0	0	0	0	0	0	0	0
Total	**2**	**7**	**2**	**4**	**0**	**9**	**24**	**1**

*(Source: Test-checked healthcare facilities) (*RNA=Record not available)*

Appendix-3.11

(Reference: Paragraph-3.5.1)

Non-availability of diagnostic services in the DHs *(as of March 2023)*

Sl. No.	Name of District Hospital	Clinical pathology	Pathology	Microbiology	Serology	Blood bank	Biochemistry	Cardiac Investigation	Ophthalmology	ENT	Radiology	Endoscopy	Respiratory	Under NVBDCP*	Under NLEP **	Total
	No. of tests required	**37**	**8**	**7**	**10**	**1**	**22**	**3**	**3**	**2**	**13**	**8**	**1**	**5**	**1**	**121**
1	Munger	22	8	7	7	1	13	3	3	2	6	8	1	2	1	**84**
2	Bhojpur	24	8	7	8	0	16	2	3	2	6	8	1	4	1	**90**
3	Kishanganj	22	7	6	7	1	12	3	3	2	5	8	1	5	1	**83**
4	Lakhisarai	26	8	6	8	0	11	2	0	2	5	8	1	2	1	**80**
5	Sheikhpura	25	8	7	5	1	13	2	1	2	4	8	1	3	1	**81**
6	Jehanabad	22	7	5	4	0	14	2	1	2	6	8	1	2	1	**75**
7	Aurangabad	17	7	7	4	1	13	2	0	2	6	8	1	4	1	**73**
8	Saharsa	19	7	7	5		10	2	3	2	7	8	1	2		**73**
9	Buxar	23	7	7	3	0	13	2	3	2	7	8	1	2	1	**80**
10	Nalanda	20	7	7	6	1	12	2	3	2	4	8	1	2	0	**75**
11	Banka	18	7	5	6	0	11	2	0	2	3	8	1	2	1	**66**
12	Khagaria	5	5	6	2	0	10	3	0	2	4	8	1	0	1	**47**
13	Vaishali	23	8	5	7	1	15	3	3	2	4	8	1	2	1	**83**
14	Begusarai	14	8	7	4	1	13	2	1	2	5	8	1	0	1	**67**
15	Sheohar	23	7	6	9	0	13	3	2	2	7	8	1	2	1	**84**
16	Sitamarhi	24	8	7	6	1	13	2	3	2	4	8	1	0	1	**80**
17	Kaimur	11	7	7	5	1	15	2	0	2	4	8	1	3	1	**67**
18	Katihar	24	8	6	5	1	14	2	3	1	6	8	1	0	1	**80**
19	Nawada	18	8	7	6	1	16	3	2	2	8	8	1	2	1	**83**

Sl. No.	Name of District Hospital	Clinical pathology	Pathology	Microbiology	Serology	Blood bank	Biochemistry	Cardiac Investigation	Ophthalmology	ENT	Radiology	Endoscopy	Respiratory	Under NVBDCP*	Under NLEP **	Total
20	Gopalganj	13	8	6	4	1	8	2	2	2	4	8	1	2	1	**62**
21	Supaul	24	8	6	8	1	12	3	0	2	5	8	1	2	1	**81**
22	Siwan	20	7	7	6	1	14	3	2	2	6	8	1	2	1	**80**
23	Araria	9	8	6	7	0	13	3	3	2	7	8	1	1	1	**69**
24	Patna	18	8	7	7	1	9	3	3	2	7	8	1	4	1	**79**
25	Madhubani	18	7	7	3	1	7	2	1	2	5	8	0	2	0	**63**
26	Saran	4	7	7	0	0	7	2	0	2	5	7	1	0	0	**42**
27	Arwal	21	8	6	3	1	12	2	1	2	8	8	1	1	1	**75**
28	Samastipur	24	8	6	9	1	13	3	0	2	5	8	1	2	1	**83**
29	Rohtas	22	8	7	8	1	14	3	3	2	13	8	1	2	1	**93**
30	Bhagalpur	10	8	7	4	1	12	2	0	2	6	8	1	1	1	**63**
31	Jamui	17	7	7	3	1	12	2	2	2	6	8	1	3	1	**72**
32	Madhepura	16	7	7	3	0	9	2	0	2	4	8	1	2	1	**62**
33	Muzaffarpur	21	8	7	7	0	14	2	3	2	7	8	1	2	1	**83**
34	Gaya	18	7	5	5	0	13	2	0	1	6	8	1	2	0	**68**
35	East Champaran	17	8	6	3	0	12	2	0	1	4	8	1	2	1	**65**

*(Source: Information collected from respective healthcare institution in May 2023) * NVBDCP: National Vector Borne Disease Control Programme ** NLEP: National Leprosy Eradication Programme*

Appendix-3.12

(Reference: Paragraphs-3.5.1 & 3.5.3)

Availability of lab technicians for diagnostic services, in the test-checked healthcare facilities

Healthcare facility	Sanctioned strength	Persons-in-position (average during 2016-22*)			Vacancy (*per cent*)	Remarks
		Regular	Contractual	Total		
SDH, Barh	5	1	0	1	4 (80)	-
SDH, Udakishunganj	3	0	0	0	3 (100)	-
SDH, Rajgir	-	-	-	-	-	Information not available
SDH, Mahua	5	0	1	1	4 (80)	In 2021-22, Regular-2, contractual-nil
RH, Chandi	1	0	0	0	1 (100)	-
RH, Makhdumpur	5	1	0	1	4 (80)	-
CHC, Kako*	1 (2016-19), 3 (2019-21)	0	1	1	2 (during 2019-21) (67)	PHC Kako (erstwhile) (2016-19), CHC Kako (2019-21)
CHC, Singheshwar	4	0	1	1	3 (75)	-
CHC, Bakhtiyarpur	4	1	0	1	3 (75)	Information for the year 2016-17 was not available
CHC, Bhagawanpur	5	3 (2016-21), 4 (2021-22)	2 (2016-21), nil (2021-22)	5 (2016-21), 4 (2021-22)	Nil (2016-21), 1 (2021-22) (20)	-
PHC, Ratni Faridpur	1	0	1	1	0 (nil)	-
PHC, Sikariya	1	1	0	1	0 (nil)	-
PHC, Ghailarh	1	0	1	1	0 (nil)	-
PHC, Noorsarai	1	1		1	0 (nil)	-
PHC, Goraul	0	0	1	1	0 (nil)	-
PHC, Jandaha*	1	1	1	2	0 (nil)	One extra LT was available
PHC, Shankarpur	2	Nil (2016-21), 1 (2021-22)	1	1 (2016-21), 2 (2021-22)	1 (2016-21) (50)	-
PHC, Daniyawan	1	1	1	2	0 (nil)	One Regular LT was on deputation at PMCH during 2016-22
PHC, Silao	4	02 (2016-20), nil (2021-22)	1	3 (2016-20), 1 (2021-22)	1 (2016-20) (25), 3 (2021-22) (75)	-

*(Source: Test-checked healthcare facilities) *Information is available only for the FYs 2016-17 to 2020-21*

Appendix-3.13

(Reference: Paragraph-3.6.11)

Names of the trolley workers and bank accounts repeated in the bills for cleaning work

Sl. No.	Name of Trolley workers	Sl. No. in bill for cleaning services	Sl. No. in bill for trolley services	Amount of excess payment *(in ₹)*
1	Shakuntala Devi	1	6	12,593
2	Shyam Kumar	2	7	12,593
3	Mamta Devi	3	8	12,593
4	Satyanarayan Ram	6, 22	141, 184	37,779
5	Rajeev Ranjan	7	177	12,593
6	Anil Kumar	10	240	12,593
7	Anita Devi	12	244	12,593
8	Sunita Devi	14	3, 194	25,186
9	Sunita Jaiswal	15, 28	4, 198	37,779
10	Suraj Kumar	16, 34	5, 204	37,779
11	Dhanmuni Devi	17	40, 168	25,186
12	Salauddin Ali	18	12, 129	25,186
13	Vimala Devi	19	13, 29	25,186
14	Vinita Kumari	20	14, 209	25,186
15	Raushan Khatoon	21	15, 117, 183	37,779
16	Gudia Khatoon	23	60	12,593
17	Uday Ram	29	199	12,593
18	Umanti Devi	30	200	12,593
19	Urmila Devi	31	201	12,593
20	Virandra Ram	32	202	12,593
21	Zohra Khatoon	33	203	12,593
22	Trilok Kumar Chaudhry	35	205	12,593
23	Veena Devi	36	206	12,593
24	Vijay Kumar	37	207	12,593
25	Ashwini Kumar	38	251	12,593
26	Baban Pd Verma	39	21, 164	25,186
27	Bindu Devi	40	30	12,593
28	Binod Kumar	41	33, 157	25,186
29	Ramdulari Devi	42	16	12,593
30	Chunnu Kumar Ram	43	39, 210	25,186
31	Dharmshila Devi	44, 85	211	12,593
32	Dilip Kumar	45	212	12,593
33	Guddu Kumar	46	213	12,593
34	Guddu Ram	47	214	12,593
35	Indu Devi	48	55, 215	25,186
36	Jeevan Kumar	49	58	12,593
37	Jitan Kumar	50	59, 217	25,186
38	Mahesh Pd Singh	51	72, 218	25,186
39	Md Javed	52	80, 219	25,186
40	Md Sabir	53	76, 220	25,186
41	Md Shamshuddin	54	82, 186, 221	37,779

Sl. No.	Name of Trolley workers	Sl. No. in bill for cleaning services	Sl. No. in bill for trolley services	Amount of excess payment *(in ₹)*
42	Renu Devi	55	222	12,593
43	Mumtaz Bano	56	90, 223	25,186
44	Sunil Ram	57	196, 224	25,186
45	Neelam Devi	58	92, 225	25,186
46	Nitiranjan Narayan	59	226	12,593
47	Pashupati Nath	60	227	12,593
48	Rakesh Pandey	61	109, 228	25,186
49	Randhir Kumar	62	112, 229, 243	37,779
50	Rani Devi I	63	18, 230	25,186
51	Ajay Kumar	65	159	12,593
52	Amardeep Kumar	67	160	12,593
53	Amit Kumar	68	161	12,593
54	Awadesh Malakar	73	163	12,593
55	Babita Devi	74	22	12,593
56	Chanda Devi	80	166	12,593
57	Manju Kumari	107	69	12,593
58	Meena Devi	109	81	12,593
59	Nasreen Khatoon	111	170	12,593
60	Nilam Devi	113	172	12,593
61	Nirmala Sinha	115	173	12,593
62	Kiran Devi II	120	67	12,593
63	Rajia Khatoon	128	150, 178	25,186
64	Rajkumari Devi	129	96	12,593
65	Raju Kumar	130	108	12,593
66	Punam Devi	131	175	12,593
67	Ranjit Kumar Singh	133	182	12,593
68	Rahima Begum	135	176	12,593
69	Roshan Khatoon	137	15, 117, 183	37,779
70	Sonu Kumar	140	167	12,593
71	Sujit Kumar	141	10, 169	25,186
72	Suman Devi	142	1, 179	25,186
73	Ranjeeta Devi	143	115, 231	25,186
74	Rekha Kumari	144	122, 232	25,186
75	Rohit Raj	145	127, 233	25,186
76	Sangeeta Devi	146	131, 234	25,186
77	Renu Devi	148	236	12,593
78	Sunil Kesri	149	2, 149, 188	37,779
			Total	**14,98,567**

(Source: Records of test-checked hospitals)

Appendix-4.1

(Reference: Paragraph-4.2.1)

Delays in delivery of drugs/ surgicals

(Quantity no. in crore and value₹ in crore)

Delay in days	2017-18		2018-19		2019-20		2020-21		2021-22		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
No delay	1.69	2.59	5.49	4.47	2.17	8.07	12.58	411.79	9.31	108.40	31.24	535.32
Per cent of total	**3.49**	**3.45**	**4.68**	**3.62**	**1.48**	**3.52**	**20.42**	**67.82**	**8.47**	**22.35**	**6.46**	**35.22**
1-30	24.85	35.91	80.19	62.00	54.34	119.64	30.77	118.64	32.29	193.80	222.44	529.99
Per cent of total	**51.34**	**47.80**	**68.33**	**50.21**	**37.17**	**52.19**	**49.95**	**19.54**	**29.38**	**39.96**	**46.01**	**34.87**
31-60	5.83	11.16	11.68	24.05	20.63	32.54	4.19	23.26	24.54	76.45	66.87	167.46
Per cent of total	**12.05**	**14.85**	**9.95**	**19.48**	**14.11**	**14.19**	**6.80**	**3.83**	**22.33**	**15.76**	**13.83**	**11.02**
61-90	3.97	6.37	3.67	9.77	14.01	21.34	3.18	12.80	14.62	49.46	39.45	99.74
Per cent of total	**8.20**	**8.48**	**3.13**	**7.91**	**9.58**	**9.31**	**5.16**	**2.11**	**13.30**	**10.20**	**8.16**	**6.56**
91-180	9.67	12.69	11.14	12.02	31.17	29.60	5.36	21.57	23.09	48.52	80.43	124.40
Per cent of total	**19.98**	**16.89**	**9.49**	**9.73**	**21.32**	**12.91**	**8.70**	**3.55**	**21.01**	**10.00**	**16.64**	**8.18**
181-365	2.39	6.40	4.56	9.55	20.42	13.83	4.71	16.54	4.34	6.63	36.42	52.95
Per cent of total	**4.94**	**8.52**	**3.89**	**7.73**	**13.97**	**6.03**	**7.65**	**2.72**	**3.95**	**1.37**	**7.53**	**3.48**
Above 365	0.00	0.01	0.63	1.62	3.45	4.24	0.81	2.60	1.70	1.71	6.59	10.18
Per cent of total	**0.00**	**0.01**	**0.54**	**1.31**	**2.36**	**1.85**	**1.31**	**0.43**	**1.55**	**0.35**	**1.36**	**0.67**
Total	**48.40**	**75.13**	**117.36**	**123.48**	**146.19**	**229.26**	**61.60**	**607.20**	**109.89**	**484.97**	**483.44**	**1,520.04**

(Source: Records of BMSICL)

Appendix-4.2

(Reference: Paragraph-4.2.4)

Excess payment of GST

Sl. No.	Description of items purchased	Name of suppliers	Date of issue of invoice	Date of receipt of items by consignee	Date of payment	Qty.	Purchased Price Per unit (excluding GST) (in ₹)	Total amount, excluding GST (in ₹)	IGST amount paid in ₹ (rates)	Applicable GST amount in ₹ (rate)	Excess payment (amount in ₹)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
								(7*8)	(9*12%)	(9*5%)	(10-11)
1	Truenat chip based RTPCR test kit for COVID- 19	Harihar Medical Agencies PVT. LTD.	12-06-2021	15-06-2021	05-08-2021	30,000	1,000	3,00,00,000	36,00,000	15,00,000	21,00,000
2	Alpine Biomedicals Rapid Antigen test kits for COVID-19	Alpine Biomedicals Pvt. Ltd.	26-06-2021	26-06-2021	13-09-2021	3,00,000	68.59	2,05,77,000	24,69240	10,28,850	14,40,390
3	Trivitron Healthcare Rapid antigen test kit for COVID-19	Sterlingwell India Pvt. Ltd.	09-06-2021	04-07-2021 as per PRC	07-08-2021	1,00,000	68.59	68,59,000	8,23,080	3,42,950	4,80,130
4	Pulse Oximeter	ToshiwalIndestries Pvt. Ltd.	24-05-2021	16-06-2021	25-08-2021	2,500	793.75	19,84,375	2,38,125 (@12%)	99,218	1,38.906
5	Corona Antigen Test-25T	Oscar Medicare Pvt. Ltd.	13-06-2021	16-06-2021	04-08-2021	1,03,450+46,600+9,950+40,000=2,00,000	68.6	1,37,20,000	16,46,400	6,86,000	9,60,400
Total											**51,19,826**

(Source: Records of BMSICL)

Appendix-4.3

(Reference: Paragraph-4.2.9)

Drugs/ surgical items indented and issued to test-checked healthcare facilities by BMSICL, during FYs 2016-17 to 2021-22

Year	**2016-17**			**2017-18**			**2018-19**			**2019-20**			**2020-21**			**2021-22**		
Name of facility	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**	**No. of Drugs indented**	**No. of Drugs issued**	**Drugs issued (In *per cent*)**
Patna DCS	3	2	**67**	166	96	**58**	221	155	**70**	160	152	**95**	137	121	**88**	329	217	**66**
Vaishali DCS	1	1	**100**	39	39	**100**	108	108	**100**	174	161	**93**	182	167	**92**	341	235	**69**
Jehanabad DCS	6	6	**100**	65	65	**100**	122	122	**100**	166	166	**100**	139	137	**99**	390	251	**64**
Biharsharif DCS	0	0	**0**	38	56	**147**	122	111	**91**	154	140	**91**	117	94	**80**	338	217	**64**
Madhepura DCS	5	5	**100**	68	66	**97**	124	112	**90**	174	160	**92**	167	156	**94**	384	254	**66**
PMCH	5	3	**60**	153	90	**59**	208	154	**74**	192	188	**98**	108	98	**91**	240	196	**82**
DMCH	1	1	**100**	77	77	**100**	139	139	**100**	179	164	**92**	110	100	**91**	223	169	**76**
GMCH	0	0	**0**	0	0	**0**	0	0	**0**	116	109	**94**	50	46	**92**	129	105	**81**
IGIC	3	3	**100**	24	22	**92**	81	77	**95**	95	91	**96**	45	42	**93**	59	51	**86**
Total	**24**	**21**	**88**	**630**	**511**	**81**	**1125**	**978**	**87**	**1410**	**1331**	**94**	**1055**	**961**	**91**	**2433**	**1695**	**70**

(Source: Records of BMSICL)

Appendix-4.4

(Reference: Paragrap-4.2.10)

Non-availability of Essential Drugs (EDs) in OPD of the test-checked healthcare facilities

Year	Type of healthcare facility	Type of EDs required as per EDL	Average essential drugs available during selected month	Percentage of essential drugs available during selected months	Average essential drugs partially available during selected months	Percentage of essential drugs partially available during selected months	Average essential drugs not available during selected months	Percentage of essential drugs not available during selected months	Range of available drugs	Range of Partial available drugs	Range of non-available drugs
2016-17	SDH	33	20.00	61	2.00	6	11.00	33	20	2	11
	RH	33	25.00	76	1.00	3	7.00	21	25	1	7
	CHC	33	19.00	58	3.00	9	11.00	33	19	3	11
	PHC	33	20.33	62	1.33	4	11.33	34	12 to 25	0 to 3	6 to 20
2017-18	SDH	33	14.00	42	4.00	12	15.00	45	14	4	15
	RH	33	24.00	73	2.00	6	7.00	21	24 to 24	2	7
	CHC	33	22.00	67	1.00	3	10.00	30	22 to 22	1	10
	PHC	33	23.67	72	1.00	3	8.33	25	17 to 28	0 to 3	5 to 13
2018-19	SDH	58	20.50	35	3.00	5	34.50	59	18 to 23	1 to 5	30 to 39
	RH	55	18.50	34	0.50	1	36.00	65	16 to 21	0 to 1	34 to 38
	CHC	55	21.00	38	1.00	2	33.00	60	21	1	33
	PHC	50	18.50	37	1.00	2	30.50	61	18 to 20	0 to 3	29 to 32
2019-20	SDH	58	22.00	38	3.00	5	33.00	57	22	1 to 5	31 to 35
	RH	55	28.00	51	5.50	10	21.50	39	27 to 29	3 to 8	20 to 23
	CHC	55	21.00	38	1.67	3	32.33	59	15 to 26	0 to 4	25 to 40
	PHC	50	25.75	52	1.25	3	23.00	46	21 to 34	0 to 4	15 to 29
2020-21	SDH	58	27.50	47	4.00	7	26.50	46	25 to 30	2 to 6	22 to 31
	RH	55	22.00	40	4.00	7	29.00	53	21 to 23	1 to 7	27 to 31
	CHC	55	21.67	39	2.00	4	31.33	57	14 to 33	0 to 6	22 to 41
	PHC	50	27.50	55	0.50	1	22.00	44	20 to 40	0 to 2	10 to 28
2021-22	SDH	58	25.00	43	4.00	7	29.00	50	25	4	29
	RH	55	32.50	59	2.00	4	20.50	37	25 to 40	0 to 4	15 to 26
	CHC	55	26.33	48	3.33	6	25.33	46	18 to 39	0 to 9	16 to 32
	PHC	50	31.33	63	0.00	0	18.67	37	23 to 45	0	5 to 27

(Source: Records of test-checked healthcare facilities)

Appendix-4.5

(Reference: Paragraph-4.2.10)

Non-availability of Essential Drugs (EDs) in IPDs of the test-checked healthcare facilities											
Year	**Type of healthcare facility**	**Number of Essential drugs required as per EDL**	**Average essential drugs available during selected months**	**Percentage of essential drugs available during selected months**	**Average essential drugs partially available during selected months**	**Percentage of essential drugs partially available during selected months**	**Average essential drugs not available during selected months**	**Percentage of essential drugs not available during selected months**	**Range of available essential drugs**	**Range of Partial available drugs**	**Range of non-available essential drugs**
2016-17	SDH	90	34	38	2	2	54	60	34	2	54
	RH	90	35	39	0	0	55	61	35	0	55
	CHC	90	19	21	8	9	63	70	19	8	63
	PHC	90	35	38	3	3	53	59	30 to 39	2 to 3	49 to 57
2017-18	SDH	90	19	21	1	1	70	78	19	1	70
	RH	90	38	42	5	6	47	52	38	5	47
	CHC	90	34	38	0	0	59	66	34	0	56
	PHC	90	39	43	1	1	51	56	38 to 39	1	50 to 51
2018-19	SDH	65	13	19	1	2	52	79	8 to 17	1	47 to 56
	RH	59	16	26	1	1	43	73	9 to 22	0 to 1	37 to 49
	CHC	59	9	16	1	1	49	83	7 to 12	0 to 1	46 to 52
	PHC	34	15	44	2	5	17	51	12 to 19	0 to 8	11 to 22
2019-20	SDH	65	16	25	4	6	45	69	8 to 24	4	37 to 53
	RH	59	16	27	2	3	41	69	16	2	41
	CHC	59	17	29	3	5	39	66	8 to 23	0 to 7	36 to 44
	PHC	34	16	48	2	5	16	48	3 to 27	0 to 9	7 to 22
2020-21	SDH	65	19	29	5	8	41	63	9 to 29	5	31 to 51
	RH	59	26	44	4	7	29	49	12 to 40	3 to 5	14 to 44
	CHC	59	24	41	1	2	34	58	23 to 26	0 to 3	33 to 36
	PHC	34	18	52	2	4	15	43	3 to 30	0 to 8	4 to 23
2021-22	SDH	65	27	42	2	3	36	55	27	2 to 2	36
	RH	59	26	43	3	5	31	52	17 to 34	0 to 6	25 to 36
	CHC	59	19	32	7	11	33	57	12 to 31	0 to 17	25 to 45
	PHC	34	21	62	1	4	11	34	13 to 32	0 to 5	2 to 18

(Source: Records of test-checked healthcare facilities)

Appendix-4.6

(Reference: Paragraph-4.2.10)

Non-availability of consumables in test-checked healthcare facilities

Year	Type of healthcare facility	Type of consumables required as per EDL	Average consumables available during selected months	Percentage of consumables available during selected months	Average consumables partially available during selected months	Percentage of consumables partially available during selected months	Average consumables not available during selected months	Percentage of consumables not available during selected months	Range of available consumables	Range of Partial available consumables	Range of non-available consumables
2016-17	SDH	22	10	45	0	0	12	55	10	0	12
	RH	22	NA*	NA	NA	NA	NA	NA	0	0	0 to 0
	CHC	22	8	36	0	0	14	64	8	0	14 to 14
	PHC	22	8	34	0	0	15	66	6 to 9	0	13 to 16
2017-18	SDH	22	6	27	0	0	16	73	6	0	16
	RH	22	NA	NA	NA	NA	NA	NA	0	0	0
	CHC	22	8	36	0	0	14	64	8	0	14
	PHC	22	13	59	0	0	9	41	11 to 15	0	7 to 11
2018-19	SDH	30	8	25	1	2	22	73	7 to 8	0 to 1	22
	RH	29	NA	NA	NA	NA	NA	NA	0	0	0
	CHC	29	7	25	0	1	21	74	4 to 11	0 to 1	18 to 25
	PHC	27	13	48	1	2	14	50	12 to 16	0 to 1	10 to 15
2019-20	SDH	30	12	40	0	0	18	60	0	0	17 to 19
	RH	29	NA	NA	NA	NA	NA	NA	0	0	0
	CHC	29	10	34	2	7	17	59	7 to 16	0 to 5	12 to 22
	PHC	27	14	50	0	1	13	49	11 to 17	0 to 1	10 to 16
2020-21	SDH	30	10	32	2	7	19	62	7 to 12	0 to 4	18 to 19
	RH	29	NA	NA	NA	NA	NA	NA	0	0	0
	CHC	29	10	36	1	5	17	60	7 to 12	0 to 2	15 to 22
	PHC	27	16	58	0	0	11	42	12 to 23	0	4 to 15
2021-22	SDH	30	12	38	2	5	17	57	9 to 14	0 to 3	16 to 18
	RH	29	NA	NA	NA	NA	NA	NA	0	0	0
	CHC	29	15	51	0	1	14	48	14 to 16	0 to 1	12 to 15
	PHC	27	18	68	0	0	9	32	15 to 24	0	3 to 12

NA: Not Available (Source: Records of test-checked healthcare facilities) **Records were not available*

Appendix-4.7

(Reference: Paragraph-4.2.18)

Financial position of test-checked District Joint Dipensaries

(Amount in ₹)

Head	Biharsharif			Madhepura			Vaishali			Patna			Grand Total		
	2016-21			2016-21			2016-21			2016-21			2016-21		
	Allot.	Exp.	Balance	Allot.	Exp.	Balance	Allot.	Exp.	Balance	Allot.	Exp.	Balance	Allot.	Exp.	Balance
Salary	5,44,74,758	5,33,20,820	11,53,938	2,13,85,108	2,47,34,572	19,67,756	5,93,99,952	5,80,33,222	15,68,420	6,06,85,154	5,80,22,914	26,62,240	19,59,44,972	19,41,11,528	73,52,354
Travel Exp.	19,000	0	19,000	14,000	11,650	7,350	69,000	33,433	35,567	16,500	0	16,500	1,18,500	45,083	78,417
Office Exp.	3,50,000	2,43,405	1,06,595	3,65,000	1,08,731	2,56,269	5,75,000	4,99,381	81,687	5,25,000	5,09,579	15,421	18,15,000	13,61,096	4,59,972
Electricity	62,500	9,000	53,500	95,000	44,934	50,066	1,70,000	1,26,936	43,064	1,53,000	65,713	87,287	4,80,500	2,46,583	2,33,917
Legal Exp.	0	0	0	0	0	0	0	0	0	10,000	9,900	100	10,000	9,900	100
Uniform	73,000	37,856	35,144	33,000	0	33,000	43,000	30,228	14,465	67,000	50,932	16,068	2,16,000	1,19,016	98,677
Rent	4,51,900	4,51,598	302	1,89,600	1,87,153	2,447	2,40,860	2,02,500	38,360	26,70,500	25,10,323	1,60,177	35,52,860	33,51,574	2,01,286
Training Exp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material Supply	5,60,000	4,23,204	1,36,796	5,35,000	1,88,799	3,46,201	7,35,000	7,20,342	14,716	6,35,000	6,32,678	2,322	24,65,000	19,65,023	5,00,035
Drugs	19,78,800	13,26,975	6,51,825	18,28,000	10,37,580	7,90,420	21,28,800	20,12,331	1,16,496	23,30,000	23,27,311	2,689	82,65,600	67,04,197	15,61,430
Machine	4,96,600	0	4,96,600	4,06,600	1,07,151	2,99,449	5,46,600	4,38,517	1,11,263	5,16,000	4,03,990	1,12,010	19,65,800	9,49,658	10,19,322
Total	**5,84,66,558**	**5,58,12,858**	**26,53,700**	**2,48,51,308**	**2,64,20,570**	**37,52,958**	**6,39,08,212**	**6,20,96,890**	**20,24,038**	**6,76,08,154**	**6,45,33,340**	**30,74,814**	**21,48,34,232**	**20,88,63,658**	**1,15,05,510**

**Records were not available*

Appendix-4.8

(Reference: Paragraph-4.2.19)

Purchase of drugs exceeding requirement

Sl. No.	Name of Medicine	Quantity	Batch No.	Date of Expiry	Rate (in ₹)	Cons-umed	Balance in Store	Gross Amount *(in ₹)*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) {(6*8)+5%}
1	Jawarish Janjbil (pH)	1,000	114/16	NA*	80	0	1,000	84,000
2	Jawarish Janjabeel (pH)	1,000	0.008	August 2022	72	0	1,000	75,600
3	Majoon Ispand Sokhtani (pH)	1,000	15	NA	58.65	0	1,000	61,582
4	Sharbat Tamar Hind (pH)	1,000	0.004	August 2021	76.5	0	1,000	80,325
5	Jawaris Zaroone Sada	2,000	97/01	August 2021	80.75	0	2,000	1,69,575
6	Jawaris Zaroone Sada	2,000		August 2022	72	0	2,000	1,51,200
7	Abresam Tab	200	20	NA	816	0	200	1,71,360
8	Habbe Rasaut (Pills)	500x 50	186/2-17-18	NA	35.5	0	500	18,637.50
9	Habbe Rasaut (Pills)	500	NA	NA	32	0	500	16,800
10	Habbe Rasaut (Pills)	500	NA	NA	32	0	500	16,800
11	Sharbat Anjaba (200ml)	500	19	August 2022	52.65	0	500	27,641.25
12	Sharbat Anjaba (200ml)	500	19	2022	52.65	0	500	27,641.25
13	Sharbat Unnab (200ml)	250	17	15.8.2022	54.5	0	250	14,306.25
14	Sharbat Unnab (200ml)	250	17	2022	54.5	0	250	14,306.25
15	Majoon Sang-e-Sarmahi	500	23	August 2022	55	0	500	28,875
16	Khamira Banafsha	500	24	August 2022	45	0	500	23,625
17	Majoon Nankhwah	500	14	August 2022	55	0	500	28,875
18	Majoon Nankhwah	500	14	2022	55	0	500	28,875
19	Arq Aijwain (200 ml)	500	NA	August 2020	20.52	0	500	10,773
20	Arq Badyan (200 ml)	500	NA	August 2020	17.96	0	500	9,429
21	Arq Kasni (200 ml)	500	NA	August 2020	35.91	0	500	18,852.75

Sl. No.	Name of Medicine	Quantity	Batch No.	Date of Expiry	Rate (in ₹)	Cons-umed	Balance in Store	Gross Amount *(in ₹)*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) {(6*8)+5%}
22	Sharbat Khaksi (200 ml)	500	NA	August 2022	45	0	500	23,625
23	Itrifal Ghududi	1,000	NA	NA	42	0	1,000	44,100
24	Sharbat Anar Shireen (200ml)	500	NA	NA	48	0	500	25,200
25	Sharbat Ustukhuddul (200ml)	500	NA	NA	45	0	500	23,625
26	Marham Quba 250g	250	NA	NA	35.5		250	9,318.75
27	Marham Quba 250g	250	NA	August 2022	35.5		250	9,318.75
28	Sharbat Injeer (200 ml)	500	NA	August 2022	41	0	250	10,762.50
29	Sharbat Injeer (200 ml)	500	NA	August 2022	41	0	250	10,762.50
30	Jawarish Bibusga	1,000	NA	August 2022	57	0	1,000	59,850
31	Majoon Hajr. Yahood	1,000	NA	August 2022	52	0	1,000	54,600
32	Manjoon Bras	500	NA	August 2022	56.43	0	500	29,625.75
33	Manjoon Babasir	2,000	NA	August 2022	56.43	0	2000	1,18,503
34	Manjoon Atrifal	2,000	NA	August 2022	71.82	0	2000	1,50,822
35	Sharbat Belgiri 200ml	250	NA	August 2022	45	0	250	11,812.50
36	Sharbat Belgiri 200ml	250	NA	August 2020	45	0	250	11,812.50
37	Roghan Babchi 50ml	200	NA	August 2020	33.35	0	200	7,003.50
38	Roghan BizaMurgh 50ml	200	NA	August 2020	37.8	0	200	7,938
39	Roghan Gul 100ml	500	NA	August 2020	66.69	0	500	35,012.25
40	Roghan Kaddu 100ml	500	NA	August 2020	66.69	0	500	35,012.25
41	Roghan Kuchala 100ml	200	NA	August 2020	56.43	0	200	11,850.30
42	Roghan Labbobsaba 50ml	500	NA	August 2020	46.17	0	500	24,239.25
43	Roghanmom 100ml	500	NA	August 2020	66.69	0	500	35,012.25
44	Roghan Malkanji 50ml	500	NA	August 2020	40.82	0	500	21,430.50

Sl. No.	Name of Medicine	Quantity	Batch No.	Date of Expiry	Rate (in ₹)	Cons-umed	Balance in Store	Gross Amount *(in ₹)*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) {(6*8)+5%}
45	Habb-e-Tinkar	500	NA	August 2020	66.69	0	500	35,012.25
46	Marham Kafoor 125 gram	200	NA	August 2020	33.35	0	200	7,003.50
47	Marham Rall 125 gram	200	NA	August 2020	35.91	0	200	7,541.10
48	Safoofselanil (90gm)	500	NA	August 2020	56.43	0	500	29,625.75
49	Safoof Usba (60gm)	500	NA		38.48	0	500	20,202
50	Safoof Ziabethes (60gm)	500	NA	August2020	35.91	0	500	18,852.75
51	Habbe Rasaut (Pills)	500	14/26	NA	32	240/10.3.21	260	8,736
52	Khmira Sandal Sada	1000	16	15.8.22	42	200/18.11.21	800	35,280
53	Khamira Banafsha	500	24	2022	45	200/18.11.21	300	14,175
54	Laboobkabir	1,000	NA	August 2022	168	200/22.9.21	800	1,41,120
55	Habb-e-Mudir	1,000X100	NA	August2020	82.08	240/15.10.20	760	65,499.84
Total:								**22,33,364.49**

(Source: Records of test-checked healthcare facility)

Appendix-4.9

(Reference: Paragraph-4.3.5)

Availability of Machines and Equipment in Medical College and Hospitals (MCHs)

Sl. no.	Name of the department	No. of equipment required	DMCH				PMCH				GMCH			
			No. of equipment available	No. of functional equipment	No. of non-functional equipment	Shortage (in *per cent*)	No. of equipment available	No. of functional equipment	No. of non-functional equipment	Shortage (in *per cent*)	No. of equipment available	No. of functional equipment	No. of non-functional equipment	Shortage (in *per cent*)
1	**Medicine**	53	24	14	10	74	05	05	0	91	11	11	0	79
2	**Paediatrics**	49	28	27	01	45	31	30	1	39	10	07	3	86
3	**Tuberculosis & Chestdiseases**	13	0	0	0	100	6	5	1	62	01	01	0	92
4	**Dermatology, venereology & leprosy**	8	3	3	0	63	6	4	2	50	04	04	0	50
5	**Psychiatry**	13	0	0	0	100	10	06	4	54	0	0	0	100
6	**Surgery**	42	16	13	3	69	20	18	2	57	10	08	2	81
7	**Orthopaedics**	25	10	07	3	72	NA*	NA	NA	NA	02	01	1	96
8	**Ophthalmology**	39	17	15	2	62	31	26	5	33	24	10	14	74
9	**Otorhinolaryngology**	178	140	133	7	25	82	78	4	56	22	22	0	88
10	**Obstetrics & gynaecology**	97	21	20	1	79	30	27	3	72	34	30	4	69
11	**Anaesthesio-logy**	51	08	05	3	90	03	03	0	94	06	05	1	90
12	**Radio-diagnosis**	9	05	02	3	78	09	09	0	0	04	03	1	67
13	**Central casualty deptt.**	69	02	02	0	97	48	37	11	46	NA	NA	NA	NA
Total			**274**	**241**	**33**		**281**	**248**	**33**		**128**	**102**	**26**	

(Source: Records of test-checked hospitals) Note: NA: *Records were not available

Appendix-5.1

(Reference: Paragraph 5.2)

Requirement, availability and shortfall of healthcare facilities as on March 2022

District	Projected Population (as on 2022)	No. of available healthcare facilities DHs/SDHs	Requirement as per population norms DHs/ SDHs	Shortfall in DHs/ SDHs		No. of available healthcare facilities CHCs/ RHs	Requirement as per population norms CHCs/ RHs	Shortfall in CHCs/RHs		No. of available healthcare facilities PHCs/ APHCs	Requirement as per population norms PHCs/ APHCs	Shortfall in PHCs/ APHCs		No. of available available HSCs	Requirement as per population norms HSCs	Shortfall in HSCs	
				No.	Percentage			No.	Percentage			No.	Percentage			No.	Percentage
Araria	33,73,424	2	3	1	33	7	34	27	79	46	112	66	59	242	675	433	64
Arwal	8,40,898	1	2	1	50	3	8	5	64	33	28	-5	-18	65	168	103	61
Aurangabad	30,47,673	2	3	1	33	8	30	22	74	71	102	31	30	254	610	356	58
Banka	24,41,383	1	2	1	50	8	24	16	67	40	81	41	51	251	488	237	49
Begusarai	35,64,165	3	6	3	50	7	36	29	80	40	119	79	66	292	713	421	59
Bhagalpur	36,44,823	3	4	1	25	11	36	25	70	69	121	52	43	362	729	367	50
Bhojpur	32,73,644	2	4	2	50	10	33	23	69	41	109	68	62	303	655	352	54
Buxar	20,47,344	2	3	1	33	4	20	16	80	39	68	29	43	160	409	249	61
Darbhanga	47,24,219	1	4	3	75	11	47	36	77	68	157	89	57	261	945	684	72
East Champaran	61,18,413	6	7	1	14	15	61	46	75	99	204	105	51	407	1,224	817	67
Gaya	52,68,985	3	6	3	50	18	53	35	66	78	176	98	56	473	1,054	581	55
Gopalganj	30,73,997	2	3	1	33	10	31	21	67	36	102	66	65	185	615	430	70
Jamui	21,12,199	1	2	1	50	8	21	13	62	34	70	36	52	279	422	143	34
Jehanabad	13,50,192	1	2	1	50	6	14	8	56	38	45	7	16	107	270	163	60
Kaimur	19,51,395	2	3	1	33	5	20	15	74	31	65	34	52	175	390	215	55
Katihar	36,84,733	3	4	1	25	10	37	27	73	61	123	62	50	327	737	410	56
Khagaria	19,99,991	2	3	1	33	4	20	16	80	32	67	35	52	193	400	207	52
Kishanganj	20,28,204	1	2	1	50	5	20	15	75	19	68	49	72	156	406	250	62
Lakhisarai	12,00,931	1	2	1	50	3	12	9	75	18	40	22	55	102	240	138	58
Madhepura	24,01,788	2	3	1	33	8	24	16	67	42	80	38	48	272	480	208	43
Madhubani	53,84,123	5	6	1	17	16	54	38	70	97	179	82	46	429	1,077	648	60

District	Projected Population (as on 2022)	No. of available healthcare facilities DHs/SDHs	Requirement as per population norms DHs/ SDHs	Shortfall in DHs/ SDHs		No. of available healthcare facilities CHCs/ RHs	Requirement as per population norms CHCs/ RHs	Shortfall in CHCs/RHs		No. of available healthcare facilities PHCs/ APHCs	Requirement as per population norms PHCs/ APHCs	Shortfall in PHCs/ APHCs		No. of available available HSCs	Requirement as per population norms HSCs	Shortfall in HSCs	
				No.	Percentage			No.	Percentage			No.	Percentage			No.	Percentage
Munger	16,41,095	3	4	1	25	3	16	13	82	31	55	24	43	167	328	161	49
Muzaffarpur	57,60,491	1	3	2	67	15	58	43	74	100	192	92	48	520	1,152	632	55
Nalanda	34,52,714	3	4	1	25	9	35	26	74	65	115	50	44	370	691	321	46
Nawada	26,62,613	2	3	1	33	11	27	16	59	50	89	39	44	174	533	359	67
Patna	70,05,205	5	7	2	29	8	70	62	89	90	234	144	61	409	1,401	992	71
Purnea	39,17,010	2	5	3	60	5	39	34	87	58	131	73	56	312	783	471	60
Rohtas	35,51,419	3	4	1	25	6	36	30	83	49	118	69	59	251	710	459	65
Saharsa	22,80,483	2	3	1	33	5	23	18	78	38	76	38	50	171	456	285	63
Samastipur	51,13,184	5	5	0	0	13	51	38	75	74	170	96	57	362	1,023	661	65
Saran	47,41,589	2	4	2	50	14	47	33	70	55	158	103	65	391	948	557	59
Sheikhpura	7,63,507	1	2	1	50	3	8	5	61	23	25	2	10	85	153	68	44
Sheohar	7,87,388	1	2	1	50	2	8	6	75	17	26	9	35	91	157	66	42
Sitamarhi	41,07,730	3	4	1	25	14	41	27	66	55	137	82	60	208	822	614	75
Siwan	39,96,014	2	3	1	33	14	40	26	65	66	133	67	50	380	799	419	52
Supaul	26,74,527	4	4	0	0	6	27	21	78	27	89	62	70	181	535	354	66
Vaishali	41,93,455	2	4	2	50	7	42	35	83	50	140	90	64	337	839	502	60
West Champaran	47,21,408	2	4	2	50	11	47	36	77	52	157	105	67	554	944	390	41
Grand Total	**12,49,02,355**	**89**	**139**	**50**	**36**	**323**	**1,249**	**926**	**74**	**1,932**	**4,163**	**2,231**	**54**	**10,258**	**24,980**	**14,722**	**59**

(Source: Records of healthcare facilities)

Appendix-5.2
(Reference: Paragraph-5.5)
APHCs and HSCs where basic facilities were not available

Sl. No.	Name of APHC/HSC	Name of facility not available
APHC		
1	APHC, Dershiya	Transport, Drinking water
2	APHC, Chainpura	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
3	APHC, Utrapati	Transport, Running on 24 X 7 basis
4	APHC, Maura kabiyahi	Transport, Running on 24 X 7 basis
5	APHC, Prataptand	Transport, Running on 24 X 7 basis
6	APHC, Sondoh	Transport, Running on 24 X 7 basis
7	APHC, Dahpar	Transport, Running on 24 X 7 basis
8	APHC, Mahkar	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
9	APHC, Bhatrandha	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
10	APHC, badhari	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
11	APHC, Sagarpur	Transport, Running on 24 X 7 basis
12	APHC, Sirsi	Transport, Running on 24 X 7 basis
13	APHC, Sadisopur	Transport, Running on 24 X 7 basis
HSC		
14	HSC, May	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
15	HSC, Nawada	Transport, Running on 24 X 7 basis
16	HSC, Bhawani Chak	Transport, Running on 24 X 7 basis
17	HSC, Gonwan	Transport, Running on 24 X 7 basis
18	HSC, Dhana Dihari	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
19	HSC, Sarta	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
20	HSC, Maura Ramnagar	Toilet, Transport, Electricity supply, Running on 24 X 7 basis
21	HSC, Kabiyahi	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis

Sl. No.	Name of APHC/HSC	Name of facility not available
22	HSC, Sahori	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
23	HSC, Asoi	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
24	HSC, Piroi	Toilet, Transport, Running 24 X 7 basis
25	HSC, Panapur	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
26	HSC, Pojha	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
27	HSC, Kathauli	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
28	HSC, Doiya	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
29	HSC, Rajanbigha	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
30	HSC, Jagatpur	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
31	HSC, Parmanandpur	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
32	HSC, Chitti	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
33	HSC, Bhawanipur	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
34	HSC, Bairbanna	Toilet, Transport, Drinking water, Electricity supply, Running on 24 X 7 basis
35	HSC, Chiriya	Toilet, Transport, Drinking water, Running on 24 X 7 basis
36	HSC, Rupas Mahaji	Toilet, Transport, Drinking water, Running on 24 X 7 basis
37	HSC, Doghra	Toilet, Transport, Drinking water facility, Running on 24 X 7 basis
38	HSC, Bahpura	Transport, Running on 24 X 7 basis
39	HSC, Kohra	Transport, Drinking water facility, Running on 24 X 7 basis
40	HSC, Sugao	Transport, Running on 24 X 7 basis

(Source: Records of the test-checked healthcare facilities)

Appendix-5.3

(Reference: Paragraph 5.6.4)

Incomplete/non-executed but fully paid works

(Amount in ₹)

Sl. No.	Name of work	Name of contractor	Work to be done as per estimate	Work actually done	Amount to be paid as per work done	Amount actually paid	Amount involved
1	2	3	4	5	6	7	8 (7-6)
1.	H&WC, Ghoshwar under PHC, Hajipur Sadar (Cost of work- ₹ 4,70,600)	Rajnish Kumar (Quotation finalised @ 5 *per cent* below of estimated cost)	Pro & fixing 2000 litre capacity of water tank on terrace {item no. 17 (b)}	500 litre capacity of water tank has been provided and fixed	3,753	15,010	11,257
			Pro wood work in frame of door (item no. 2)	Work not executed	0	12,313	12,313
			Pro & fixing flush door shutter – 4x3'6"x6'6" (item no. 3)	One flush door shutter has been provided and fixed*	3,219	12,876	9,657
			Pro & fixing MS sheet door with frame (item no. 4)	Work not executed	0	11,587	11,587
			Pro & fixing paneled or paneled and glazed shutter (item no. 5)	Work not executed	0	17,650	17,650
			Providing & fixing 1 HP submersible pump (item no. 16)	Work not executed	0	19,000	19,000
2.	H&WC, Subhai under PHC, Hajipur Sadar (Cost of work - ₹ 1,78,505)	M S Enterprises (Quotation finalised @ 5 *per cent* below of estimated cost)	Pro & fixing 2000 litre capacity of water tank on terrace (item no. 9)	1,000 litre capacity of water tank has been provided and fixed	7,505	15,010	7,505
			Providing & fixing 1 HP submersible pump (item no. 10)	Work not executed	0	14,250	14,250
			S/F/F Sanitary installation (item no. 11)	Work not executed	0	57,000	57,000
3	H&WC Ismailpur under PHC Bidupur (Cost of work - ₹ 4,35,000)	Laxmi Enterprises (Quotation finalised @ 3.91 *per cent* below of estimated cost)	Pro & laying vitrified floor tiles- 59.38 m^2 (item no. 4)	Pro & lying vitrified floor tiles- 44.03 m^2	64,347	86,780	22,433
			Dismantling stone slab flooring – 59.38 m^2 (item no. 3)	Dismantling stone slab flooring – 44.03 m^2 (item no. 3)	3,752	5,061	1,309
			Pro & laying P.C.C 50.38x0.075=4.45 m^3 (item no. 5)	Pro & laying P.C.C 44.03x0.075=3.302 m^3 (item no. 5)	13,172	17,752	4,580
			Pro & fixing in position collapsible steel shutter (item no. 11)	Work not executed	0	38,977	38,977

Sl. No.	Name of work	Name of contractor	Work to be done as per estimate	Work actually done	Amount to be paid as per work done	Amount actually paid	Amount involved
4.	H&WC Hansi Malahi under CHC Bhagwanpur (Cost of work - ₹ 4,88,000)	Laxmi Enterprises (Quotation finalised @ 1.014 *per cent* below of estimated cost)	Pro & laying P.C.C 6.73 m^3(item no. 2)	Work not executed	0	27,667	27,667
			Pro & laying vitrified floor tiles 89.77 m^2(item no. 3)	Work not executed	0	1,35,147	1,35,147
			Pro & laying vitrified tiles in skirting 11 m^2(item no. 4)	Work not executed	0	12,430	12,430
			Pro & lying Kota stone in brick step (item no. 4)	Work not executed	0	6,461	6,461
5.	H&WC Suratpur under PHC Rajapakar (Cost of work - ₹ 4,43,700)	Surendra Ram (Quotation finalised @ 10 *per cent* below of estimated cost)	Pro & laying situ seven course water proofing treatment over roof (item no. 3)	Work not executed	0	45,478	45,478
			Pro 100 A brick flat soling (item no. 4)	Work not executed	0	15,234	15,234
			Pro & laying P.C.C (item no. 5)	Work not executed	0	17,075	17,075
			P/L ceramic glazed floor tiles (item no. 6)	Work not executed	0	6,734	6,734
			P/L ceramic glazed wall tiles (item no. 7)	Work not executed	0	16,646	16,646
			Steel work in built up section (item no. 8)	Work not executed	0	7,133	7,133
			Pro 2mm thick putty (item no. 9)	Work not executed	0	67,979	67,979
			Pro & fixing 1000 litre capacity of water tank on terrace (item no. 13)	500 litre capacity of water tank has been provided and fixed	3,555	7,110	3,555
			P/F wash basin quantity-2 nos. (item no.27)	Only one wash basin has been provided and fixed	1,480	2,960	1,480
6.	H&WC Sinduari under PHC Hajipur Sadar (Cost of work- ₹ 1,36,515)	M S Enterprises (Quotation finalised @ 8.194 *per cent* below of estimated cost)	S/F/F sanitary installation (item no.2)	Work not executed	0	50,493	50,493
			White vitreous china surgery type wash basin --- (item no. 3)	Work not executed	0	5,963	5,963
			Providing and fixing sink waste and vent pipe 100 mm dia (item no. 5)	Work not executed	0	8,411	8,411
			Proving and placing 2000 lit water storage tank (item no. 7)	1000 litre capacity of water tank has been provided and placed	7,253	14,505	7,252
7	H&WC Panapur Langa under PHC Hajipur Sadar (Cost of work - ₹ 1,46,015)	M S Enterprises (Quotation finalised @ 5 *per cent* below of estimated cost)	S/F/F sanitary installation (item no.2)	Work not executed	0	52,250	52,250
			Proving and placing 2000 lit water storage tank (item no. 7)	1000 litre capacity of water tank has been provided and placed	7,505	15,010	7,505
			Providing and fixing sink waste and vent pipe 100 mm dia (item no. 5)	Work not executed	0	8,704	8,704

Sl. No.	Name of work	Name of contractor	Work to be done as per estimate	Work actually done	Amount to be paid as per work done	Amount actually paid	Amount involved
8	H&WC Baidyanathpur under PHC Rajapakar (Cost of work - ₹ 4,75,000)	Laxmi Enterprises (Quotation finalised @ 4.43 *per cent* below of estimated cost)	Providing 250mm wide brick drain (item no. 3)	Work not executed	0	37,018	37,018
			Providing 100 A one brick flat soling (item no. 4)	Work not executed	0	7,886	7,886
			P/L P.C.C (1:2;4)---- (item no. 5)	Work not executed	0	8,846	8,846
			Pro wood work in frames of door, window--- (item no. 10)	Work not executed	0	15,107	15,107
			P/F paneled and glazed shutter for door and windows ---- (item no. 11)	Work not executed	0	14,887	14,887
			P/F paneled glazed shutter for doors and window---- (item no. 12)	Work not executed	0	8,437	8,437
			P/F wash basin (item no. 34)	Work not executed	0	3,143	3,143
9	H&WC Piroi under PHC Goraul (Cost of work - ₹ 3,57,770)	Laxmi Enterprises (Quotation finalised @ 5 *per cent* below of estimated cost)	P/L vitrified floor tiles – 22.11m^2 (item no. 5)	P/L vitrified floor tiles – 17.66m^2	25,516	31,946	6,430
			S/F with local sand in plinth (item no. 8)	Work not executed	0	2,983	2,983
			Providing 100 A one brick flat soling (item no. 9)	Work not executed	0	7,790	7,790
			P/L P.C.C (1:2:4) ---*etc*. (item no. 10)	Work not executed	0	8,716	8,716
			Providing 250 mm wide brick drain (item no. 11)	Work not executed	0	28,883	28,883
			P/F wash basin –etc – 2 nos	Only one wash basin has been found provided and fixed	1,563	3,125	1,562
			Providing 2mm thick white based putty (item no. 29)	Work not executed	0	22,513	22,513
Total	**Cost of work- ₹ 29,31,105**						**9,05,316**

(Source: Records of test-checked districts)

Appendix-6.1

(Reference: Paragraph-6.9.1)

Hundred *per cent* surrender of allotments

Name of Hospital	Financial Year	As per budget estimates		As per Surrender Report		
		Name of Item/sub-head	Budget estimate *(in ₹)*	Allotment *(in ₹)*	Expenditure *(in ₹)*	Savings *(in ₹)*
DMCH	**2016-17**	Publishing & Printing	1,00,000	50,000	0	50,000
		Training	2,04,400	22,00,000	0	22,00,000
	2017-18	Publishing & Printing	1,00,000	50,000	0	50,000
		Training	10,40,000	22,00,000	0	22,00,000
	2018-19	Publishing & Printing	50,000	50,000	0	50,000
		Training	10,40,000	10,00,000	0	10,00,000
	2019-20	Publishing & Printing	50,000	50,000	0	50,000
		Training	20,00,000	10,00,000	0	10,00,000
		Telephone	1,00,000	1,00,000	0	1,00,000
	2020-21	Publishing & Printing	50,000	50,000	0	50,000
		Training	2,00,000	2,00,000	0	2,00,000
		Telephone	1,00,000	1,00,000	0	1,00,000
	2021-22	Publishing & Printing	50,000	16,500	0	16,500
		Training	2,00,000	330	0	330
PMCH	**2016-17**	Publishing & Printing	NA	2,40,000	0	2,40,000
		Conference, Workshop Seminar	NA	40,000	0	40,000
		Training	NA	3,10,000	10,724	2,99,276
	2017-18	Publishing & Printging	NA	1,19,000	0	1,19,000
		Conference, Workshop Seminar	NA	40,000	0	40,000
		Training	NA	1,55,000	5,262	1,49,738

Name of Hospital	Financial Year	As per budget estimates		As per Surrender Report		
		Name of Item/sub-head	**Budget estimate *(in₹)***	**Allotment *(in ₹)***	**Expenditure *(in ₹)***	**Savings *(in ₹)***
	2018-19	Publishing & Printging	50,000	21,000	0	21,000
		Conference, Workshop Seminar	0	20,000	0	20,000
		Training	50,000	20,000	0	20,000
	2019-20	Publishing & Printging	50,000	42,500	0	42,500
		Conference, Workshop Seminar	0	7,300	0	7,300
		Training	50,000	40,000	0	40,000
		Grace & Grant	50,000	25,500	0	25,500
	2020-21	Publishing & Printging	50,000	40,000	0	40,000
		Conference, Workshop Seminar	0	80,000	0	80,000
		Training	50,000	80,000	0	80,000
		Grace & Grant	50,000	40,000	0	40,000
	2021-22	Publishing & Printing	0	330	0	330
		Conference, Workshop Seminar	0	330	0	330
		Training	50,000	330	0	330
		Grace & Grant	50,000	16,500	0	16,500
GMCH	**2019-20**	Vehicle	NA	2,00,000	0	2,00,000
		Ttravailing Allowance (TA)	NA	1,00,000	0	1,00,000
		Legal Charges	NA	50,000	0	50,000
		Verdi	NA	50,000	0	50,000
		Rent and Taxes	NA	1,00,000	0	1,00,000
		Electricity	NA	20,00,000	0	20,00,000

Name of Hospital	Financial Year	As per budget estimates		As per Surrender Report		
		Name of Item/sub-head	Budget estimate *(in₹)*	Allotment *(in ₹)*	Expenditure *(in ₹)*	Savings *(in ₹)*
	2020-21	Medical Reimbursement	2,00,000	2,00,000	0	2,00,000
		Ttravailing Allowance (TA)	4,00,000	2,00,000	0	2,00,000
		Legal Charges	3,00,000	1,00,000	0	1,00,000
		Verdi	2,65,000	2,65,000	0	2,65,000
		Rent and Taxes	2,00,000	2,00,000	0	2,00,000
	2021-22	Medical Reimbursement	2,00,000	2,00,000	0	2,00,000
		Ttravailing Allowance (TA)	4,00,000	1,32,000	0	1,32,000
		Rent and Taxes	2,00,000	66,000	0	66,000

(Source: Records of test-checked hospitals)

Appendix-6.2

(Reference: Paragraph-6.10)

Hundred *per cent* surrender of funds

(₹ in lakh)

Financial Year	Object Head	Budget Proposal	Allotment	Expenditure	Savings/ surrender
2016-17	1101 TA	NA*	0.10	0	0.10
	1305 Legal Charges	NA	0.10	0	0.10
	2002, conference, Seminar	NA	0.01	0	0.01
	2003, Training	NA	10.00	0	10.00
	Total		**10.21**	**0**	**10.21**
2017-18	1101 TA	NA	0.10	0	0.10
	1305 Legal Charges	NA	0.10	0	0.10
	2002, conference, Seminar	NA	0.01	0	0.01
	2003, Training	NA	10.00	0	10.00
	Total		**10.21**	**0**	**10.21**
2018-19	1101 TA	NA	0.10	0	0.10
	1305 Legal Charges	NA	0.10	0	0.10
	2002, conference, Workshop, Seminar	NA	1.00	0	1.00
	2003, Training	NA	1.00	0	1.00
	1601 Publication and Printing	NA	1.00	0	1.00
	2702 Repair and Maintenance	NA	100.00	0	100.00
	Total		**111.21**	**0**	**111.21**
2019-20	1305 Legal Charges	0.10	0.10	0	0.10
	1601 Publication and Printing	2.50	1.00	0	1.00
	2002, conference, Seminar	1.00	0.01	0	0.01
	2003, Training	5.00	1.00	0	1.00
	Total		**2.11**	**0**	**2.11**

Financial Year	Object Head	Budget Proposal	Allotment	Expenditure	Savings/ surrender
2020-21	1101 TA	0.10	0.10	0	0.10
	1303 Telephone	0.70	0.70	0	0.70
	1305 Legal Charges	0.10	0.10	0	0.10
	2002, conference, workshop Seminar	1.00	1.00	0	1.00
	1601 Publication and Printing	2.50	2.00	0	2.00
	2003, Training	1.00	1.00	0	1.00
	Total	**5.40**	**4.90**	**0**	**4.90**
2021-22	1101 TA	0.10	0.03	0	0.03
	1305 Legal Charges	0.10	0.03	0	0.03
	1601 Publication and Printing	20.00	0.66	0	0.66
	2002, conference, Seminar	1.00	0.00	0	0.00
	2003, Training	1.00	0.00	0	0.00
	Total		**0.72**	**0**	**0.72**

(Source: Records of test-checked hospitals) **Records were not available*

Appendix-8.1
(Reference: Paragraph-8.2.3)
Shortage of necessary equipment

Sl. No.	Name of equipment	Functions/Description of equipment	Affected investigation/tasks
1	High Performance Liquid Chromatography with Accessories (Isocratic- /Gradient- Auto sampler)	HPLC process separating components in a liquid mixture	Advance Assay Analysis of Oral suspension, related substances, Antibiotics, etc
2	UV-Vis Spectrophotometer (Double Beam)	Used for determining the absorption of light from a sample.	Advance Assay Analysis
3	IR – Spectrophotometer (FTIR)	Used for obtaining an infrared spectrum of absorption or emission of a solid, liquid or gas. An FTIR spectrometer simultaneously collects high-resolution spectral data over a wide spectral range.	Identification
4	GAS- Liquid Chromatography with Accessories	It is a chemical analysis instrument, used for separating chemicals in a complex sample	For Assay of Volatilesamples
5	Generator (200 KVA)	For continues backup of sophisticated equipments/Instruments.	Without this, the work gets affected at the time of power cut or low voltage.
6	Polarimeter Digital with Multiwavelength	Measuring optical rotation to four decimal places angular across the UV/Visible spectrum using standard glass or low volume leur taper flow-through tubes. • Touch screen facilitates navigation through user and supervisor menus • Standard and low volume sample tubes • Single, double, or multiple wavelengths (UV/Vis) • 21 CFR Part 11 audit trail and signatures • GLP software (date/time/batch)	For Assay of Carbohydratecontaining samples
7	Dissolution Apparatus (Auto Sampler)	Used for drawing samples from the dissolution vessel automatically at the specified time points	Test of Tablet, capsules
8	Raman Spectrometer	Provides detailed information about chemical structure, phase and polymorphy, crystallinityand molecular interactions	Different modern test.
9	Refractive Index Determination Instrument	Used for the measuring of an index of refraction (refractometry). The index of refraction is calculated from the observed refraction angle using Snell's law	Test of oily samples

(Source: Records of Bihar Drug Control Laboratory)

Appendix-8.2

(Reference: Paragraph-8.4.2)

Delays in renewal of registration and penalty amount to be recovered from establishments

(Amount in ₹)

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
Jehanabad	17/2020	Adarsh Hospital	03-06-2021	26-06-2021	22	2,200	0	2,200
	21/2020	Chaturbhuj Nursing Home	14-09-2021	24-09-2021	9	900	0	900
	11/2019	Dr. Chandra Shekar Azad, Medical Office	17-06-2020	20-01-2021	216	21,600	0	21,600
	05/2019	Jeevan Deep Nursing Home &Maternitity Centre	10-12-2019	12-01-2021	398	39,800	0	39,800
	10/2019	Kopal Cilinc	17-06-2020	01-05-2021	317	31,700	0	31,700
	16/2020	Magadh Hospital	05-03-2021	20-03-2021	14	1,400	0	1,400
	13/2020	Neha Nursing Home	11-02-2021	20-03-2021	36	3,600	0	3,600
	14/2020	Shanti Surgical Clinic	23-02-2021	25-03-2021	29	2,900	0	2,900
	12/2019	Shreya Nursing Home	17-06-2020	21-01-2021	217	21,700	0	21,700
	02/2020	Adarsh Janch Ghar	09-02-2021	26-03-2021	44	4,400	0	4,400
Total						**1,30,200**	**0**	**1,30,200**
Nalanda	NA*	Maa Shitla Hospital	22-01-2022	12-03-2022	48	4,800	0	4,800
	NA	Divya Jyoti Hospital	29-01-2022	31-01-2022	1	100	0	100
	NA	Nalanda Bone and Spine Centre Pvt. Ltd	22-03-2022	04-04-2022	12	1,200	0	1,200
	NA	J. P. Hospital	26-03-2022	30-04-2022	34	3,400	0	3,400
	NA	Jeevan Jyoti Super Speciality Hospital	09-01-2021	22-01-2021	12	1,200	0	1,200
Total						**10,700**	**0**	**10,700**
Madhepura	04/2016	Bio-Lab	10-11-2016	26-08-2020	1384	1,38,400	200	1,38,200
	03/2016	Madhepura-Lab	10-11-2016	26-08-2020	1384	1,38,400	200	1,38,200
	01/2016	Town-Lab	10-11-2016	26-08-2020	1384	1,38,400	200	1,38,200
	14/2016	Yadubanshi Janch Ghar	10-11-2016	28-09-2020	1417	1,41,700	200	1,41,500

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	39(Patho)/2021	R.M.S Diagnostic	26-06-2021	30-07-2021	33	3,300	0	3,300
	02/2016	Parwati Jach Ghar	10-11-2016	26-08-2020	1384	1,38,400	200	1,38,200
	06(Patho)/2020	Parwati Jach Ghar	28-03-2021	02-08-2021	126	12,600	200	12,400
	07(Patho)/2020	Maa Neelam Pathology	28-03-2021	24-09-2021	179	17,900	3,300	14,600
	37(patho)/2021	Gitanjali Diagnostic Centre	26-06-2021	29-09-2021	94	9,400	2,900	6,500
	05(Patho)/2020	Medico Lab	28-03-2021	25-10-2021	210	21,000	2,300	18,700
	14(Patho)/2020	Shanti Lab	07-04-2021	15-11-2021	221	22,100	200	21,900
	16(Patho)/2020	Chandra Bio- Lab	07-04-2021	15-11-2021	221	22,100	200	21,900
	21(Patho)/2020	Maa Pathology	15-04-2021	29-11-2021	227	22,700	5,200	17,500
	20(Patho)/2020	Micro Lab	15-04-2021	30-11-2021	228	22,800	5,200	17,600
	22(Patho)/2020	New Koshi Pathology	15-04-2021	30-11-2021	228	22,800	5,200	17,600
	15/16	Divya Pathology	10-11-2016	26-08-2020	1384	1,38,400	200	1,38,200
	26(Patho)/2020	Life Line Diagnostic Center	25-04-2021	03-01-2022	252	25,200	17,910	7,290
	40(Patho)/2020	Micro Lab	28-06-2021	13-01-2022	198	19,800	11,200	8,600
	08//2016	Pragyan Nursing Home	10-11-2016	23-09-2020	1412	1,41,200	200	1,41,000
	4//2020	Druvit Nursing Home	23-12-2021	28-02-2022	66	6,600	2,000	4,600
	03/2020	Being Helpful Clinic	26-06-2021	24-12-2021	180	18,000	3,100	14,900
Total						**12,21,200**	**60,310**	**11,60,890**
Vaishali	NA	Agrawal Nursing Home	02-02-2016	17-04-2019	1169	1,16,900	0	1,16,900
	NA		20-05-2020	24-06-2021	399	39,900	0	39,900
	NA	Shivank Nursing Home	17-06-2020	25-06-2021	372	37,200	0	37,200
	NA	Maheshwar Nursing Home	11-07-2020	30-06-2021	353	35,300	0	35,300
	NA	MaanavAarogya Sansthaan	02-02-2016	19-01-2019	1081	1,08,100	0	1,08,100
	NA		02-02-2020	30-08-2020	209	20,900	0	20,900
	NA	Chanchal Suman Hospital	02-02-2016	20-04-2019	1172	1,17,200	0	1,17,200
	NA		07-05-2020	14-06-2020	37	3,700	0	3,700

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	NA	Nandraaj Nursing Home	02-02-2016	14-04-2019	1166	1,16,600	0	1,16,600
	NA		21-04-2020	16-08-2020	116	11,600	0	11,600
	NA	Super Hospital	02-02-2016	15-04-2019	1167	1,16,700	0	1,16,700
	NA		21-04-2020	29-04-2020	7	700	0	700
	NA		06-05-2021	09-06-2021	33	3,300	0	3,300
	NA	Aadarsh Hospital & Research Centre	12-02-2016	09-06-2019	1212	1,21,200	0	1,21,200
	NA		17-06-2020	06-07-2020	18	1,800	0	1,800
	NA	Jeevan Rekha Nursing Home	12-02-2016	12-07-2019	1245	1,24,500	0	1,24,500
	NA	Shashank Nursing Home	12-02-2016	11-07-2019	1244	1,24,400	0	1,24,400
	NA		21-04-2020	17-08-2020	117	11,700	0	11,700
	NA	Chandra Nursing Home	12-02-2016	24-06-2019	1227	1,22,700	0	1,22,700
	NA		03-07-2020	14-03-2021	253	25,300	0	25,300
	NA	Mahadev Jaanch Ghar	12-02-2016	22-10-2019	1347	1,34,700	0	1,34,700
	NA		30-10-2020	17-11-2020	17	1,700	0	1,700
	NA	City Hospital	12-02-2016	09-06-2019	1212	1,21,200	0	1,21,200
	NA		24-05-2021	18-06-2021	24	2,400	0	2,400
	NA	Poonam Surgery	12-02-2016	15-05-2019	1187	1,18,700	0	1,18,700
	NA		20-05-2020	14-05-2021	358	35,800	0	35,800
	NA	Krishna Hospital	12-02-2016	13-05-2019	1185	1,18,500	0	1,18,500
	NA	Aashirwad Hospital	12-02-2016	09-06-2019	1212	1,21,200	0	1,21,200
	NA		17-06-2020	07-07-2020	19	1,900	0	1,900
	NA	Dr. Sadhu Sharan Singh Clinic	08-03-2016	09-04-2019	1126	1,12,600	0	1,12,600
	NA		15-04-2020	29-06-2020	74	7,400	0	7,400
	NA	Gita Clinic	08-03-2016	23-06-2019	1201	1,20,100	0	1,20,100

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	NA	Saakshi Indoscopy & Surgery Centre	08-03-2016	18-03-2019	1104	1,10,400	0	1,10,400
	NA		24-03-2020	29-06-2020	96	9,600	0	9,600
	NA	Banaraas jaanch Ghar	08-03-2016	24-08-2019	1263	1,26,300	0	1,26,300
	NA	Ayushmaan Chikitsa Kendra	08-03-2016	21-04-2019	1138	1,13,800	0	1,13,800
	NA		01-05-2020	25-08-2020	115	11,500	0	11,500
	NA	Sakshi Nursing Home	08-03-2016	19-03-2019	1105	1,10,500	0	1,10,500
	NA		24-03-2020	09-06-2021	441	44,100	0	44,100
	NA	Rahul Nursing Home	08-03-2016	09-06-2019	1187	1,18,700	0	1,18,700
	NA		17-06-2020	15-12-2020	180	18,000	0	18,000
	NA	Manoj Nursing Home	22-03-2016	13-11-2019	1330	1,33,000	0	1,33,000
	NA	Vaishali Nursing Home	22-03-2016	29-02-2020	1438	1,43,800	0	1,43,800
	NA	Maa Nursing Home	22-03-2015	14-07-2019	1574	1,57,400	0	1,57,400
	NA		21-07-2020	27-06-2021	340	34,000	0	34,000
	NA	Bharat Seva Sadan	22-03-2015	26-02-2019	1436	1,43,600	0	1,43,600
	NA		07-03-2020	21-04-2020	44	4,400	0	4,400
	NA		06-05-2021	01-07-2021	55	5,500	0	5,500
	NA	Shivam Seva Sadan & Nas Rog Hospital	22-03-2015	03-04-2019	1472	1,47,200	0	1,47,200
	NA		15-04-2020	10-09-2020	147	14,700	0	14,700
	NA	Misha Clinic Pvt. Ltd	06-04-2015	05-08-2019	1581	1,58,100	0	1,58,100
	NA		13-07-2020	23-01-2021	193	19,300	0	19,300
	NA	Shubh Nursing Home	06-04-2015	22-02-2019	1417	1,41,700	0	1,41,700
	NA		13-03-2021	21-05-2021	68	6,800	0	6,800

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	NA	Shivangi Nursing Home	06-04-2015	24-04-2019	1478	1,47,800	0	1,47,800
	NA		01-03-2020	24-05-2021	448	44,800	0	44,800
	NA	Apana Jaanch Ghar	04-05-2016	09-05-2019	1099	1,09,900	0	1,09,900
	NA		07-05-2020	29-01-2021	266	26,600	0	26,600
	NA	Ganpati Hospital	04-05-2016	19-08-2019	1201	1,20,100	0	1,20,100
	NA		27-05-2020	08-07-2021	406	40,600	0	40,600
	NA	Sumitraam Hospital	04-05-2016	08-02-2020	1374	1,37,400	0	1,37,400
	NA	BabaNew Born Child Care	24-05-2016	18-04-2019	1058	1,05,800	0	1,05,800
	NA	Nigam chikitsa cendra	24-05-2016	03-02-2020	1349	1,34,900	0	1,34,900
	NA		01-05-2020	24-08-2020	114	11,400	0	11,400
	NA		03-09-2021	18-09-2021	14	1,400	0	1,400
	NA	Maheshari Jaanch Ghan	17-06-2016	30-12-2020	1656	1,65,600	0	1,65,600
	NA	Bharat Jaanch Ghar	17-06-2016	27-03-2019	1012	1,01,200	0	1,01,200
	NA		05-01-2021	30-06-2021	175	17,500	0	17,500
	NA	Sumitra seva sadan	17-06-2016	30-12-2020	1656	1,65,600	0	1,65,600
	NA		07-04-2019	09-04-2020	367	36,700	0	36,700
	NA		26-04-2021	02-05-2021	5	500	0	500
	NA	Sanjeevani Jaanch Ghar	28-06-2016	17-10-2019	1205	1,20,500	0	1,20,500
	NA	Modern Jaanch Ghar	28-06-2016	05-05-2019	1040	1,04,000	0	1,04,000
	NA		30-10-2020	23-06-2021	235	23,500	0	23,500
	NA	ASG Hospital	20-07-2016	17-12-2019	1244	1,24,400	0	1,24,400
	NA		20-05-2021	02-06-2021	12	1,200	0	1,200
	NA	Max Care Diagnostic	16-08-2016	14-11-2019	1184	1,18,400	0	1,18,400
	NA		10-01-2022	23-12-2022	346	34,600	0	34,600

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	NA	Sharda Clinic	16-08-2016	14-11-2019	1184	1,18,400	0	1,18,400
	NA		22-11-2020	10-03-2021	107	10,700	0	10,700
	NA	New B.K. hosital	16-08-2016	04-03-2020	1295	1,29,500	0	1,29,500
	NA		19-03-2021	02-06-2021	74	7,400	0	7,400
	NA	Goldern Jaanch Ghar	16-08-2016	29-12-2019	1229	1,22,900	0	1,22,900
	NA	Gokul Diagnostic	09-05-2017	31-10-2019	904	90,400	0	90,400
	NA	Deen Prabha diagnostic & health care centre	09-05-2017	29-09-2020	1238	1,23,800	0	1,23,800
	NA	Care nursing home	25-12-2017	24-06-2019	545	54,500	0	54,500
	NA		05-07-2020	23-08-2020	48	4,800	0	4,800
	NA	Ohm sai diagnostic centre	09-02-2018	23-12-2021	1412	1,41,200	0	1,41,200
	NA	Vimal disgnostic centre	09-03-2018	31-08-2020	905	90,500	0	90,500
	NA	shyam ditital X-ray	05-05-2018	23-04-2019	352	35,200	0	35,200
	NA	Balaji Emergency Hospital	21-08-2018	09-09-2019	383	38,300	0	38,300
	NA	Pathology Medlab	20-03-2019	24-06-2019	95	9,500	0	9,500
	NA		05-07-2020	23-08-2020	48	4,800	0	4,800
	NA	Sushila devi memorial hospital	03-05-2019	01-06-2021	759	75,900	0	75,900
	NA	Aashirvaad seva sadan	08-10-2019	31-12-2020	449	44,900	0	44,900
	NA		10-01-2022	23-12-2022	346	34,600	0	34,600
	NA	Bone Care Fracture Orthopedic Centre	31-10-2019	23-01-2020	83	8,300	0	8,300
	NA		02-02-2021	28-02-2021	25	2,500	0	2,500
	NA	Oral dental Clinic	16-11-2019	10-06-2021	571	57,100	0	57,100
	NA	Remedy hospital	07-03-2020	23-02-2021	352	35,200	0	35,200
	NA	Prince Multi specialist Clinic & Hospital	17-06-2020	10-03-2021	265	26,500	0	26,500
	NA	Indu memorial Hospital	18-08-2020	24-11-2021	462	46,200	0	46,200

Name of District	Registration No.	Name of Nursing Home /Pathology Centre	Validity of Registration up to	Date of Receiving Application	Total delay (in days)	Total Penalty Amount to be imposed	Penalty Amount Received	Penalty Amount to be recovered
	NA	New Surya clinic	21-08-2020	02-11-2020	72	7,200	0	7,200
			24-11-2021	26-12-2021	31	3,100	0	3,100
	NA	Patho lab	27-12-2020	09-01-2021	12	1,200	0	1,200
	NA	Aadya Sarvya Drishti Eye Hospital	27-12-2020	09-06-2021	163	16,300	0	16,300
	NA	pathology diagnostic	19-02-2021	20-06-2021	120	12,000	0	12,000
	NA	Life care Janch Ghar	24-02-2021	23-04-2021	57	5,700	0	5,700
	NA	Anand Patho diagnostic	15-06-2021	29-06-2021	13	1,300	0	1,300
Total					**71,826**	**71,82,600**	**0**	**71,82,600**
Grand Total								**84,84,390**

*(Source: Records of CS-cum-CMOs of the test-checked districts) *NA: Not Available*

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