

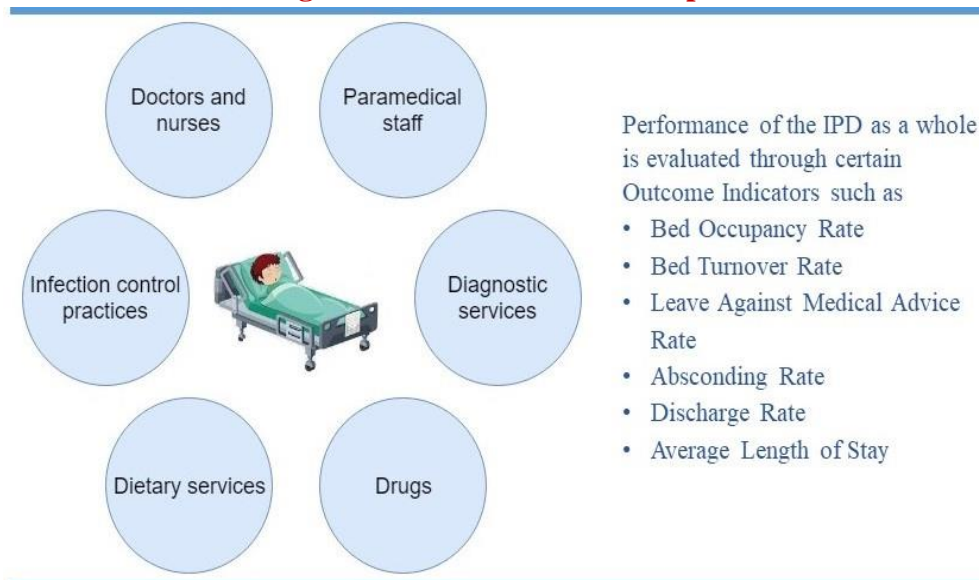
Chapter-4

In-Patient Services

4 In-Patient Services

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

Figure 4: IPD services in a hospital



While availability of doctors, nurses, essential drugs/equipment, dietary services and patient safety along with performance evaluation are included in this chapter, diagnostic services and drug management are discussed in Chapters 3 and 7 respectively. Similarly, the results of audit scrutiny of infection control practices in the test-checked hospitals are discussed in Chapter 6. Also, Maternity services in DWHs have been commented upon in Chapter 5. The following paragraphs discuss the in-patient services of eleven DHs (including two JHs) and 22 CHCs test-checked in audit.

4.1. Availability of in-patient services

As per NHM Assessor's Guidebook, a DH should provide specialist in-patient services pertaining to General Medicine, General Surgery, Ophthalmology, Orthopaedics, *etc.* Audit observed that the required services were, however, not available in the test-checked DHs as shown in **Table 12**.

Table 12: In-patient services in District Hospitals

Hospital	Act	Bur	Dia	GM	GS	Oph	Orth	Phy	Psy
DH Agra	No	No	No	Yes	Yes	Yes	Yes	Yes	No
DH Allahabad	No	No	No	Yes	Yes	Yes	Yes	No	No
DH Balrampur	No	No	No	Yes	Yes	Yes	Yes	No	No
DH Banda	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
DH Budaun	No	Yes	No	Yes	Yes	Yes	Yes	No	No

Hospital	Act	Bur	Dia	GM	GS	Oph	Orth	Phy	Psy
DH Gorakhpur	No	Yes	No	Yes	Yes	Yes	Yes	No	No
DH Lucknow	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DH Saharanpur	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
DH-II Allahabad	No	No	Yes	Yes	Yes	Yes	Yes	No	No
JH Balrampur	No	No	No	Yes	Yes	Yes	Yes	No	No
JH Lucknow	No	No	No	Yes	Yes	Yes	Yes	Yes	No

*Act: Accident and trauma ward, Bur: Burn ward, Dia: Dialysis, GM: General medicine, GS: General surgery, Oph: Ophthalmology, Orth: Orthopedics, Phy: Physiotherapy, Psy: Psychiatry

(Source: Test-checked hospitals, 2017-18)

Thus, while General medicine, General surgery, Ophthalmology and Orthopaedic services were available in all the test-checked DHs, Accident and trauma ward, Burn ward, Dialysis, Physiotherapy and Psychiatry indoor services were available in less than half of the test-checked DHs/JHs.

The Government replied (May 2019) that the Department was implementing Basic Minimum Module to ensure availability of essential medical care specialisation. Further, the District Mental Health Program was running in 45 districts and in these districts, provision of psychiatry indoor facility is available, while there were 31 trauma centres, 29 plastic and burn units, and 30 dialysis units functioning in the State.

The fact, however, remains that the in-patient services as mentioned in the audit observation were not available in the test-checked hospitals.

Table 13: In-patient services in CHCs

Sl. No	In patient service	CHCs with service available (total test-checked 22)
1	General medicine	18
2	Paediatric services	10
3	Maternal health	22

(Source: Test-checked CHCs, 2017-18)

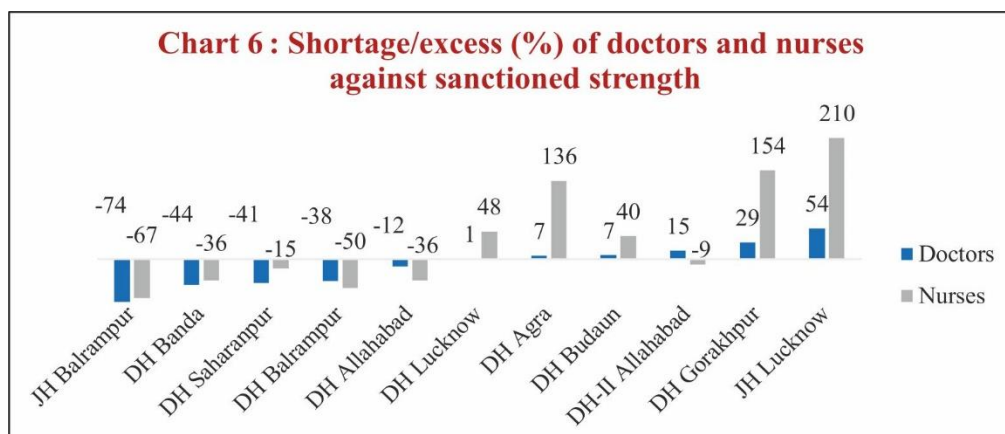
Similarly, as seen from **Table 13**, 12 out of the 22 test-checked CHCs did not have a paediatrician available for providing specialised child healthcare related services, which was inconsistent with the norms stipulated in the NHM Assessor's Guidebook

The Government admitted that due to shortage of specialists, all specialised services could not be ensured at the CHC level.

4.2. Availability of human resources

4.2.1. Doctors and nurses

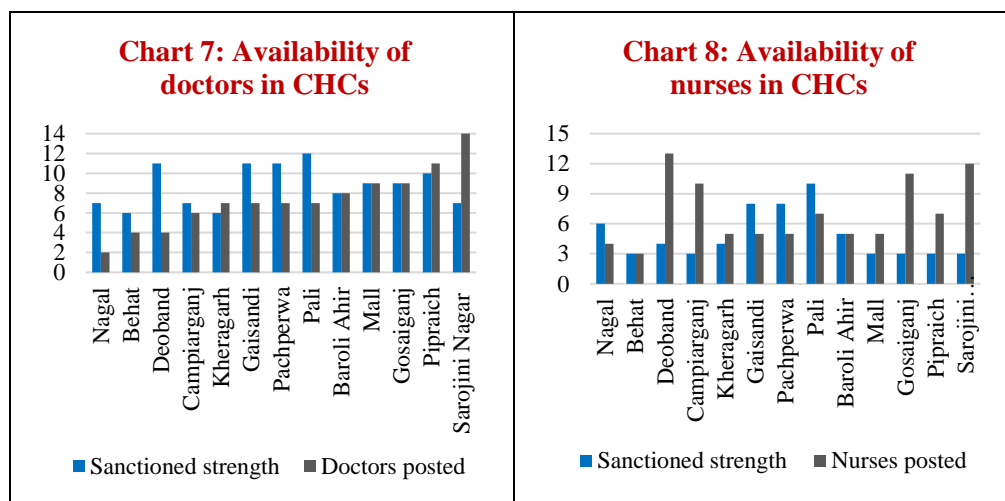
IPHS envisage that doctors and nurses should be available round the clock in IPD to provide due medical care to the in-patients. The availability of doctors and nurses in test checked hospitals/CHCs are detailed in **Appendix-V**. During 2017-18, there was shortage/excess availability of doctors and nurses in the DHs, as shown in **Chart 6**.



(Source: Test-checked hospitals, 2017-18)

Thus, asymmetric distribution of doctors in the test-checked hospitals was noticed with 54 per cent excess doctors in JH Lucknow and a 74 per cent shortfall of doctors in JH Balrampur vis-à-vis the sanctioned strength. Similarly, the deployment of nurses across the hospitals vis-à-vis the sanctioned strength suffered from unevenness with a maximum shortage of 67 per cent in JH Balrampur and an excess of 210 per cent in JH Lucknow.

In respect of CHCs too, significant variation in the deployment of doctors and nurses vis-à-vis the sanctioned strength was observed, as shown below for the 12 test-checked CHCs having 30 sanctioned and functional beds each.



(Source: Test-checked CHCs, 2017-18)

The Government replied that deployment of doctors was made as per the case load and in view of the audit observation, the deployment of doctors would be further rationalised. Audit, however, observed that no documents were available on record regarding deployment of doctors as per the case load in the test-checked hospitals. Further, the Department has also not modified the sanctioned strength of doctors vis-à-vis the case load. In respect of nurses, it was stated that the Department had engaged nurses on contractual basis to reduce the vacancy and the deployment of nurses would be reworked and rationalised, if required.

4.2.2. Rosters for doctors and nurses

To ascertain the availability of doctors for providing various indoor health care services in IPD, Audit requisitioned the roster of doctors but none of the hospitals furnished the same. In the absence of the doctors' roster, Audit could not ascertain the availability of doctors for the IPD.

The Government replied that doctors were always available 'on call' in IPD and instructions would be issued to ensure the availability of doctors in IPD as per the requirement.

The reply is not acceptable, as the General Duty doctor was required to be available in the IPD all the time³¹.

Further, Audit observed that the test-checked DHs maintained the roster of duty in IPD for nurses, except by the DHs detailed in **Table 14**.

Table 14: Shift-wise non-availability of roster for nurses in IPD in DHs/JHs

Shift	2013-14 (May-2013)	2014-15 (Aug-2014)	2015-16 (Nov-2015)	2016-17 (Feb-2017)	2017-18 (May-2017)
Shift-1 (8 am to 2 pm)	5 (Balrampur, Budaun, Gorakhpur, Saharanpur, JH Balrampur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)
Shift-2 (2 pm to 8 pm)	5 (Balrampur, Budaun, Gorakhpur, Saharanpur, JH Balrampur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)
Shift-3 (8 pm to 8 am)	5 (Balrampur, Budaun, Gorakhpur, Saharanpur, JH Balrampur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	4 (Balrampur, Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)	3 (Budaun, Gorakhpur, Saharanpur)

(Source: Test-checked hospitals)

Thus, lack of maintenance of roster of duty for nurses in IPD indicated *ad hocism* in the system of patient care in the concerned test-checked hospitals.

Further, Nursing Council of India (NCI) recommends one nurse per six beds in the general ward of a DH. The details of 8 test-checked DHs where rosters for duty of nurses in IPD were maintained in 2017-18, are given in **Table 15**.

Table 15: Beds against one nurse in IPD in DHs/JHs (2017-18)

Shift	DH Agra	DH Allahabad	DH-II Allahabad	DH Balrampur	JH Balrampur	DH Banda	DH Lucknow	JH Lucknow
Shift-I	21	13	12	25	25	6	15	20
Shift-II	43	38	20	37	25	10	15	25
Shift-III	43	25	20	37	25	10	15	25

(Source: Test-checked hospitals)

³¹ Assessor's Guidebook for Quality Assurance in District Hospitals

Thus, except for Shift-I in DH Banda, none of the test-checked hospitals complied with the NCI norms in respect of nursing care.

Further, in the 22 test-checked CHCs, the number of nurses in Shifts-II and III were either one or two for the entire IPD, thus one nurse was available for 15 to 30 beds except in CHC Kamasin (04-bedded) in Banda, CHCs Meja, Handia and Baharia in Allahabad (number of functional beds ranged between 11 to 20) and CHCs – Samrer and Asafpur in Budaun (number of functional beds were 10 in each CHC).

The Government replied that nurses had also been engaged on contractual basis and the deployment of nurses would be reworked and rationalised.

The fact remains that the sub-optimal nurse to bed ratio in all the test-checked DHs and CHCs would have adversely affected the quality of nursing care in these hospitals.

4.2.3. Para-medical staff

The paramedical staff was responsible for implementation and management of the prescribed treatment plan and to deal with the patients in emergent medical situations. Audit observed that there was shortage/excess of para-medical staff in the test-checked DHs/CHCs³², as shown in **Table 16**.

Table 16: Details of availability of para-medical staff

DHs with shortage of para-medical noticed against the sanctioned strength (in per cent)	DHs with excess para-medical staff posted against sanctioned strength (in per cent)
Allahabad (7), Balrampur (20), JH Balrampur (26) and Banda (45)	Saharanpur (9), Lucknow (41), DH-II Allahabad (64), Gorakhpur (75), Agra (184), JH Lucknow (356)
CHCs with shortage of staff para-medical staff noticed against the sanctioned strength (in per cent)	CHCs with excess para-medical staff posted against sanctioned strength (in per cent)
11 to 22 per cent in Gaisandi and Pachperwa, Balrampur; Naraini, Banda; Campiarganj, Pali and Pipraich, Gorakhpur; Gosaiganj and Sarojini Nagar, Lucknow; Nagal, Saharanpur; Meja and Baharia, Allahabad 60 per cent in Jaitpur Kalan, Agra	Mall (14), Lucknow; Deoband (38), Saharanpur; and Baroli Ahir (100), Agra

(Source: Test-checked hospitals/CHCs)

Thus, it was observed that maximum shortage and excess of para-medical staff *vis-à-vis* the sanctioned strength ranged between 45 per cent in DH Banda and 356 per cent in JH Lucknow, respectively, underscoring the inequitable deployment of para-medical staff, who share with physicians, the direct responsibility of patient care.

The Government stated that the vacancies of para-medical staff are being filled up through regular as well as contractual engagements and recruitments and their deployment would be reworked and rationalised.

³² DH Budaun and CHCs Asafpur, Samrer and Sahaswan, Budaun; and Behat, Saharanpur did not furnish to audit the sanctioned strength of para-medical staff.

4.3. Availability of essential drugs and equipment

To ascertain the availability of essential drugs in the IPD, Audit examined availability of 14 types of essential drugs³³ prescribed in the NHM Assessor's Guidebook during the sampled months, as shown in **Table 17**.

Table 17: Availability of essential drugs in DHs

Hospital ³⁴	Number of drugs available out of the 14 test-checked drugs				
	May-2013	Aug-2014	Nov-2015	Feb-2017	May-2017
DH Agra	9	9	9	9	9
DH Allahabad	10	10	10	10	10
DH Budaun	10	10	10	10	10
DH Balrampur	5	4	7	9	7
DH Banda	11	8	10	11	11
DH Gorakhpur	7	10	8	8	8
DH Lucknow	12	12	12	12	12
JH Lucknow	6	3	7	11	11
DH Saharanpur	10	12	11	11	12
DH-II Allahabad	11	11	11	11	11

(Source: Test-checked hospitals)

Thus, non-availability of the essentials drugs such as Adrenaline (used in emergencies to treat very serious allergic reactions to improve breathing, stimulate the heart, raise a dropping blood pressure, *etc.*), Diclofenac Sodium (used to relieve pain, inflammation and joint stiffness), Salbutamol (used to treat asthma, chronic bronchitis, and to prevent exercise-related asthma) *etc.* in the IPD of the test-checked DHs indicated that either the quality of treatment was compromised or the patients were compelled to buy these drugs from outside.

According to NHM Assessor's Guidebook, DHs are required to ensure the availability of equipment and instruments for examination and monitoring of patients. However, Audit observed that during 2017-18, out of the sampled 19 essential equipment³⁵, DH Balrampur had 9 equipment while DHs Agra and Allahabad had 11 each. The rest of the 08 DHs had 14 to 17 equipment available. Further, none of the test-checked DHs executed an Annual Maintenance Contract for IPD equipment.

Thus, important equipment such as Crash-cart (used for transportation and dispensing of drugs and consumables on site) in DHs Agra, Allahabad, Balrampur and DH-II Allahabad; Defibrillator (used in cardiac arrest) in DHs Agra, Balrampur and Budaun; Doppler (estimation of blood flow) in 07 DHs; and Glucometer (estimation of blood sugar) in DH Balrampur, were not available.

³³ Activated Charcoal, Adrenaline, Aminophylline, Antiserum Polyvalent Snake Venom, Atropine sulphate, Dextrose, Dextrose with normal saline, Diclofenac Sodium, Digoxin, Metoclopramide, Ringer Lactate, Salbutamol, Sodium Chloride and Vitamin K (Phytomenadione)

³⁴ JH Balrampur did not maintain the relevant records.

³⁵ Adult Bag and Mask, AED, Baby Bag and Mask, BP Apparatus, Crash-cart, Defibrillator, Doppler, Dressing kit, Dressing material, Dressing trolley, ET Tubes, Foetoscope, Glucometer, Laryngoscope, Oxygen flow meter, Suction machine, Thermometer, Weighing scale for adult and Weighing scale for baby.

The Government responded that the availability of essential drugs and equipment in IPD would be ensured according to the required norms.

4.4. Operation Theatre services

Operation Theatre (OT) is an essential service that is to be provided to the patients. IPHS guidelines prescribe OTs for elective major surgery, emergency services and ophthalmology/ENT (ear, nose and throat) for district hospitals having bed strength of 101 to 500. Availability of OTs required for various services was as shown in **Table 18**.

Table 18: Availability of OTs in DHs (2017-18)

Hospital ³⁶	OT for elective major surgeries	OT for emergency surgeries	OT for ophthalmology/ENT
DH Agra	Yes	No	Yes
DH Allahabad	Yes	No	Yes
DH Balrampur	Yes	No ³⁷	Yes
DH Banda	Yes ³⁸	Yes	Yes
DH Budaun	Yes	Yes	Yes
DH Gorakhpur	Yes	Yes	Yes
DH Lucknow	Yes	Yes	Yes
DH Saharanpur	Yes	Yes	Yes
DH-II Allahabad	Yes	No	Yes
JH Balrampur	Yes	No	Yes
JH Lucknow	Yes	Yes	Yes

(Source: Test-checked hospitals)

Further, Audit observed that Minor OT was not available in 09 CHCs³⁹ out of the 22 test-checked. This in effect would have denied patients from receiving even minor surgical operations as part of the treatment process, thereby driving them in the direction of private clinics, or referral to DHs which would have further increased the strain on the resources of DHs.

The Government in its response stated that the matter would be examined and necessary directions would be issued to activate emergency surgery services in the district hospitals and CHCs.

As per NHM Assessor's Guidebook, surgeries performed per surgeon is an indicator to measure efficiency of the hospitals. Analysis of the records of surgeries conducted on the basis of a sample of the last quarter of 2017-18 in the test-checked DHs, indicated substantial variation in the number of major and minor surgeries per surgeon in the test-checked hospitals as shown in **Table 19**.

³⁶ DH and JH Balrampur have less than 100 beds.

³⁷ Minor OT is available.

³⁸ Due to non-availability of a surgeon, the OT services were not functional since December 2017

³⁹ CHCs – Baroli Ahir, Jaitpur Kalan and Kheragarh in Agra, Asafpur, Sahaswan and Samrer in Budaun, Campiarganj, Pali and Pipraich in Gorakhpur

Table 19: Major and minor surgeries per surgeon

Hospital	Major surgeries performed per surgeon			Minor surgeries performed per surgeon			Eye surgeries ⁴⁰ performed per surgeon
	General	ENT	Ortho	General	ENT	Ortho	
DH Agra	43	29	9	56	57	53	717
DH Allahabad	95	5	29	25	9	9	234
DH-II Allahabad	151	28	64	19	5	13	247
DH Balrampur	8	NA	0	19	NA	5	8
JH Balrampur	14	NA	0	37	NA	2	217
DH Banda	6	17	NA	0	11	NA	72
DH Budaun	8	4	33	2	30	8	201
DH Gorakhpur	95	13	37	23	8	82	177
DH Lucknow	64	43	35	17	9	13	264
JH Lucknow	54	30	57	14	23	11	13
DH Saharanpur	74	17	39	36	22	20	310

(Source: Test-checked hospitals for 4th quarter, 2017-18)

As evident from the above table, DH and JH Balrampur, DH Banda and DH Budaun had considerably less number of major general surgeries performed per surgeon as compared to rest of the DHs. No major orthopaedic surgeries were conducted in DH and JH Balrampur. Further, ENT surgeries in DH and JH Balrampur, and orthopaedic surgeries in DH Banda were not carried out due to non-availability of surgeons.

Thus, the non-availability of surgeon and/or less number of major surgeries performed indicate that patients could have been deprived of treatment in DH and JH Balrampur, DH Banda and DH Budaun.

4.4.1. Availability of equipment and drugs for OTs

Audit checked availability of 23 types of drugs⁴¹ and 29 essential equipment as prescribed in NHM Assessor's Guidebook during 2017-18 for OTs in the 11 test-checked hospitals and observed significant shortages, as shown in Table 20.

Table 20: Availability of essential drugs and equipment in OTs

Hospital	Essential drugs (in per cent)	Essential equipment (in per cent)
DH Agra	43	45
DH Allahabad	52	41
DH Balrampur	39	66
DH Banda	74	42
DH Budaun	39	48
DH Gorakhpur	26	45
DH Lucknow	61	27
DH Saharanpur	70	59
DH-II Allahabad	35	45
JH Balrampur	NA	52
JH Lucknow	57	45

(Source: Test-checked hospitals)

⁴⁰ Number of cataract surgeries

⁴¹ Inj Oxytocin, Inj. Ampicillin, Inj. Metronidazole, Gentamycin, Inj. Diclofenac Sodium, IV fluids, Ringer lactate, Plasma expander, Normal saline, Inj Magsulf, Inj Calcium gluconate, Inj Dexamethasone, Inj Hydrocortisone Succinate, Diazepam, Pheneramine maleate, Inj Corboprost, Fortwin, Inj Phenergen, Betameathazon, Inj Hydrazaline, Methyl dopa, Nefidepin and Ceftriaxone

As evident from the table given above, the essential drugs and equipment in OT were short in respect of all hospitals. Significant shortage in terms of equipment and drugs was observed in 08 and 05 hospitals respectively. Thus, the resources available for OTs in the test-checked hospitals were insufficient, implying that quality of surgical treatment would have been adversely affected in these test-checked hospitals.

The Government stated that the availability of drugs and equipment would be ensured according to the required norms.

4.4.2. Documentation of OT procedures

NHM Assessor's Guidebook prescribes that surgical safety checklist, pre-surgery evaluation records and post-operative evaluation records for OTs should be prepared for each case. The availability of required records in the 11 test-checked DHs during 2013-18 was as detailed in **Table 21**.

Table 21: Documentation of OT procedures

Hospital	Surgical safety checklist	Pre-surgery evaluation records	Post-operative evaluation records
DH Allahabad	Partially maintained in 2015-18		
Other 10 test-checked DHs	Not maintained		

(Source: Test-checked hospitals)

In the absence of surgical safety checklist, pre-surgery evaluation records and post-operative evaluation records for OTs, it was not ascertainable whether safety procedures in OTs were adhered to in the test-checked DHs.

The Government stated that instructions would be issued to hospitals to prepare required records and follow all safety procedures in OTs.

4.5. Intensive Care Unit services

Intensive Care Unit (ICU) is essential for critically ill patients requiring highly skilled life-saving medical aid and nursing care. These include major surgical and medical cases such as head injuries, severe haemorrhage, poisoning *etc.*

4.5.1. Availability of ICU services

Intensive care services in a District Hospital are essential for providing minimum assured services as per the IPHS for DHs having more than 100 beds.

Audit observed that only DH Lucknow and Gorakhpur had an ICU. Thus, in the absence of ICU facility, patients approaching district hospitals despite being in an emergent condition were likely to be referred and/or passed on to higher facility public or private hospitals.

The Government stated that ICU services would be provided after conducting a gap analysis.

4.5.1.1. Discrepancies in available intensive care services

- As per IPHS, the number of ICU beds should be 05 to 10 *per cent* of the available number of beds in the hospital. Audit observed that only two *per*

cent beds in DH Lucknow⁴² and three per cent of the beds in DH Gorakhpur were earmarked for ICU.

- ICU is required to be equipped with essential equipment, viz., High-end Monitor, Ventilator, Defibrillator, Ultrasound for invasive procedures, etc. as per NHM Assessor's Guidebook. Audit observed that only six High-end Monitors were available against the requirement of 14, seven Infusion pumps were available against the requirement of 14, while Ventilators, Ultrasound for invasive procedures and Arterial Blood Gas (ABG) analysis machine were not available at all in DH Lucknow. Similarly, in DH Gorakhpur, there were no Ventilators, Infusion Pumps, Ultrasound for invasive procedures and ABG analysis machine.
- Out of the 14 essential drugs for an ICU as prescribed in NHM Assessor's Guidebook, Audit observed that during 2017-18, two drugs (Activated Charcoal and Antiserum Polyvalent Snake Venom) were not available in DH Lucknow, while DH Gorakhpur did not have six⁴³ drugs.
- As per the norms of the Indian Nursing Council, one nurse is required for each bed in ICU. In DH Lucknow, it was observed that the bed to nurse ratio in Shift-I was 3.5:1 and in Shifts-II and III it was 7:1, indicating significant shortfall in the requisite level of care in ICU. DH Gorakhpur did not furnish specific information in this respect.
- IPHS prescribe that a hospital building should be well maintained with no seepage or cracks in the walls of ICU to preclude infection amongst patients/ attendants/ visitors and hospital staff. In DH Lucknow, during joint physical inspection, heavy seepage in the walls of the ICU was noticed as depicted alongside.



Heavy seepage in the ICU, DH Lucknow
(25.09.2018)

The Government replied that the issues would be examined and instructions would be issued to hospitals to take necessary corrective action.

4.6. Emergency services

4.6.1. Availability of emergency services

As per IPHS, emergency OT is required to be available in each DH but as discussed previously, it was not available in DH Agra, DH and DH-II Allahabad, DH and JH Balrampur out of the 11 test-checked DHs. Audit also observed that accident and trauma care services were available in only DH Banda and Saharanpur.

⁴² In DH Lucknow, the ICU catered only to cardiac patients.

⁴³ Activated Charcoal, Salbutamol, Ringer Lactate, Digoxin, Vitamin K (Phytomenadione) and Antiserum Polyvalent Snake Venom

Further, none of the 22 test-checked CHCs attended to all types of emergency care services, except for snake bite and other cases not requiring diagnostic services. For other emergencies, such as cardiac arrest and severe pneumonia *etc.*, CHCs effectively served only as referral centres.

The Government replied that proper emergency services would be ensured in all CHCs.

4.6.2. Accident and trauma care services

Government of Uttar Pradesh sanctioned equipment and human resources as per norms fixed in July 2015 in order to operationalise Trauma Centres in the district hospitals.

Audit observed the following in DHs Banda and Saharanpur, wherein Trauma Centres were functioning:

- In DH Banda, due to non-availability of surgeon, surgery services in the Trauma Centre were not available since December 2017 and patients were referred to higher facilities after providing primary treatment.
- In DHs Banda and Saharanpur, 52 *per cent* and 43 *per cent* of Trauma Centre related equipment, such as X-ray machine, Portable USG, Anaesthesia machine, ABG analysis machine and Defibrillator, respectively were not available and the required human resources were also not deployed.

Thus, non-availability of vital equipment jeopardized the quality of medical care administered to the patients in the Trauma Centres in DH Banda and DH Saharanpur.

The Government replied that deployment of a surgeon would be made at the earliest and essential equipment made available to the concerned DHs as per available resources.

4.6.3. Triage of patients and average turn-around time

Only a limited number of patients admitted in the emergency have life endangering, medically urgent conditions demanding to be identified and given treatment on priority. NHM Assessor's Guidebook prescribes standard treatment protocol for triaging⁴⁴ of patients getting admitted in an emergency department. However, there was no evidence of triaging being done during 2013-18 in the test-checked hospitals/CHCs. Further, Audit could not ascertain the average turn-around time of the patients admitted in the emergency department due to non-maintenance of relevant records.

Thus, assurance could not be drawn regarding efficacy of the emergency services in terms of classification of patients according to the criticality of their condition and the turnaround time.

⁴⁴ The process of sorting people based on their need for immediate medical treatment as compared to their chance of benefiting from such care.

The Government replied that triaging was done in emergency and instructions would be issued to document the procedure. However, lack of proper records not only limits the ability of audit to provide assurance in this regard but also impairs the ability of the hospitals to monitor and improve emergency services.

4.6.4. Continuity of care during emergency

As per NHM Assessor's Guidebook, hospitals were required to ensure referral services for transfer to other/higher health facilities during emergencies to ensure continuity of care of the patients.

Audit observed that none of the 11 test-checked DHs except DH Allahabad had a system of preparation of referral cards for patients to be referred.

The Government in its response stated that necessary instructions would be issued to all DHs/CHCs to ensure referral linkages and to prepare referral cards.

4.7. Dietary services

IPHS envisage dietary service as an important therapeutic tool. It is, therefore, essential that the quality and quantity of the diet should be of the requisite standard. The Government Order (2011) prescribes six types of diet⁴⁵ for in-patients, to be provided free of cost as per the advice of the doctor.

Scrutiny of records, however, revealed that during 2017-18, the patients were provided six types of diet in DHs Lucknow and Saharanpur, four types in DH Banda and DWH Lucknow, three types in DH Agra and two types in DH Budaun and DH-II Allahabad, while in the rest 12 hospitals and 19 CHCs⁴⁶ test-checked, the patients were not provided different diets. Non-provision of the six types of diet indicated that the distinctive dietary requirements of the different categories of patients were ignored in the concerned test-checked hospitals.

Positive feature

District hospitals Lucknow and Saharanpur provided all six types of prescribed diets to the in-patients.

The dietary services provided are documented through a Diet Register which records the diets distributed to the patients in the hospital. Audit, however, observed that Diet Registers were not maintained in DH Banda for 2013-16, DWH Gorakhpur for 2013-17 and JH Balrampur for 2013-18 out of the 19 hospitals test-checked. Similarly, Diet Registers were not maintained in 07 to 09 CHCs⁴⁷ out of the test-checked 19 CHCs during 2013-18.

⁴⁵ Full milk diet, half milk diet, full *atta* diet, half *atta* diet, full *khichdi* diet, and half *khichdi* diet.

⁴⁶ CHCs Baharia, Handia and Meja, Allahabad did not furnish records to audit.

⁴⁷ Jaitpur Kalan in Agra for 2013-18, Asafpur in Budaun for 2013-18, Gaisandi for 2013-18 and Pachperwa for 2013-17 in Balrampur, Naraini for 2013-16 and Kamasin for 2013-15 in Banda, Campiarganj, Pali and Pipraich in Gorakhpur for 2013-18.

Thus, in the absence of Diet Registers, Audit could not derive an assurance whether diet was provided to in-patients during 2013-18 in the above mentioned hospitals/CHCs.

Further, scrutiny in audit revealed that during 2017-18, the dietary services were provided through in-house arrangement in 12 test-checked hospitals and outsourced in 07 hospitals⁴⁸.

Audit compared the expenditure on in-house diet services in five test checked hospitals, which revealed substantial variation ranging between ₹ 29 to ₹ 102 per patient per day. Similarly, in respect of outsourced dietary services, per patient per day expenditure varied between ₹ 71 and ₹ 100 in six test-checked hospitals. The remaining 08 hospitals⁴⁹ did not provide the related information.

None of the test-checked hospitals/CHCs had a system of quality testing of the diet provided to the in-patients during 2013-18, except for DH Gorakhpur and JH Lucknow during 2013-18, DH Banda during 2017-18 and CHC Pipraich, Gorakhpur during 2016-18. Resultantly, Audit could not derive an assurance regarding the quality of the diet provided in the test-checked hospitals/CHCs.

The Government replied that the matter would be examined and accordingly necessary directions would be issued to the hospitals/CHCs.

4.8. Patient safety

4.8.1. Disaster management capability of hospitals

Standard Operating Procedures of the Emergency Support Function-Public Health & Sanitation of GoUP⁵⁰, 2010 (SOP-ESF) require that a Disaster Management Plan (DMP) be developed for each hospital to trigger mechanism of preparedness in case of signal of a disaster in the hospital and also organise disaster management training for hospital staff and conduct periodic mock drills in the hospitals. Further, NHM Assessor's Guidebook envisages that in each hospital, SOPs should be available and a disaster management committee should be constituted.

Audit, however, observed that out of the 19 test-checked hospitals, only DH Gorakhpur and DWH Allahabad⁵¹ had prepared DMP. Both DH Gorakhpur⁵² and DWH Allahabad had formed a Disaster Management Committee as well. SOPs for disaster and mass casualty management were available in DWH Allahabad, DH and DWH Banda and DH Gorakhpur. On the other hand, none of the 22 test-checked CHCs had prepared the DMP or SOPs for disaster management.

Positive feature

District hospitals Allahabad and Gorakhpur had Disaster Management Committee and also prepared Disaster Management Plan.

⁴⁸ JH Balrampur, DWHs Agra, Banda, Budaun and Gorakhpur. In DH and DWH Saharanpur, the services were outsourced but the preparation was done in the in-house kitchen.

⁴⁹ DH and DH-II Allahabad, DH, DWH and JH Balrampur, DH and DWH Banda and DH Budaun

⁵⁰ The High Powered Committee on Disaster Management, 2001 of GoUP identified 14 emergency support functions.

⁵¹ This was reported to Audit by DWH Allahabad but no supporting documents were available.

⁵² DH Gorakhpur formed the Committee in January 2018.

Further scrutiny revealed that only DH Banda, DH Gorakhpur, DH Lucknow, DWH Allahabad and DWH Saharanpur had provided training to staff on disaster management and conducted mock drills⁵³ amongst the test-checked hospitals/CHCs.

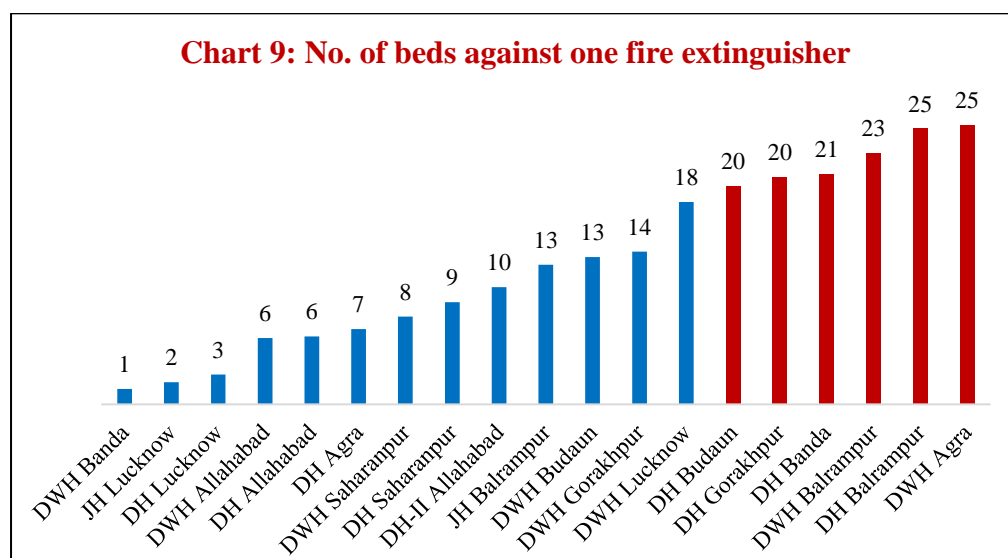
The Government did not give a specific reply regarding the instances of non-compliance of the SOP on Disaster Management pointed out by audit and the remedial action proposed to be taken in this regard.

4.8.2. Safety from fire

Uttar Pradesh Manual of Fire Safety Norms 2005 (UP Fire Norms) prescribe standards in respect of safety from fire for the hospital buildings. Audit, however, observed that in the test-checked 19 hospitals and 22 CHCs, fire safety audit was not conducted during 2013-18.

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

Audit observed that during 2017-18, safety of patients, attendants, visitors and the hospital staff from fire was compromised in 07 CHCs⁵⁴ out of the 22 test-checked, as no fire extinguishers were available in these CHCs. In respect of hospitals, while fire extinguishers⁵⁵ were available in 2017-18 in each hospital, their numbers varied widely, as shown in **Chart 10**.



(Source: Test-checked hospitals)

⁵³ In DH Gorakhpur and DH Lucknow, mock drills were conducted in December 2017 and February 2018, while no supporting documents were provided to Audit in DH Banda, DWH Allahabad and DWH Saharanpur in respect of the mock drills claimed to be conducted.

⁵⁴ CHCs – Baroli Ahir, Jaitpur Kalan and Kheragarh in Agra, Baharia, Handia and Meja in Allahabad and Campiarganj in Gorakhpur.

⁵⁵ In the absence of any benchmark or fire safety audit, number of fire extinguishers available were compared against the total number of beds.

Thus, one fire extinguisher was available against less than five beds in DWH Banda, JH and DH Lucknow, while in DH Balrampur and DWH Agra one fire extinguisher was available against 25 beds.

UP Fire Norms also prescribe for an evacuation plan along with photographs of evacuation routes and staircases for evacuating patients and staff during emergency (disaster incidents) situations. Out of the 19 test-checked hospitals, the evacuation plans and photographs of evacuation routes and staircases were available in DH-II Allahabad,

JH and DWH Lucknow only, while photographs of evacuation routes and staircases were available in DWH Allahabad also. In respect of CHCs, the evacuation plan was available only in CHC Gosaiganj, Lucknow, while the photographs of evacuation routes and staircases were present in CHCs Gosaiganj, Lucknow and Pipraich, Gorakhpur.

The Government replied that fire safety arrangement has been initiated through the State budget from 2017-18, under which presently 28 hospitals and 232 CHCs are being covered in a phased manner.

4.9. Evaluation of in-patient services through Outcome Indicators

The IPD services provided during 2013-18 in the 10 test-checked DHs⁵⁶ were evaluated through certain Outcome Indicators (OIs), viz., Bed Occupancy Rate (BOR), Leave Against Medical Advice (LAMA) Rate, Patient Satisfaction Score (PSS), Average Length of Stay (ALoS), Adverse Event Rate (AER), Completeness of Medical Records, Absconding Rate, Referral Out Rate (ROR), Discharge Rate (DR) and Bed Turnover Rate (BTR). The categorisation and methodology of evaluating these OIs are discussed in **Appendix-VI**. In the absence of information such as date of discharge, patient status, *etc.* being recorded in the IPD register in several hospitals, BHTs⁵⁷ were evaluated for calculating the average outcome for the aforementioned outcome indicators.

Further, Audit observed that 08 out of the 22 test-checked CHCs – Asafpur, Sahaswan and Samrer in Budaun, Gaisandi and Pachperwa in Balrampur, and Campiarganj, Pali and Pipraich in Gorakhpur did not maintain BHTs. Thus, assurance could not be derived by audit with respect to the performance of these CHCs. Besides, in respect of CHCs which were maintaining BHTs, patient status was not recorded on 59 per cent of the sampled BHTs⁵⁸

The form is a yellow document with black text and lines. At the top, it has the hospital name in Hindi and English: 'बलरामपुर चिकित्सालय, लखनऊ (जिला चिकित्सालय) BALRAMPUR HOSPITAL, LUCKNOW'. Below this, there are several sections: 'DOCTOR / SURGEON I/C' with fields for Name, Sign., and Sub. I/C Surgeon; 'Name of the Patient', 'Ward', 'Bed No.', 'Age', 'Religion', 'M/F', 'Marital Status'; 'Name of Father / Husband', 'Permanent Address', 'Village/Mohalla', 'Occupation'; 'Home No.', 'PIS', 'Post', 'District', 'Telephone No.', 'Local Address', 'DIET', 'FAD/HAD/MD'; 'Date & time of admission', 'Provisional Diagnosis', 'Final Diagnosis', 'Operative Procedure', 'Date & time of discharge', 'Signature', 'Result on Discharge - Cured / Relieved / LAMA / Absconded / Expired / Referred to'; 'No. of Days of stay', 'days Bed Charges = Rs.', 'Procedure Charges = Rs.', 'Remarks'; and a table with columns 'Deposit Receipt No.', 'Date', 'Amount', and 'Remarks'. At the bottom, there are signature lines for 'Sig. & Record Keeper', 'Sig. of Sister IC Ward', and 'Signature of Case Incharge'. A footer note in Hindi says 'नोट: सैव्या/सेवा शुल्क जमा करवाने का पालन चम्पित चिकित्सक/सिस्टर IC का है।'

⁵⁶ JH Balrampur has not been included in the findings of outcome indicators on account of inconsistent data.

⁵⁷ All treatment plan prescription/orders are recorded in the patient records known as BHT.

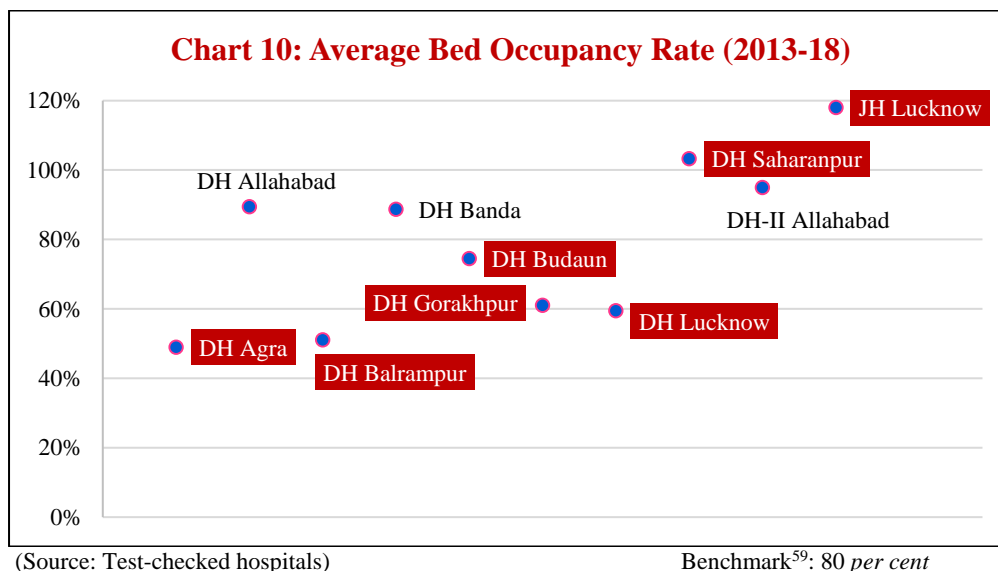
⁵⁸ 1579 BHTs were sampled.

pertaining to 10 CHCs. Thus, Bed Turnover Rates, Discharge Rates and Referral Out Rates could not be evaluated for CHCs.

4.9.1. Evaluating productivity of the hospitals

4.9.1.1. Bed occupancy rate

The Bed Occupancy Rate (BOR) is an indicator of the productivity of the hospital services and is a measure of verifying whether the available infrastructure and processes are adequate for delivery of health services. As per IPHS, the BOR of hospitals should be at least 80 *per cent*.



Thus, the productivity of DHs Agra, Budaun, Balrampur, Gorakhpur and Lucknow was below the norm of 80 *per cent* for the test-checked months. Further, BOR above 100 *per cent* as noticed in DH Saharanpur and JH Lucknow implied strain on resources of the hospital, thus adversely impacting the quality of care provided.

Exaggerated reporting of BOR

Audit observed that DH Lucknow calculated the BOR on the basis of 603 number of beds in place of available 756 beds during 2013-18, resulting in exaggerated reporting of the BOR by 12 to 20 *per cent* during 2013-18. Further, in DH Agra during 2013-18, while the average BOR reported by hospital authorities was more than 80 *per cent*, the corresponding figure in test-check of the records in audit was around 50 *per cent*, thus indicating considerable exaggeration.

BOR in CHCs

Audit observed that in case of the test-checked CHCs, the maintenance of records related to BOR was very poor as only four CHCs Behat, Deoband and Nagal, Saharanpur and Naraini, Banda provided the year-wise information of BOR out of the 22 test-checked CHCs. In the 02 test-checked CHCs in

⁵⁹ As per IPHS

Saharanpur, BOR was in the 40 to 50 *per cent* range and in the 02 CHCs in Balrampur, BOR records were available for 2013-14 only.

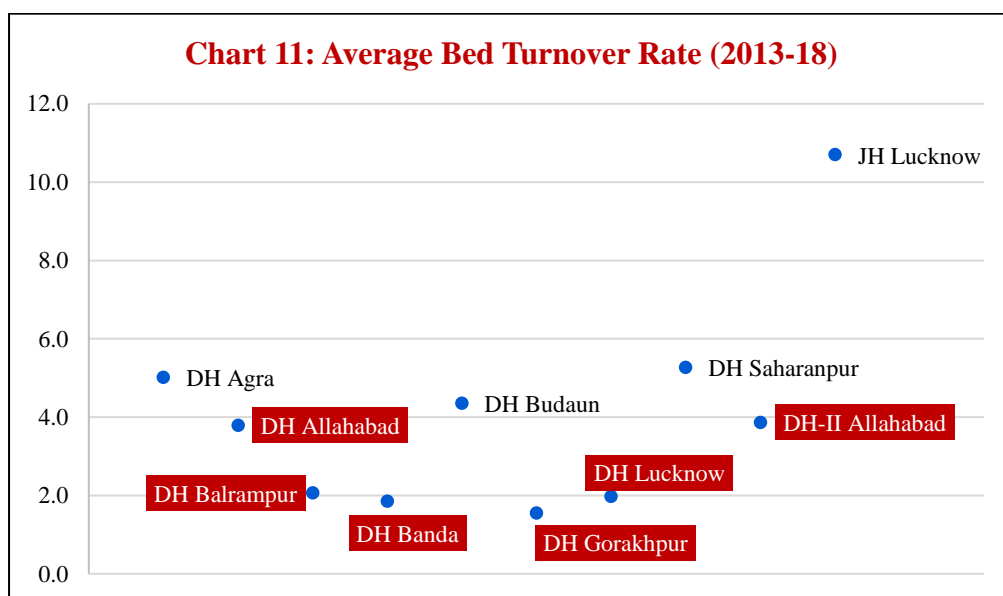
Thus, in the absence of records related to BOR, it was not possible for Audit to derive an assurance regarding the productivity of the test-checked CHCs.

The Government replied that the matter would be examined and instructions issued accordingly.

4.9.2. Evaluating efficiency of the hospitals

4.9.2.1. Bed Turnover Rate

The Bed Turnover Rate (BTR) is the rate of usage of beds in an in-patient department in a given period of time and is a measure of the utilization of the available bed capacity and serves as an indicator of the efficiency of the hospital. High BTR indicates high utilization of the in-patient beds in a department while low BTR could be due to fewer patient admissions or longer duration of stay in the departments.



(Source: Test-checked hospitals)

Benchmark⁶⁰: 4.1

Thus, efficiency of the hospital as indicated by BTR was found on the lower side in DH and DH-II Allahabad, Balrampur, Budaun, Gorakhpur, and Lucknow.

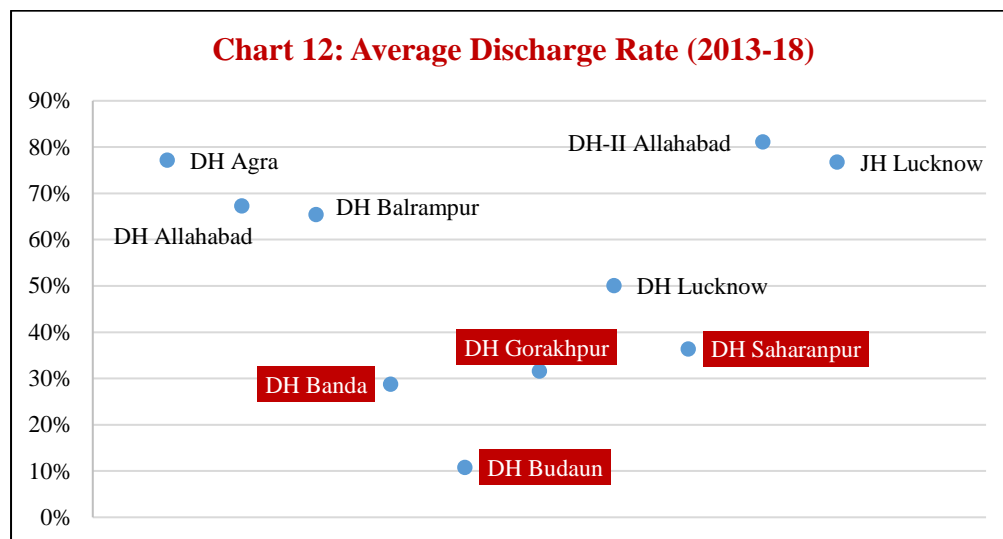
The Government replied that the matter would be examined and instructions issued accordingly.

4.9.2.2. Discharge rate

Discharge rate measures the number of patients leaving a hospital after receiving due health care. High discharge rate denotes that the hospital is providing health care facilities to the patients efficiently, on the other hand low rates of discharge means that the health care facilities were not adequate.

⁶⁰ Weighted average with average annual IPD load as the weight

Scrutiny of the test-checked Bed Head Tickets (BHTs) in 10 hospitals revealed that the discharge rates were as per **Chart 12**:

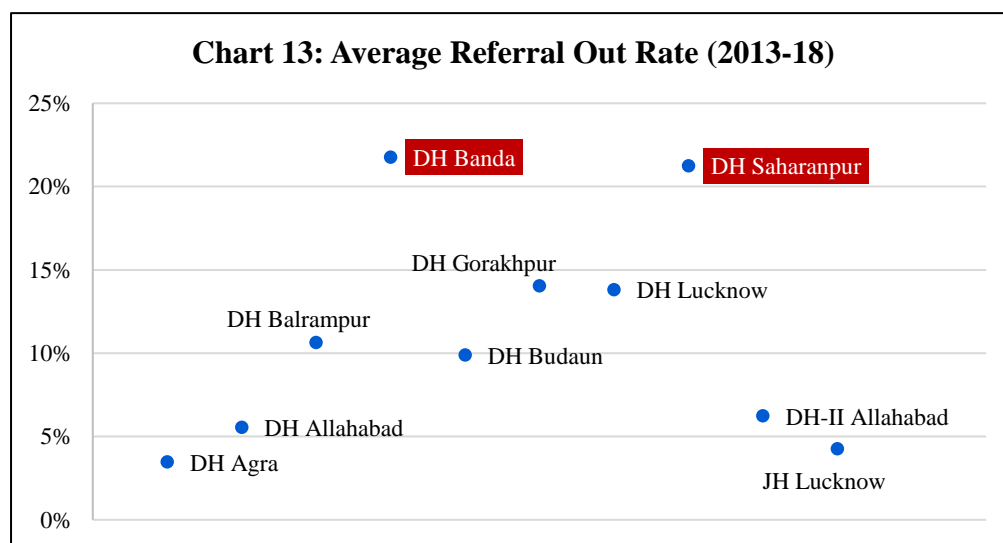


As depicted in the chart 13 above, the lowest discharge rate was in DH Budaun, indicating that this hospital was the most under-performing hospital among the test-checked 10 hospitals. Further, DHs Banda, Gorakhpur and Saharanpur also did not perform well in terms of the discharge rate.

The Government replied that the matter would be examined and instructions issued accordingly.

4.9.2.3. Referral out rate

As per IPHS norms, referral services to higher centres denote that the facilities for treatments were not available in the hospitals. Audit observed that in the 10 test-checked hospitals the Referral Out Rate (ROR) was as per the **Chart 13**.



⁶¹ Weighted average with average annual IPD load as the weight

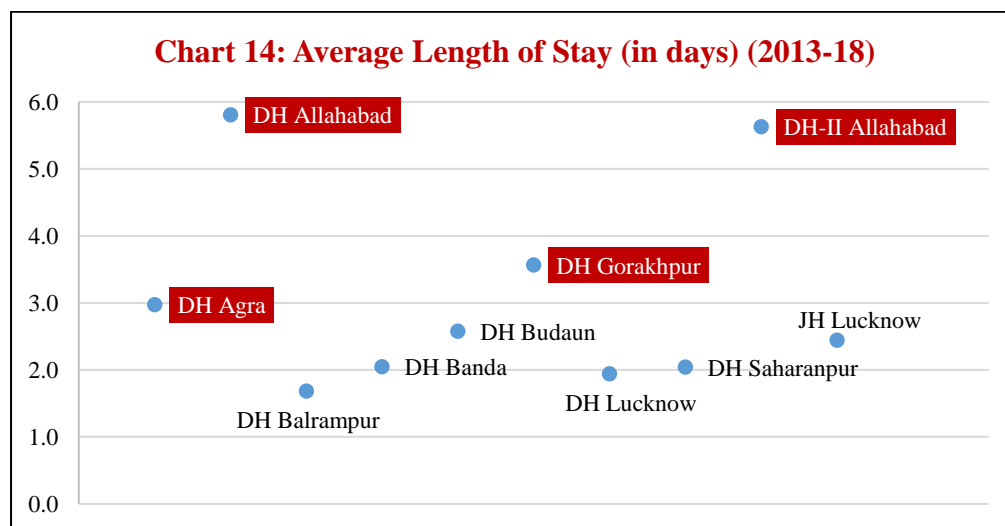
Thus, the highest ROR were in DHs Banda and Saharanpur, indicating that health care facilities were not adequate in these hospitals.

The Government replied that the matter would be examined and instructions issued accordingly.

4.9.3. Evaluating clinical care capability of the hospitals

4.9.3.1. Average Length of Stay

Average Length of Stay (ALoS) is an indicator of clinical care capability and to determine effectiveness of interventions. ALoS is the time between the admission and discharge/death of the patient. The ALoS (in days) in the test-checked hospitals was as depicted in the **Chart 14**.



(Source: Test-checked hospitals)

Benchmark⁶³: 2.6

Chart 15 shows that ALoS was significantly higher for DH and DH-II Allahabad, Agra and Gorakhpur. Further, Audit could determine ALoS for four CHCs only based on the BHTs, which revealed that ALoS ranged approximately one day for CHCs – Jaitpur Kalan, Kheragarh and Baroli Ahir in Agra and two days for CHC Kamasin in Banda. Thus, in the absence of availability of a system within the hospitals/CHCs to regularly monitor outcome parameters like ALoS, the ability of the hospitals/CHCs to evaluate the quality of services delivered and optimise outcomes was affected.

The Government stated that efforts would be made to ensure quality healthcare in the hospitals and CHCs.

4.9.3.2. Adverse Event Rate (AER)

Adverse outcomes with respect to healthcare received are known as adverse events (e.g. wrong drug administration, needle stick injury *etc.*) which should be quickly identified and managed to limit their detrimental effects on the patients/staff. Typology of adverse events can also indicate specific problems in the system.

⁶² Weighted average with average annual IPD load as the weight

⁶³ Weighted average with average annual IPD load as the weight

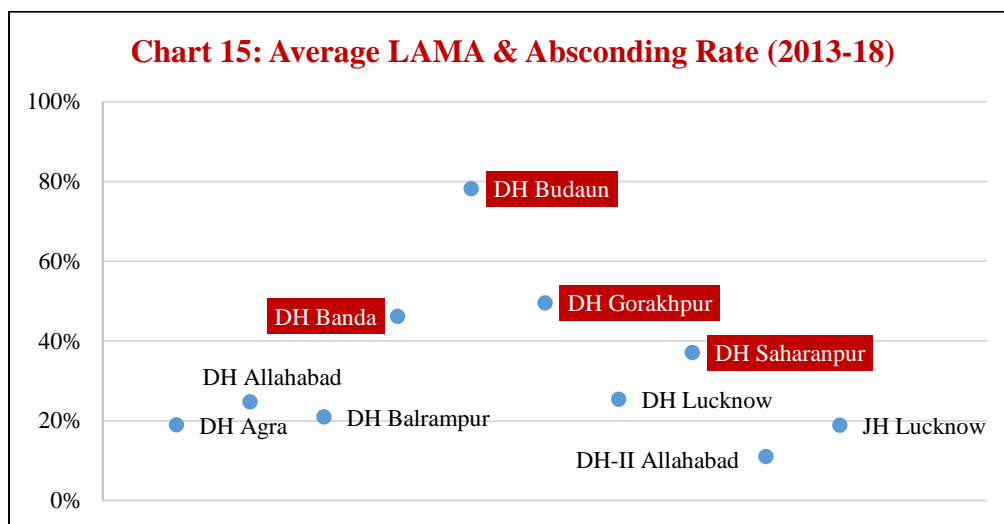
Audit observed that none of the test-checked hospitals maintained records relating to AER except DH Balrampur wherein adverse event cases ranged from 13 to 26 cases during 2013-18 for the sampled months. Thus, non-availability of the adverse event rate impacted the ability of the hospitals to quickly identify and manage the detrimental effects of adverse events.

The Government replied that the matter would be examined and instructions would be issued accordingly.

4.9.4. Evaluating service quality of the hospitals

4.9.4.1. LAMA & Absconding Rate in DHs

To measure service quality of a hospital, Leave against Medical Advice (LAMA) Rate & Absconding Rate are evaluated. LAMA is the term used for a patient who leaves the hospital against the advice of the doctor and Absconding Rate refers to patients who leave the hospital without informing the hospital authorities. Since it was observed that the two terms were used interchangeably in the test-checked hospitals, a combined analysis of both LAMA & Absconding Rate is presented in **Chart 15**.



(Source: Test-checked hospitals)

Thus, the LAMA and Absconding Rate was alarmingly high in DH Budaun while DHs Banda, Gorakhpur and Saharanpur had substantially higher LAMA and Absconding Rate than the mean value for the 10 test-checked DHs, indicating poor service quality in these hospitals and lack of security arrangements in the hospitals.

LAMA & Absconding Rate in CHCs

Due to improper/non-maintenance of the BHTs in the CHCs where BHTs were available, Audit could ascertain the LAMA and Absconding Rate for one to five CHCs only during the sampled period. It was observed that LAMA and Absconding Rate was alarmingly high (more than 80 per cent) in CHC Mall, Lucknow, thus indicating poor service quality of the hospital.

⁶⁴ Weighted average with average annual IPD load as the weight

The Government replied that the matter would be examined and instructions issued accordingly.

4.9.4.2. Completeness of medical records

The Regulations on Graduate Medical Education 2012, MCI prescribe maintaining accurate, clear and appropriate record of the patient in conformity with the legal and administrative framework. Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002 contain the format for doctors to maintain medical records of patients in which details of the patients were required to be filled. These records are essential to measure effectiveness of care received by the patient, for legal purposes as well as for follow-up treatment *etc.*

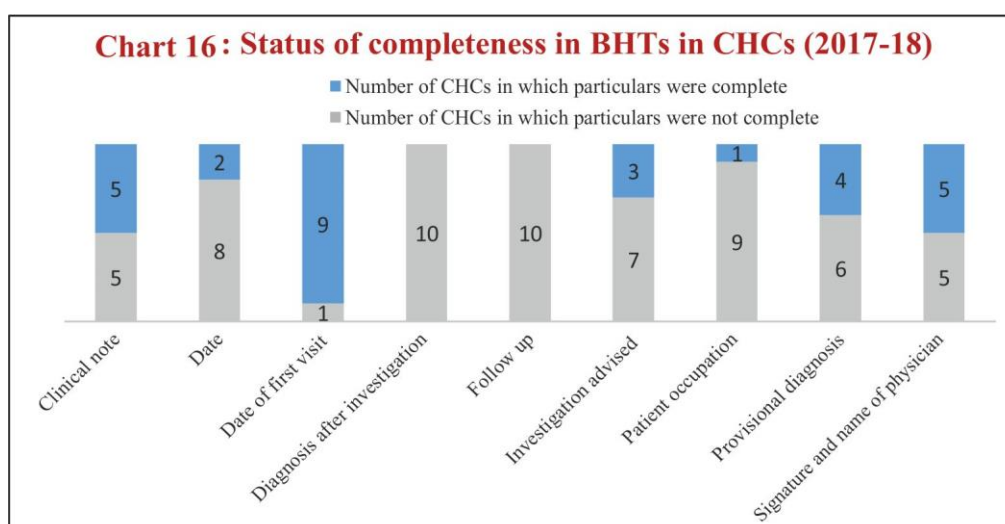
Scrutiny of the 1100 test-checked BHTs of 11 DHs and 356 test-checked BHTs of 10 CHCs⁶⁵ pertaining to 2017-18 revealed that the required details were not filled completely, as discussed in **Table 22**.

Table 22: Status of completeness of BHTs in DHs (2017-18)

Particulars	DHs in which particulars were not complete
Diagnosis after investigation	DH Allahabad, DH and JH Balrampur, DH Banda, and DH Saharanpur
Follow up	DH Agra, DH and DH-II Allahabad, DH Budaun, DH and JH Balrampur and DH Banda
Investigation advised	DH Balrampur
Patient occupation	DH Agra, DH and DH-II Allahabad, DH Balrampur, DH Banda, DH Budaun, DH Gorakhpur, DH and JH Lucknow and DH Saharanpur

(Source: Test-checked hospitals)

Similarly, in case of CHCs the status of completeness of BHTs was as under:



(Source: Test-checked CHCs)

The deficiency of properly filled-up BHTs has an impact on the continuity and efficiency of medical care provided to a patient, especially in case of follow-up or referral to higher facilities.

⁶⁵ Baroli Ahir, Jaitpur Kalan and Kheragarh (Agra), Kamasin and Naraini (Banda), Gosaiganj and Sarojini Nagar (Lucknow), Behat, Deoband and Nagal (Saharanpur)

The Government replied that the matter would be examined and necessary directions would be issued to the concerned hospitals.

4.9.4.3. Patient Satisfaction Score

Patient satisfaction score (PSS) is an indicator of patient satisfaction and acts as an important monitoring and feedback mechanism for the IPD. It was observed that only two DHs (DH-II Allahabad and Lucknow) conducted survey to evaluate PSS during the period 2016-18 out of the 11 test-checked DHs. Analysis of PSS data⁶⁶ revealed that in DH Lucknow 18 to 27 per cent of the respondents rating the services poor or average.

Thus, while the 08 DHs and 22 CHCs which did not conduct PSS missed out an opportunity for identifying gaps based on feedback by patients and developing an effective action plan for quality improvement in their respective hospitals, DH Lucknow despite conducting PSS did not prepare action points based on the survey results.

The Government replied that the matter would be examined and action taken accordingly.

4.9.5. Outcomes vis-à-vis availability of resources

The relative performance of the test-checked hospitals on the various outcome indicators worked out by audit and the corresponding availability of resources was as shown in **Table 23**.

Table 23: Outcomes vis-à-vis availability of resources in District Hospitals

Hospital	Productivity	Efficiency			Service quality	Clinical care	Availability of resources			
	Bed Occupancy Rate (%)	Bed Turnover Rate	Discharge Rate (%)	Referral Out Rate (%)	LAMA & Absconding Rate (%)	Average Length of Stay (in days)	Doctors (%)	Nurses (%)	Essential Drugs (%)	Clinical Pathology Services (%)
DH Agra	49	5.0	77	3	19	3.0	107	236	64	45
DH Allahabad	89	3.8	67	6	25	5.8	88	64	71	59
DH Balrampur	51	2.1	65	11	21	1.7	63	50	46	58
DH Banda	89	1.9	29	22	46	2.1	56	64	73	86
DH Budaun	75	4.4	11	10	78	2.6	107	140	71	90
DH Gorakhpur	61	1.5	32	14	50	3.6	129	254	59	93
DH Lucknow	59	2.0	50	14	25	1.9	101	148	86	97
DH Saharanpur	103	5.3	36	21	37	2.0	59	85	80	59
DH-II Allahabad	95	3.9	81	6	11	5.6	115	91	79	48
JH Lucknow	118	10.7	77	4	19	2.4	154	310	54	79
Benchmark ⁶⁷	80-100%	4.1	46%	14%	36%	2.6	100%	100%	68%	71%

(Source: Test-checked hospitals)

As seen from Table 23 above, every hospital- relative to the other test-checked DHs- underperformed on at least one outcome indicator, with the performance of DHs Banda, Budaun, Gorakhpur and Saharanpur being, in particular, below par. The details in this regard are as follows:

⁶⁶ PSS data not provided by DH-II Allahabad

⁶⁷ Benchmarks: BOR – as per IPHS, weighted average for rest of the outcome indicators with average annual IPD patients as the respective weight for each hospital, 100 per cent (sanctioned strength) for availability of doctors and nurses, and simple mean for drugs and clinical pathology services

- The combined LAMA & Absconding Rate was alarmingly high in DH Budaun at 78 *per cent*, indicating poor satisfaction with the service quality as experienced by the patients. However, the hospital had an excess availability of both doctors and nurses vis-à-vis their sanctioned strength which is a cause of concern and needs to be investigated further.
- DHs Banda and Saharanpur experienced high bed occupancy but had a high referral out rate of above 20 *per cent* and a low discharge rate of less than 40 *per cent*, indicating that these hospitals struggled to provide quality services.
- DH Gorakhpur had a poor discharge rate despite having an excess of human resources along with a low bed occupancy.

The Government stated that the ineffectual management of resources was due to lack of trained human resources and specialist doctors which could be overcome in the near future when new doctors and specialists join services in the State for which the State Government was opening new medical colleges in a phased manner. Also, the Government stated that the underperformance in DHs Gorakhpur and Budaun was most likely due to shortage of human resources.

The reply of the Government was not satisfactory as the DHs Gorakhpur and Budaun had human resources available in excess of the respective sanctioned strength. Furthermore, the monitoring of outcome indicators during 2013-18 by Director General, Medical and Health Services was restricted only to BOR and omitted other significant indicators pertaining to efficiency, service quality and clinical care capability of the hospitals, which was not in accordance with the NHM Assessor's Guidebook.

The Government needs to adopt an integrated approach, allocate resources in ways which are consistent with patient priorities and needs, improve the monitoring and functioning of the district hospitals towards facilitating a significant change in health outcomes at a high value for money.

To sum up, the audit scrutiny of IPD services revealed asymmetric distribution of human resources. Excess posting of doctors and para-medical staff in big cities like Lucknow and Agra needs to be reversed quickly, and a system put in place where such excessive postings/"deputations" (other than for emergency and for a specific period) are impossible at any level of authority. Further, there were significant shortage of drugs and equipment, deficiencies in OT services and substantial gaps in availability of accident and trauma services. Dietary support to patients varied from hospital to hospital, while the patient safety in the hospital premises was compromised on account of non-compliance with the disaster management guidelines and lack of proper fire safety arrangement in the test-checked hospitals. While poor maintenance of records in the CHCs constrained the evaluation of IPD services, the 10 test-checked hospitals were evaluated on six outcome indicators, with four hospitals – DHs Banda, Budaun, Gorakhpur and Saharanpur underperforming the most compared to the other hospitals.

