CHAPTER 3
Healthcare Services

Healthcare Institutions provide services to the patients which could be categorised under Line Services, Support Services and Auxiliary Services. Line Services include OPD Services, IPD Services, Emergency Services, Super Specialty Services such as Operation Theatres, ICU Services, Maternity Services, Blood Bank and Diagnostic Services. Support Services include provision of Oxygen, Dietary, Laundry, Bio-Medical Waste Management, Ambulance and Mortuary Services. Auxiliary Services include Patient Safety facilities, Patient Registration, Grievance/Complaint Redressal and Stores.

Various components of Health services

Line Services	Support Services	Auxiliary Services
Outdoor Patient Department	Oxygen Services	Patient Safety Facilities
Indoor Patient Department	Dietary Service	Patient Registration
Emergency Services	Laundry Service	Grievance /Complaint Redressal
Super Specialty	Biomedical Waste Management	Stores
OT, ICU	Ambulance Service	
Maternity	Mortuary Service	
Blood Bank		
Diagnostic Services		

3.1   Fixed Day Health Service (FDHS)

Under FDHS[1], health services are offered by the District Medical and Health Officer (DM&HO) to each village on a 'fixed' day of each month. Fixed Day Health Services consist of a Mobile Health Unit (MHU) comprising medical equipment along with well-trained Lab Technicians and Pharmacists to perform basic lab diagnosis and to dispense the medicines. FDHS is a technology-enabled, comprehensive, once-a-month fixed day health service for the rural poor located more than 3 kilometers away from any public health service provider PHCs with a set of services like primary screening of all pregnant women to identify risky pregnancies, screening of children with insufficient growth/diseases through appropriate lab investigations and distribution of drugs for the chronic diseases and ensures 100 *per cent* immunisation of children. The MHU visits two service points every day of the month according to a pre-determined calendar and on pre-decided and approved routes.

Audit observed that the FDHS were not being extended to the rural poor as envisaged. When the specific reasons for the discontinuance of FDHS were called for, it was replied

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[1] A Scheme introduced by the erstwhile State Government in the year 2008 under Public Not for Profit partnership with M/s Health Management and Research Institute

(March 2022) by the Commissioner of HM&FW that, as the SCs in the State were converted into Palle Dawakhanas and services were being brought to the doorstep of people, the FDHS had become infructuous. Hence, these services were provided up to December 2021 and the staff services were being utilised at different health facilities.

The reply of the Department is not acceptable as 1,595 out of 4,797 SCs were yet to be converted as Palle Dawakhanas. Further, Audit also observed that, Medical Officers (earlier known as Mid Level Health Provider (MLHP)) were not available in 122 Palle Dawakhanas.

Government in its response also stated that 3,206 Health Wellness Centres (HWCs) were sanctioned Medical Officers and that currently 3,084 Medical Officers were in position. However, supporting documents in respect of 3,084 Medical Officers being in position were not furnished to Audit. Further, Government had not clarified the position as to how FDHS services are rendered in the absence of conversion of all the SCs into HWCs.

3.2   Delivery of Healthcare Services

3.2.1   Outpatient Department (OPD) Services

Outpatient Department (OPD) is the first point of contact between patient and hospital staff. To avail services in a hospital, patients first register at the registration counter of the hospital. Patients are then examined by OPD Doctors and further diagnostic tests, if necessary, are prescribed for evidence-based diagnosis and/or drugs are prescribed or admission in In-Patient Department (IPD) is advised based on the diagnosis.

3.2.1.1   Availability of Registration Counters and Average Daily Patient Load per Counter in the test checked Health Institutions

Registration Counter is the first point of contact with the hospital for a patient and is an important component of the hospital for patients and their attendants. NHM Assessor Guidebook (Vol-l) estimates that average time required for registration to be 3-5 minutes per patient, which roughly works out to about 20 patients/ hour per counter.

Inadequate Registration Counters

Audit examined the number of patients registered during 2021-22 in the test checked Hospitals with the availability of registration counter(s) and identified shortage of counters in four out of nine health institutions that were test checked.

Table 3.1- Inadequate registration counters in test checked Hospitals

| Name of the hospital	Counters available	No. of OPD Patients	Average working hours [2]	Average no. of working days (310[3])	Counters required (20 per hour)	Shortage of counters
Osmania General Hospital	6	5,14,211	6	310	14	8
Niloufer Hospital	4	1,91,576	6	310	5	1
AH, Golconda, Hyderabad	2	2,64,762	6	310	7	5
CHC Badepally, Mahabubnagar	2	95,203	6	310	3	1

Source: - Information furnished by the Hospitals

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[2] Assuming that a Doctor in OPD worked full time, i.e. six hours continuously
[3] Average working days: - 365 – (52 Sundays & 3 National Holidays) = 310 working days

As per the NHM Assessor Guidebook (Vol-l), the shortage of counters ranged from 1 to 8 in the aforementioned hospitals. Due to shortage of registration counters in four out of nine test checked hospitals, each counter per hour was faced with an increased patient load. Thus, the patients were forced to wait a long time for registration and each counter was faced with an increase in workload.

Chart 3.1 - Average number of Patients per hour per counter in all DHs during 2021-22
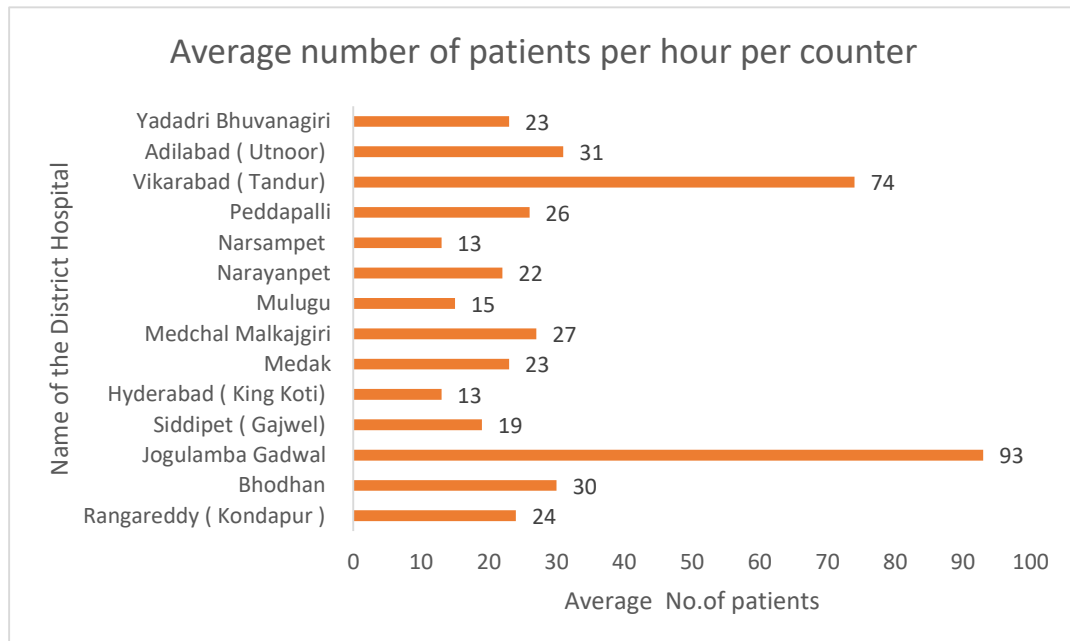
Source: Information furnished by the Hospitals

Chart 3.2 - Average number of Patients per hour per counter in Test checked Hospitals during 2021-22
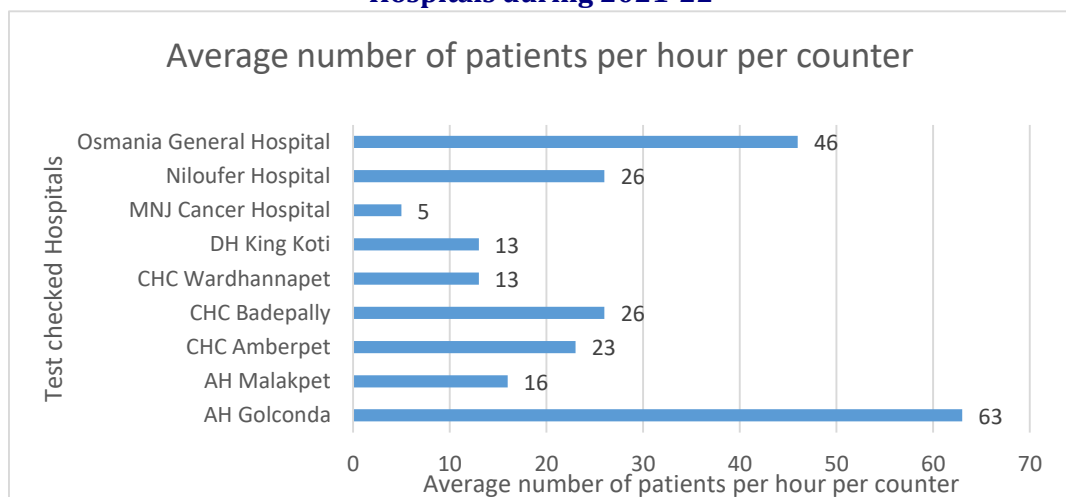
Source: Information furnished by the Hospitals

Government in its response stated (August 2023) that, with the introduction of Hospital Management Information System (HMIS), registration time has drastically come down even for new registrations. For repeat visit by already registered patients which constitute more than 60 *per cent* of the total patients, the time taken was even less. Thus the counters are able to handle the load of all the patients well within the OP hours.

Government response is not acceptable as OP module of HMIS had been implemented in only 29 out of the 102 proposed health institutions (as of March 2023) as mentioned in Para 4.8.5.

3.2.1.2   Outpatient Department Services

Patients after getting registered at Registration Counters are then examined by OPD Doctors and further diagnostic tests, if necessary, are prescribed for evidence-based diagnosis and/or drugs are prescribed or admission in In-Patient Department (IPD) is advised based on the diagnosis.

3.2.1.3   Availability of OPD services in District Hospitals

As per IPHS, DHs should provide specialist out-patient services pertaining to Dental Surgeon (DS), Obstetrics (OB), Gynaecology (GY), Dermatology (DM), General Medicine (GM), General Surgery (GS), Paediatrics (PD), Orthopaedics (Ortho), Ophthalmology (Opth), Ear, Nose and Throat (ENT), Psychiatry (PSY), Emergency Services (ES), Laboratory Services (LS), Dialysis (DIA) etc.

Table 3.2 - Availability of OPD services in the District Hospitals(DHs)

OPD services	DS	OBG & GY	DM	GM	GS	PD	AYUSH	ES	ENT	Ortho	PSY	Opth	LS
District Hospital													
BOD	A	A	NA	A	A	A	NA	A	A	NA	NA	A	A
GAD	A	A	NA	A	A	A	A	A	NA	A	A	A	A
GAJ	A	A	NA	A	A	A	NA	A	A	A	A	A	A
HYD	A	A	A	A	A	A	A	A	A	A	A	A	A
KDP	A	A	A	A	A	A	A	A	A	A	A	A	A
MDK	A	A*	NA	A	A	A*	NA	A	A	A	A	A	A
MED	NA	A	A	A	A	A	NA	A	A	A	A	A	A
MUL	A	A	A	A	A	A	NA	A	A	A	A	A	A
NRY	A	A	NA	NA	A	A	NA	A	NA	A	NA	NA	A
NRS	NA	A	NA	A	A	A	A	A	NA	A	NA	A	A
PED	A	A	A	A	A	A	NA	A	A	A	A	A	A
TDR	NA	A*	NA	A	A	A*	NA	A	A	A	NA	A	NA
UT	A	A	NA	NA	NA	A	A	A	NA	A	NA	A	A
YB	A	A	NA	A	A	A	A	A	A	A	A	A	A

Source: - Information furnished by the Hospitals.

*Note: OPD Services for Obstetrics and Gynaecology (OBG) services and Paediatric (PD) are presently delivered through MCH Centre in the Districts of Medak (MDK) and Tandur (TDR).

Colour code: Green colour/A= Available; Red colour/NA=Not available

Audit observed that, out of the 14 DHs, required OPD services as per the IPHS norms were fully available only in DHs Hyderabad and Kondapur.

3.2.1.4   Availability of OPD services in Area Hospitals (AHs)

Scrutiny of the test checked AHs revealed the following:

Table 3.3 - Availability of OPD services in the test checked Area Hospitals

Name of the Hospital	GM	GS	PD	Ortho	Opth	ENT	PSY	DIA
AH, Golconda, Hyderabad	A	A	A	A	A	A	NA	NA
AH, Malakpet, Hyderabad	A	A	A	A	A	A	NA	NA

Source: - Information furnished by the Hospitals
Colour code: Green colour/A= Available*;* Red colour/NA=Not available

Audit observed that, the OPD services of Psychiatry and Dialysis were not available in both the AHs Golconda and Malakpet.

3.2.1.5 Availability of OPD services in Community Health Centres (CHCs)

As per the IPHS guidelines, every CHC should have the OPD Services and IPD Services: General Medicine (GM), Surgery(S), Obstetrics & Gynaecology(OBG), Paediatrics (PD), Laboratory Services (LS), etc.

Table 3.4 – District-wise No. of CHCs in which OPD services are available

District Name	No of CHCs	GM	OBG	PD	S	LS
Adilabad	1	NA	1	NA	NA	1
Bhadradri Kothagudem	5	3	2	1	2	5
Hanumakonda	1	1	1	1	1	1
Hyderabad	11	5	9	10	2	8
Jagtial	2	2	2	2	2	2
Jayashankar Bhupalpally	2	2	2	2	2	2
Kamareddy	6	5	3	5	4	2
Karimnagar	2	1	2	1	1	2
Khammam	1	1	NA	1	NA	1
Kumuram Bheem Asifabad	1	1	1	NA	NA	1
Mahabubabad	2	1	1	1	1	2
Mahabubnagar	2	1	2	2	2	2
Mancherial	3	2	2	2	1	3
Medak	2	2	2	1	NA	2
Medchal Malkajgiri	1	1	1	NA	NA	NA
Mulugu	2	1	1	1	1	1
Nagarkurnool	3	2	3	2	2	3
Nalgonda	1	1	1	1	1	1
Narayanpet	2	NA	NA	NA	NA	NA
Nirmal	1	1	NA	1	NA	NA
Nizamabad	8	3	3	2	2	7
Peddapalli	2	1	2	1	2	2
Rangareddy	6	4	5	4	3	6
Sangareddy	2	2	1	2	1	2
Siddipet	4	3	4	3	3	4
Suryapet	3	2	1	1	1	1

District Name	No of CHCs	GM	OBG	PD	S	LS
Vikarabad	3	2	2	2	2	2
Wanaparthy	2	1	NA	1	NA	2
Warangal	2	2	2	2	2	2
Yadadri Bhuvanagiri	2	2	2	2	2	2
Grand Total	85	55	58	54	40	69

Source: - HMIS information.

Colour code:

Services available 50% and more		Services available in 25% to less than 50%		Services available in less than 25%	

Except in the case of CHCs of the Districts of Jagtial, Jayashankar Bhupalpally, Nalgonda, Hanumakonda, Warangal and Yadadri Bhuvanagiri, the OPD services were not extended to patients as per the required norms.

3.2.1.6   *Availability of OPD Services in PHCs*

IPHS Guidelines relating to OPD services envisage provision of services for six days a week, with four hours provided in the morning and two hours in the afternoon.

Table 3.5 - Availability of OPD services in test checked PHCs

District	Name of the PHC	General	Antenatal Care (ANC)	Delivery services	Immunisation services	Animal Bite
Mahabubnagar	Edira	A	A	A	A	A
	Addakal	A	A	A	A	A
	Rajapur	A	A	A	A	A
Warangal	Alankanipet	A	A	A	A	A
	Duggondi	A	A	A	A	A
	Geesugonda	A	A	A	A	A
Hyderabad	UPHC, Gaganmahal	A	A	A	A	A
	UPHC, Niloufer	A	A	NA	A	NA
	UPHC, Azampura	A	A	NA	A	NA

Source: Information furnished by the Health facilities

Colour code: Green colour/A= Available; Red colour/NA :-Not Available.

Audit observed that, out of the three test checked UPHCs, OPD services relating to Delivery services and for animal bite were not available in UPHC Niloufer and UPHC Azampura.

3.2.1.7   *Non-availability of AYUSH services in PHCs*

As per IPHS Guidelines, besides one MBBS Medical Officer, one AYUSH Medical Officer (desirable) has to be posted to provide healthcare services to the people.

AYUSH services availability in 394 facilities (out of 636 PHCs) were as follows:

Table 3.6 - Types of AYUSH facilites available in the State

| Type	Number of PHC/ UPHC
Ayurveda	199
Homeo	105
Unani	62
Naturopathy	28
Total	394

Source: Information furnished by the Department

Audit scrutiny revealed that out of these 394 health facilities where AYUSH services were available, AYUSH Medical Officer was not available in 204 health facilties. The post of Pharmacist was lying vacant in 124 health facilities. Thus, the provision of the AYUSH Services has not been done fully in the State.

3.2.1.8 *Average OPD Cases per Doctor per annum against available OPD Services in DHs/AHs/CHCs/PHCs/UPHCs*

Details of the average number of OPD cases per Doctor per annum against the available OPD services in DHs and test checked AHs/CHCs/PHCs/UPHCs are given in the Chart 3.3 and Chart 3.4:
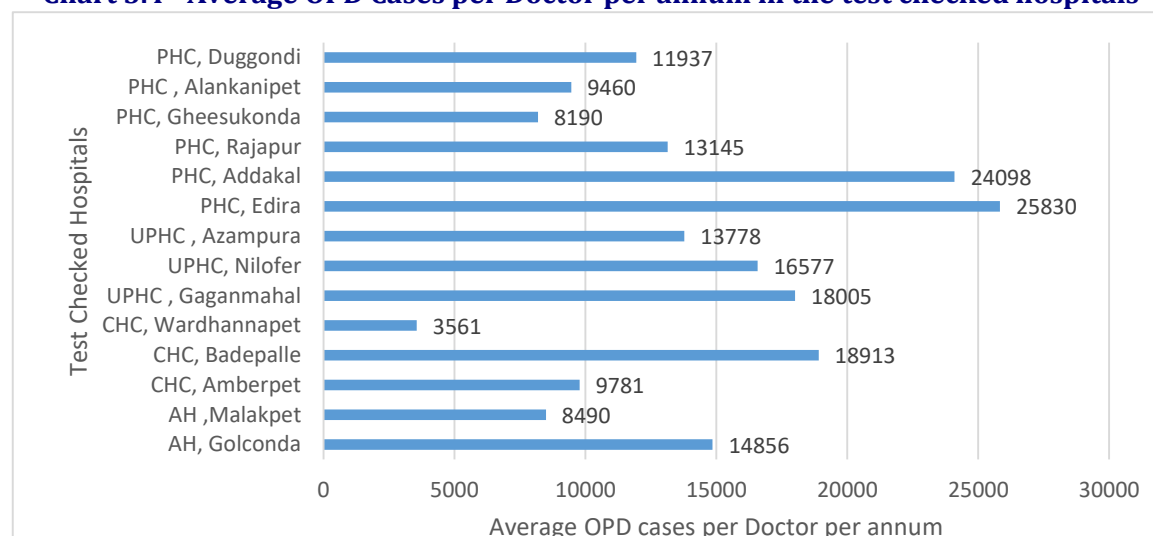
Chart 3.3- Average OPD cases per Doctor per annum in DHs during 2016-17 to 2021-22
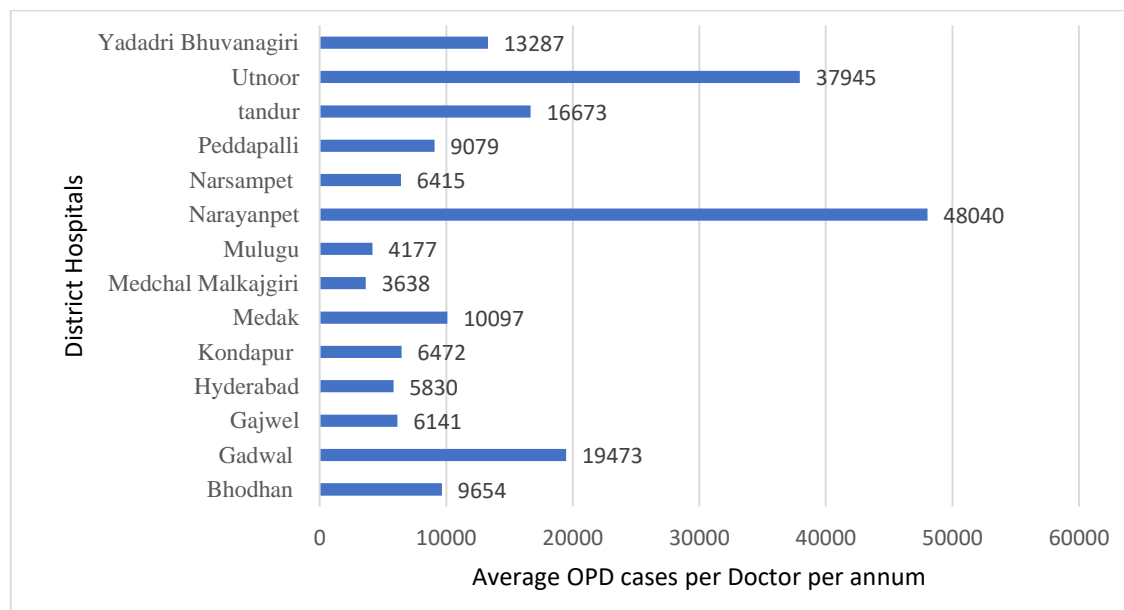
Source: Information furnished by the District Hospitals

Audit observed that the average OPD cases per Doctor per annum in the DHs ranged from 3,638 cases (DH Medchal Malkajgiri) to 48,040 cases (DH Narayanpet).

Chart 3.4 - Average OPD Cases per Doctor per annum in the test checked hospitals

Source: Information furnished by the Hospitals

Audit observed that the average OPD cases per Doctor per annum in the test checked Health Institutions ranged from 3,561 cases (CHC Wardhannapet) to 25,830 cases (PHC Edira).

3.2.1.9 *Lack of availability of required infrastructure in Healthcare Facilities in the State*

IPHS norms provide for the availability of building, drinking water, toilet etc. in the healthcare facilities.

Analysis of these aspects of own building, drinking water, toilet etc. was done based on information available in the HMIS website as of 24 February 2022. Audit noticed that in the State, various healthcare facilities were running in rented buildings/Government buildings without basic facilities such as drinking water and toilet as detailed in Table below:

Table 3.7 – Details of availability of infrastructure in healthcare facilities

Healthcare facilities	No. of healthcare facilities	Healthcare facilities running in rented buildings (*per cent*)	Water facility not available (*per cent*)	Toilet facility not available (*per cent*)
SC	4,797	2,819 (59)	1,517(32)	1,259 (26)
PHC	636	290 (46)	113(18)	106(17)
CHC	107	53 (50)	48 (45)	46(43)

Source: Information available on www.hmis.nhp.gov.in

Audit observed that, out of 4,797 existing SCs, 2819 (59 *per cent*) were functioning from rented buildings, 1517 (32 *per cent*) did not have water facilities and 1259 (26 *per cent*) did not have toilet facilities. In the case of 636 existing PHCs, 290 (46 *per cent*) were functioning from rented buildings, 113 (18 *per cent*) did not have water facilities and 106 (17 *per cent*) did not have toilet facilities. In the case of 107 CHCs, 53 (50 *per cent*) were functioning from rented buildings, 48 (45 *per cent*) did not have water facilities and 46 (43 *per cent*) did not have toilet facilities.

Thus, most of the healthcare facilities in the State were functioning without basic facilities.

3.2.1.10   Facilities in AYUSH Dispensaries

Out of 834 AYUSH dispensaries existing in the State,

➤ 825 dispensaries were running in own buildings and 9 were in rented buildings.

➤ 31 dispensary buildings were in a dilapidated condition.

When information relating to the submission of proposals for repairs to buildings was called for, no response was furnished by the Department.

3.2.1.11   General facilities in test checked health facilities

In the test checked healthcare facilities, the following was observed:

Table 3.8 - General Amenities in the test checked hospitals

Type of Hospital	Name of the District	Name of the Hospital	Building Own/ Rented	Drinking Water facility	Separate toilets for men & women	Seating arrangements
Specialty	HYD	MNJ Cancer Hospital	A	A	A	A
Specialty	HYD	Niloufer	A	A	A	A
Teaching Hospitals	HYD	Osmania General Hospital	A	A	A	A
DH	HYD	King Koti, Hyderabad	A	A	A	A
AH	HYD	Golconda	A	A	A	A
AH	HYD	Malakpet	A	A	A	A
CHC	HYD	Amberpet	A	A	A	A
CHC	WGL(R)	Wardhannapet	A	A	A	A
CHC	MBNR	Badepally	A	A	A	A
UPHC	HYD	Azampura	A	A	A	A
UPHC	HYD	Niloufer	Rented	A	NA	NA
UPHC	HYD	Gaganmahal	A	A	A	A
PHC	MBNR	Addakal	A	A	NF	NF
PHC	MBNR	Rajapur	A	A	NF	NF
PHC	MBNR	Edira	A	A	NF	NF
PHC	WGL(R)	Alankanipet	A	A	NF	NF
PHC	WGL(R)	Geesugonda	A	NA	NF	NF
PHC	WGL(R)	Duggondi	A	NA	NF	NF

Source: Information furnished by the Department.
Colour code: Green colour/A= Available; Red colour/NA=Not Available; Yellow Colour= Rented; Blue/NF= Not Furnished:

During the test-check of DHs, AHs, CHCs, UPHCs and PHCs, the following were observed:

➤ Out of the nine[4] test checked UPHCs/PHCs, separate toilet facility for men and women was not available in UPHC, Niloufer. Information was not furnished by the test checked PHCs.

➤ Only UPHC Niloufer, was working in rented accommodation.

➤ Drinking water facility was not available in PHCs Geesugonda and Duggondi.

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[4] 3 PHCs in Warangal Dist (1)Alankanipet (2) Geesugonda (3) Duggondi, 3 PHCs in Mahabubnagar Dist. (1) Addakal (2) Edira (3) Rajapur and 3 UPHCs in Hyderabad (1) Gaganmahal (2) Azampura and (3) Niloufer

➤ Seating arrangements for patients in UPHC Niloufer were inadequate and the patients were forced to stand in long queues at the OPD counters for registration.

➤ Due to the non-availability of sufficient seating capacity in the test checked AYUSH facilities, patients were forced to wait for a longer time for registration at the Out Patient Department (OPD) Registration Counters at Government Nizamia General Hospital, Hyderabad and Government Homeopathy Hospital, Hyderabad.

| **Figure 3.1 - Government Nizamia General Hospital Unani (10 July 2022)** | **Figure 3.2 - Government Homeopathy Hospital , Hyderabad (24 March 2022)** |

3.2.1.12 Availability of necessary facilities

As per IPHS norms, OPD area should have following facilities:

Table 3.9 - Status of availability of facilities

Name of service	Total DHs in the State	AH	CHC	PHC/ UPHC
	Total =14	Test checked 2	Test checked 3	Total=9
Display of fluorescent fire exit sign	14	1	0	0
Enquiry/May I help Desk with staff fluent in local language	13	2	1	8
Directional signage for Emergency, Departments and Utilities	14	2	3	8
Patient calling system (Digitalisation) Queue system	0	0	0	0
Water for drinking purpose	14	2	3	7
Water for utility purpose	14	2	3	8
Separate Toilets for men and women	12	2	3	2
Availability of seating arrangements waiting at Registration, OPD counters and specialists	14	2	3	2
Mandatory information (under RTI Act, PNDT Act, etc.) was displayed	14	2	2	0

Source: Data furnished by test checked health institutions

Colour code:

Facilities available 50% and more		Facilities Available in more than 25% and less than 50%		Facilities available in less than 26%	

Audit observed that, Patient calling system (Digitalisation) Queue system was not available in any of the DHs, AHs, CHCs, UPHCs/PHCs. Display of Fluorescent fire exit sign was not available in any of the test checked CHCs/UPHCs/PHCs. Display of mandatory information (under RTI Act, PNDT Act, etc.) was not available in any of the test checked UPHCs/PHCs.

3.2.1.13 *Patient Satisfaction Survey*

NHM Assessor's Guidebook for Quality Assurance provides for evaluation of the services provided in an OPD through certain outcome indicators.

➢ Out of 14 District Hospitals in the State, it was stated that, Patient Satisfaction survey was conducted in only six District hospitals. In the remaining eight[5] District hospitals, no survey was conducted.

➢ Out of three UPHCs test checked, Patient Satisfaction Survey was not conducted in any of the UPHCs.

➢ In Area Hospitals, Golconda and Malakpet, it was observed that no such survey was conducted.

➢ In the case of AYUSH institutions, Superintendent, Government Ayurvedic Hospital, Erragadda stated that Director, Institute of Health System has been entrusted with the responsibility of preparing of Patient Satisfaction Survey instrument and protocol in AYUSH teaching hospitals and after the completion of the project, the same would be implemented by the Health institutions

Government in its response assured (August 2023), that Patient Satisfaction Survey as per NQAS guidelines would be conducted in all the hospitals.

3.2.2 Inpatient Department (IPD) Services

In-patient Department (IPD) refers to the areas of the hospital where patients are accommodated after being admitted, based on a Doctor's/specialist's assessment, from the OPD, Emergency Services and Ambulatory Care. In-patients require a higher level of care through nursing services, availability of drugs, observation by Doctors, etc.

3.2.2.1 *Availability of IPD Wards in DHs*

As per NHM Assessor's Guidebook, a DH should provide in-patient services pertaining to General Medicine, General Surgery, Obstetric and Gynaecology, Paediatrics, Ophthalmology, Orthopaedics, Psychiatry, etc.

Table 3.10- Availability of IPD Wards and Beds in DH

District Hospital	Sanction bed strength	Medical Ward	Surgical Ward	Paediatric ward	OB&G ward	Burns ward	Others	Total
101 -200 Beds District Hospitals								
Ward wise beds required as per IPHS norm		30	30	10	30	0		
MED	50	21	0	0	25	0	4	50
UT	50	30	0	20	15	0	51	116
BOD	100	31	9	11	30	0	40	121
KDP	100	24	12	24	36	0	7	103
YB	100	38	21	21	36	0	12	128
201-300 Beds District Hospitals								
Ward wise beds required as per IPHS norm		50	45	20	30	5		

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[5] Jogulamba Gadwal, Medak, Narayanpet, Narsampet, Peddapalli, Tandur, Yadadri Bhuvanagiri and Hyderabad

District Hospital	Sanction bed strength	Medical Ward	Surgical Ward	Paediatric ward	OB&G ward	Burns ward	Others	Total
GAJ	200	14	28	29	61	0	39	171
MDK	200	29	38	29*	51*	0	111	258
MUL	250	16	24	8	16	2	34	100
GAD	250	25	20	67	0*	0	100	212
NRY	250	28	16	24	26	0	46	140
NRS	250	21	28	7	39	0	10	105
PED	200	16	20	5	75	0	20	136
301-500 Beds District Hospitals								
Ward wise beds required as per IPHS norm		80	70	10	60	10		
HYD	350	24	24	24	38	0	90	200
TDR	350	65	30	60*	109*	6	58	328

Source: IPHS norms and Information furnished by the Hospitals

*Note: In DH of Jogulamba Gadwal, there are no dedicated wards for OBG. Patients were extended OBG services and were being accommodated in the Female wards of DH Jogulamba Gadwal as the MCH Centre in the District of Jogulamba Gadwal is not fully functional and provides Antenatal care to the patients. The beds available in the MCH Centre Tandur and Medak have been included under the categories Paediatric, OBG and others.

Audit observed that the Burns ward was not available in 7[6] DHs and beds in Surgical Ward were not available in DHs Medchal Malkajgiri and Utnoor.

3.2.2.2 *Availability of six beds in UPHCs/PHCs with Mother and Child Healthcare*

As per IPHS norms, every PHC should have six Beds for Mother and Child healthcare and family planning. PHC should also have Labour Room and OT for Vasectomy and Tubectomy.

Table 3.11- Availability of Beds, Labour Room and OT in test checked PHCs/UPHCs

Name of the District	No.of test checked PHCs/ UPHCs	Availbility of six beds	Aailability of Labour room services	Availability of OT for Vasectomy, Tubectomy
Hyderabad	3	2	2	2
Mahabubnagar	3	3	3	2
Warangal	3	3	3	3

Source: Information furnished by the test checked hospitals

3.2.2.3 *Availability of Isolation wards*

National Health Mission (NHM) Assessor's Guidebook prescribes that DHs should have positive and negative isolation wards. Immuno compromised patients like AIDS, Cancer, Type I Diabetes, Leukemia, Asthma, Rheumatoid Arthritis and Genetic Disorder requires Positive Isolation Room. Further, patients affected with Tuberculosis, Measles and other infectious patients (Flu) require Negative Isolation. Only four DHs have both Positive and Negative Isolation Wards.

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[6] DHs: Gajwel; Medak; Jogulamba Gadwal; Narayanpet; Narsampet; Peddapalli and Hyderabad (King Koti)

Table 3.12- Availability of positive and negative isolation wards in DHs

District Hospital	Positive Isolation Ward	Negative Isolation Ward
BOD	A	A
GAD	NA	NA
GAJ	NA	NA
HYD	NA	NA
KDP	NA	NA
MDK	NA	NA
MED	A	NA
MUL	One Isolation Ward Available.	
NRY	A	NA
NRS	A	A
PED	A	NA
TDR	NA	NA
UT	A	A
YB	A	A

Source: Information furnished by the District Hospitals.
Code: A= Available; NA=Not available

Audit observed that the required isolation ward (both Positive and Negative) was not available in six DHs Jogulamba Gadwal, Gajwel, Hyderabad (King Koti), Kondapur, Medak and Tandur.

Table 3.13 - Details of Isolation Wards available in test checked AHs/CHCs

Name of AHs/CHCs	Positive Isolation Ward	Negative Isolation Ward
Area Hospital, Golconda	NA	NA
Area Hospital, Malakpet	NA	NA
CHC, Amberpet, Hyderabad	NA	NA
CHC, Wardhannapet, Warangal	Not Furnished	
CHC, Badepally, Mahabubnagar	NA	NA

Source: Information furnished by the Hospitals
Code: A= Available; NA=Not available

Audit observed that, Positive and Negative isolation wards were not available in both the test checked AHs Golconda and Malakpet and two out of three test checked CHCs Amberpet and Badepally. CHC Wardhannapet had not furnished the information in this regard.

Government in its response assured (August 2023) that, all the DHs are converted/being converted into Teaching Hospitals where these facilities are being made available.

3.3 Details of Surgeries performed in test checked Health Institutions

3.3.1 Availability of Major and Minor surgeries

IPHS Guidelines prescribe Operation Theatre (OT) for elective Major Surgeries, Minor services, Emergency Services and Ophthalmology/ENT for District Hospitals. Details of Major and Minor surgeries performed in the District Hospitals are as follows.

Chart 3.5- Major surgeries performed in DHs during 2016-22
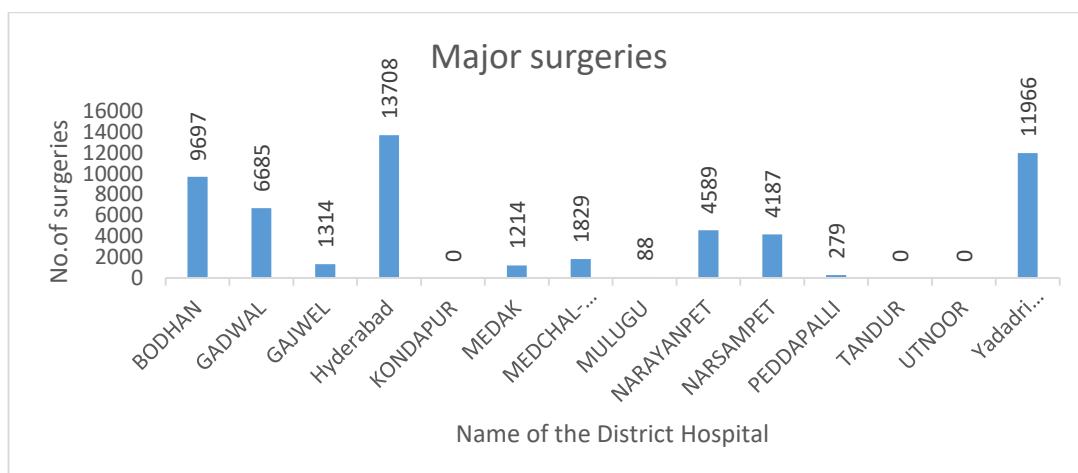
Source: Information furnished by the District Hospitals

Chart 3.6 - Minor surgeries in DHs during 2016-22
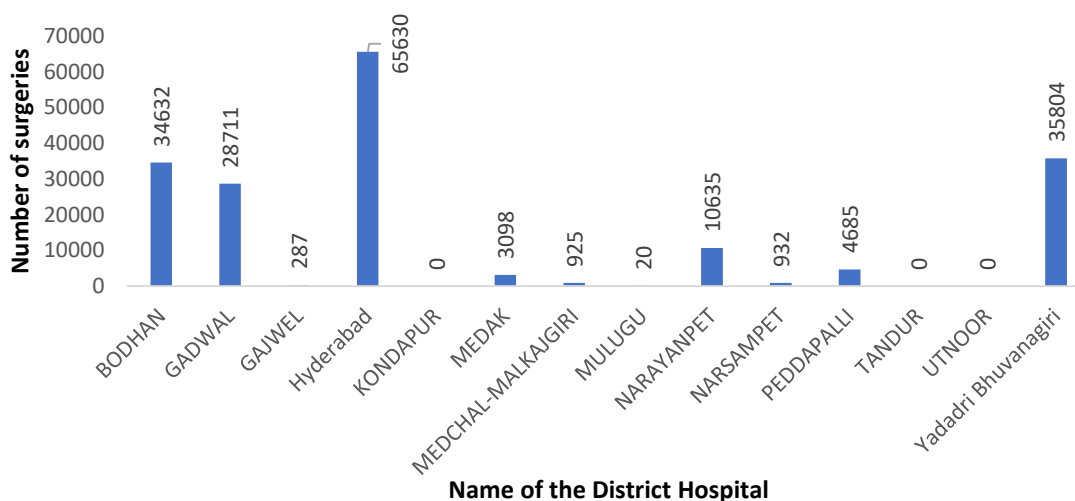
Source: Information furnished by the District Hospitals

Chart 3.7 – Surgeries done in test checked AHs, CHCs during 2016-22

Source:- Information furnished by the Hospitals

Table 3.14- Surgical Procedures in District Hospitals

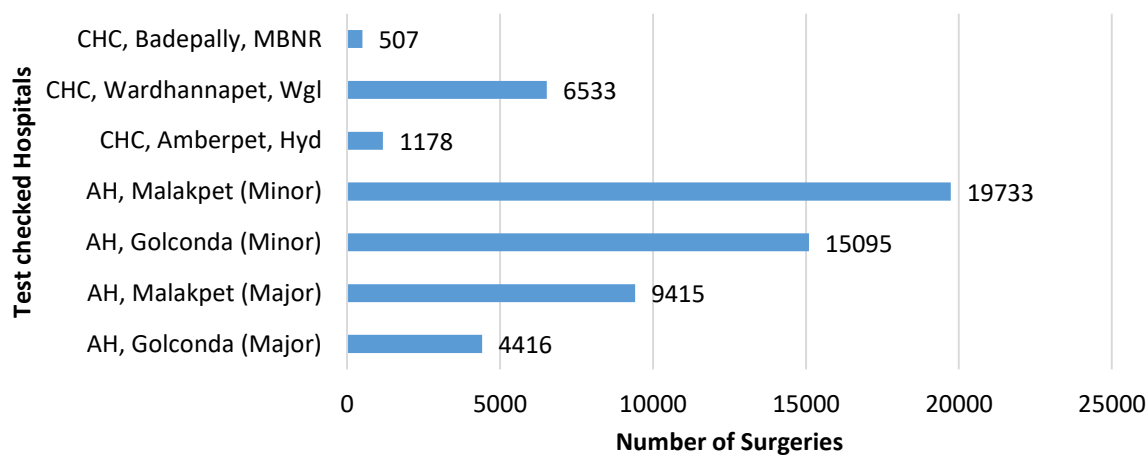| Name of the Surgical Procedure	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Hernia	A	A	A	A	A	A	A	A	A	A	A	A	NA	A
Hydrocele	A	A	A	A	A	A	A	A	A	A	A	A	NA	A
Appendicitis	A	A	A	A	A	A	A	A	A	A	A	A	NA	A
Haemorrhoids	A	NA	NA	A	A	A	A	A	A	NA	A	A	NA	A
Fistula	A	A	NA	A	A	A	A	A	A	NA	A	A	NA	A
Intestinal Obstruction	A	NA	NA	NA	A	NA	A	A	NA	NA	NA	A	NA	A
Hemorrhage	A	NA	A	NA	A	A	A	NA	A	NA	NA	NA	NA	A
Nasal Packing	A	NA	A	A	NA	A	A	NA	NA	NA	A	NA	NA	A
Tracheotomy	A	NA	NA	NA	NA	A	NA	NA	NA	NA	A	NA	NA	NA
Foreign body removal	A	NA	A	A	NA	A	A	A	NA	A	A	A	A	NA
Fracture reduction	NA	NA	A	A	A	A	NA	NA	A	NA	A	A	A	A
Putting splints/plaster case	NA	NA	A	A	A	A	A	A	A	NA	A	A	A	A
Every/Any available surgical procedure	A	A	NA	A	A	A	NA	A	A	NA	NA	A	NA	NA

Source: -Information furnished by the Hospitals.

Colour code: Green colour/A= Available; Red colour/NA=Not availabe

As seen from the table above, all the required surgical procedures were not available in the District Hospitals.

Table 3.15 - Details of Surgical Procedures performed in Test checked AHs, CHCs

Name of the Surgical Procedure	AH, Golconda	AH, Malakpet	CHC, Amberpet	CHC, Wardhannapet	CHC, Badepally
Hernia	A	A	NA	A	NA
Hydrocele	A	A	NA	A	NA
Appendicitis	A	A	NA	NA	NA
Haemorrhoids	A	A	NA	A	NA
Fistula	A	A	NA	NA	NA
Intestinal Obstruction	NA	NA	NA	NA	NA
Nasal Packing	A	A	NA	NA	NA
Tracheotomy	NA	NA	NA	NA	NA
Foreign body removal	A	A	NA	NA	NA
Fracture reduction	A	A	NA	NA	NA
Putting splints/plaster case	A	A	NA	NA	NA
Every/Any available surgical procedure	A	A	NA	A	NA

Source: Information furnished by the Hospitals

Colour code: Green colour/A= Available; Red colour/NA=Not available

Audit observed that all the required surgical procedures were not available in CHCs, Amberpet and Badepally. Only four surgical procedures were available in CHC Wardhannapet.

Government in its response stated (August 2023) that, Tracheotomy procedure was done on the basis of requirement of the case, Haemorrhoids and fistula surgery was a common procedure done by every General Surgeon, Intestinal obstruction surgery was done by every General Surgeon on requirement basis, Nasal packing was a common procedure done by every Medical Officer and hence there was no need for a Specialist and Fracture reduction, putting of splints, POP will be done by every Orthopaedic Surgeon.

Government response is acceptable with respect to Haemorrhoids, Fistula, Tracheotomy and nasal packing.

3.3.2   Surgery load per Surgeon in DHs/AHs/CHCs

As per NHM Assessor's Guidebook, Surgery performed per Surgeon is an indicator to measure the efficiency of the hospitals. Analysis of the records of surgeries done in DHs and test checked AHs/CHCs revealed substantial variation in the number of Major and Minor Surgeries performed, per Surgeon, per Year. Details are given below:

Table 3.16- Average number of Surgeries per Surgeon

Name of the District Hospital	Year	General		ENT		Ortho		Eye		Other Surgeries (specifically) LSCS	
		No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries
BOD	2016-17	1	22	0	0	0	0	0	0	2	131
	2017-18	1	11	0	0	0	0	0	0	2	256
	2018-19	1	10	0	0	0	0	1	85	2	520
	2019-20	1	33	0	0	0	0	1	106	2	606
	2020-21	1	13	0	0	0	0	1	21	2	656
	2021-22	2	34	0	0	0	0	0	0	2	424
GAD	2016-17	1	167	0	0	1	0	0	0	0	0
	2017-18	1	172	0	0	1	0	0	0	0	0
	2018-19	1	195	0	0	1	0	0	0	0	0
	2019-20	1	226	0	0	1	0	0	0	0	0
	2020-21	1	110	0	0	0	0	0	0	0	0
	2021-22	2	184	0	0	1	0	1	0	0	0
GAJ	2016-17	1	0	0	0	0	0	0	0	6	234
	2017-18	1	0	0	0	0	0	0	0	6	306
	2018-19	2	33	1	0	0	0	0	0	6	328
	2019-20	4	73	1	0	0	0	0	0	6	250
	2020-21	3	98	1	0	1	106	2	24	6	293
	2021-22	3	221	1	0	2	88	3	119	8	280
HYD	2016-17	4	190	1[7]	289	1	415	3	101	10	76

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[7] Surgeries performed by Surgeons appointed on Contract basis

Name of the District Hospital	Year	General		ENT		Ortho		Eye		Other Surgeries (specifically) LSCS	
		No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries
	2017-18	3	333	1	326	2	169	2	179	9	111
	2018-19	2	388	1	300	2	171	1	566	11	70
	2019-20	2	249	1	322	2	139	1	514	13	38
	2020-21	1	49	1	52	2	15	1	108	7	7
	2021-22	3	17	2	6[8]	2	13	2	8	8	6
KDP	2016-17	2	86	0	0	0	0	0	0	0	0
	2017-18	2	75	0	0	0	0	0	0	0	0
	2018-19	2	76	0	0	1	26	0	0	0	0
	2019-20	2	53	0	0	0	0	0	0	0	0
	2020-21	1	19	0	0	1	0	0	0	0	0
	2021-22	1	47	0	0	2	7	0	0	0	0
MDK	2016-17	1	697	0	0	1	72	1	205	0	0
	2017-18	1	714	0	0	1	85	1	269	0	0
	2018-19	1	736	1	0	1	103	1	229	0	0
	2019-20	1	658	1	0	2	29	1	149	0	0
	2020-21	1	866	1	0	2	22	1	45	0	0
	2021-22	1	641	1	3	2	10	1	80	0	0
MED	2016-17	0	0	0	0	0	0	0	0	0	0
	2017-18	0	0	0	0	0	0	0	0	0	0
	2018-19	2	150	1	0	2	0	1	0	0	0
	2019-20	2	65	1	0	2	0	1	0	0	0
	2020-21	2	200	1	0	2	0	1	0	0	0
	2021-22	2	221	1	19	2	39	1	4	0	0
MUL	2016-17	0	0	0	0	0	0	0	0	2	0
	2017-18	0	0	0	0	0	0	0	0	2	0
	2018-19	0	0	0	0	0	0	0	0	2	0
	2019-20	0	0	0	0	0	0	0	0	2	0
	2020-21	0	0	0	0	0	0	0	0	7	217
	2021-22	2	54	3	0	1	123	1	0	7	281
NRY	2016-17	1	33	0	0	0	0	0	0	0	101
	2017-18	1	20	0	0	1	0	0	0	1	472
	2018-19	1	150	0	0	1	0	0	0	1	718
	2019-20	1	126	0	0	1	0	0	0	1	962
	2020-21	1	99	0	0	1	0	0	0	1	855
	2021-22	1	142	0	0	1	2	0	0	2	1003

[8] Being a COVID designated hospital

Name of the District Hospital	Year	General		ENT		Ortho		Eye		Other Surgeries (specifically) LSCS	
		No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries	No. of surgeons	Average surgeries
NRS	2016-17	0	0	0	0	0	0	0	0	0	0
	2017-18	0	0	0	0	0	0	0	0	0	0
	2018-19	1	1	0	0	1	2	1	0	0	0
	2019-20	1	3	0	0	1	0	1	0	0	0
	2020-21	1	0	0	0	1	0	1	0	0	0
	2021-22	1	90	0	0	1	0	1	0	0	0
PED	2016-17	0	0	0	0	0	0	0	0	0	0
	2017-18	0	0	0	0	0	0	0	0	0	0
	2018-19	1	13	0	0	0	0	0	0	0	0
	2019-20	1	55	0	0	0	0	0	0	0	0
	2020-21	1	28	0	0	0	0	0	0	0	0
	2021-22	2	32	0	0	0	0	0	0	0	0
TDR	2016-17	2	230	0	0	2	109	1	62	0	0
	2017-18	3	189	0	0	2	17	1	109	0	0
	2018-19	2	197	0	0	1	11	1	89	0	0
	2019-20	3	167	0	0	2	17	0	0	0	0
	2020-21	3	244	0	0	3	27	0	0	0	0
	2021-22	1	528	0	0	2	11	0	0	0	0
UT	2016-17	0	0	0	0	0	0	0	0	0	0
	2017-18	0	0	0	0	0	0	0	0	0	0
	2018-19	0	0	0	0	0	0	0	0	0	0
	2019-20	0	0	0	0	0	0	0	0	0	0
	2020-21	0	0	0	0	0	0	0	0	0	0
	2021-22	0	0	0	0	0	0	0	0	0	0
YB	2016-17	1	0	1	0	1	0	0	0	6	179
	2017-18	2	19	1	0	1	0	2	0	8	340
	2018-19	1	29	0	0	1	0	2	0	7	409
	2019-20	0	0	0	0	1	0	1	0	6	347
	2020-21	0	0	1	0	1	0	1	0	6	285
	2021-22	0	0	1	0	1	0	1	0	4	373

Source: Information furnished by the District Hospitals.

Table 3.17- Average number of Surgeries per Surgeon in test checked AHs, CHCs

Name of the AH/ CHC	Year	General		ENT		Ortho		Eye		Other Surgeries (specifically) LSCS	
		No. of surgeons	Average Surgeries	No. of surgeons	Average Surgeries	No. of surgeons	Average Surgeries	No. of surgeons	Average Surgeries	No. of surgeons	Average Surgeries
AH, Golconda, Hyderabad	2016-17	2	30	0	0	1	598	0	0	3	204
	2017-18	2	228	0	0	1	191	0	0	9	90
	2018-19	2	151	0	0	1	126	0	0	6	162
	2019-20	2	105	0	0	1	104	0	0	6	159
	2020-21	2	46	0	0	1	72	0	0	7	125
	2021-22	2	179	2	0	2	36	1	0	9	121
AH, Malakpet, Hyderabad	2016-17	2	897	0	0	1	0	2	310	0	0
	2017-18	2	897	0	0	1	0	2	238	0	0
	2018-19	2	720	0	0	1	0	2	156	0	0
	2019-20	2	320	0	0	1	0	2	171	0	0
	2020-21	2	2	0	0	1	0	2	67	0	0
	2021-22	2	88	1	25	1	17	2	130	0	0
CHC Amberpet, Hyderabad	2016-17	0	0	0	0	0	0	0	0	0	0
	2017-18	0	0	0	0	0	0	0	0	0	0
	2018-19	0	0	0	0	0	0	0	0	0	0
	2019-20	0	0	0	0	0	0	0	0	0	0
	2020-21	0	0	0	0	0	0	0	0	0	0
	2021-22	0	0	0	0	0	0	0	0	0	0
CHC Badepally	2016-17	2	37	0	0	0	0	0	0	0	0
	2017-18	2	67	0	0	0	0	0	0	0	0
	2018-19	2	44	0	0	0	0	0	0	0	0
	2019-20	2	54	0	0	0	0	0	0	0	0
	2020-21	2	52	0	0	0	0	0	0	0	0
	2021-22	0	0	0	0	0	0	0	0	0	0
CHC Wardhannapet	2016-17	5	71	0	0	0	0	0	0	0	0
	2017-18	6	167	0	0	0	0	0	0	0	0
	2018-19	6	275	0	0	0	0	0	0	0	0
	2019-20	6	235	0	0	0	0	0	0	0	0
	2020-21	6	201	0	0	0	0	0	0	0	0
	2021-22	6	151	0	0	0	0	0	0	0	0

Source: *Information furnished by the Health facilities*

3.3.3 Operation Theatre Services

In all the test checked Super Speciality Hospitals, DHs, AHs and CHCs, Operation Theatre (OT) facilities were available.

IPHS Guidelines provide that DHs should have Operation Theatres (OTs) equipped with all instruments. The OTs should have the Departments of Surgery with Central Sterile Supply Department (CSSD) near to the OTs. It further provides that the OTs should have preparatory, pre-operative and post-operative resting rooms.

Table 3.18- Availability of facilities for OT services in DHs

District Hospital	Have convenient relationship with surgical ward, ICU, radiology, pathology, blood bank and CSSD	Barrier free Access facility for people with disabilities	Piped suction and medical gases, electric supply, heating, air conditioning, ventilation	Patient's records and clinical information is maintained	Defined and established grievance redressal system	AMC and preventive maintenance for equipment	Established with procedure for internal and external calibration of measuring equipment
BOD	A	A	NA	A	A	A	A
GAD	PA	A	NA	A	A	A	NA
GAJ	A	A	PA	A	A	A	A
HYD	A	A	A	A	A	A	A
KDP	A	A	A	A	A	A	A
MDK	A	A	A	A	NA	NA	NA
MED	A	A	A	A	A	NA	A
MUL	A	A	NA	A	A	A	A
NRY	A	A	PA	A	A	A	A
NRS	A	A	A	A	NA	A	A
PED	A	A	A	A	A	A	A
TDR	A	A	A	A	A	NA	A
UT	A	A	A	A	A	A	A
YB	A	NA	A	A	NA	A	A

Source: Information furnished by test checked DHs
Colour code: Green colour/A= Available; Red colour//NA=Not available Yellow/PA:- Partially available.

Audit observed that, except in case of four DHs Hyderabad (King Koti), Kondapur, Peddapalli and Utnoor, facilities for all OT services were not available in the remaining 10 DHs.

3.3.3.1 *OT services in test checked hospitals*

Table 3.19- Availability of OT services in test checked AHs and CHCs

Description	AH, Golconda	AH, Malakpet	CHC, Amberpet	CHC, Wardhannapet	CHC, Badepally
OT have convenient relationship with surgical ward, intensive care unit, radiology, pathology, blood bank and CSSD.	A	A	A	A	NA
Barrier free Access is provided to facility for people with disabilities	A	A	A	NA	A
OT have piped suction and medical gases, electric supply, heating, air conditioning, ventilation.	A	A	A	A	NA
Patient's records and clinical information is maintained	A	A	A	A	A

Has defined and established grievance redressal system in place.	A	A	A	A	A
Whether all equipment are covered under AMC including preventive maintenance.	NA	NA	NA	NA	NA
Whether the facility has established procedure for internal and external calibration of measuring equipment.	NA	A	A	A	NA

Source : *Information furnished by the Health facilities*

Colour code: Green colour/A= Available; Red colour//NA=Not available

Audit observed that in none of the test checked AHs and CHCs, all equipment were covered under AMC including preventive maintenance.

3.3.4   Evaluation of IPD services through Outcome Indicators

The IPD services can be evaluated through Outcome Indicators *viz*., Bed Occupancy Rate (BOR), Bed Turnover Rate (BTR), Discharge Rate (DR), Referral Out Rate (ROR), Average Length of Stay (ALoS), Left Against Medical Advice (LAMA) Rate and Absconding Rate (AR).

Table 3.20- Outcome Indicators of IPD services in DHs during 2021-22

District Hospitals	Average bed occupancy rate (BOR[9]) (%)	Average bed turnover rate (BTR[10])(No. of patients per bed in a year)	Discharge Rate (DR[11]) (%)	Average Referral out rate[12] (%)	Average length of stay[13] (No. of days)	LAMA[14] rate (per 1000 patients)	Absconding rate[15] (per 1000 patients)
BOD	42	NF	101	NF	NF	NF	NF
GAD	119	72	85	12	4 to 5	1	11
GAJ	73	72	100	4	3	0.24	0.11
HYD	42.99	4.91	74.5	9.49	8	47.05	35.82
KDP	67.40	19.91	82.80	2.94	4	60.90	57
MDK	43	38	87	9	6	0.76	2.09
MED	91	62	84	8	5	3.80	3.70
MUL	94	0	87	5	NF	3.90	3.50
NRY	80	50	100	2	2 to 3	5	2

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[9] **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, it is expected that the BOR of a hospital should be at least 80 *per cent*. High BOR is a sign of good productivity of the hospital

[10] The **Bed Turnover Rate (BTR)** is a measure of the utilisation of the available bed capacity and serves as an indicator of the efficiency of the hospital. High BTR indicates high utilisation of the in-patient beds in a hospital while low BTR could be due to fewer patient admissions or longer duration of stay in the hospitals

[11] **Discharge Rate (DR)** measures the number of patients leaving a hospital after receiving due health care. High DR denotes that the hospital is providing healthcare facilities to the patients efficiently

[12] **Referral to higher centres** denotes that the facilities for treatments were not available in the hospitals

[13] **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

[14] To measure service quality of a hospital, **Leave Against Medical Advice (LAMA)** rate is evaluated. LAMA is the term used for a patient who leaves the hospital against the advice of the Doctor. LAMA Rate is calculated for every 1000 admissions

[15] **Absconding Rate (AR)** refers to patients who leave the Hospital without informing the Hospital authorities. Absconding Rate is calculated for every 1000 admissions

District Hospitals	Average bed occupancy rate (BOR[9]) (%)	Average bed turnover rate (BTR[10])(No. of patients per bed in a year)	Discharge Rate (DR[11]) (%)	Average Referral out rate[12] (%)	Average length of stay[13] (No. of days)	LAMA[14] rate (per 1000 patients)	Absconding rate[15] (per 1000 patients)
NRS	100	41	95	20	5	1.71	2.59
PED	97	10.3	72	3	7	9	1
TDR	86	86	93	2	1	0.86	1.96
UT	75	35	80	10	3	4	0
YB	69.50	49.35	88.72	6.90	7	Nil	Nil

Source: Information furnished by test checked Health Institutions   NF – Not furnished

3.3.4.1   Outcome Indicators of IPD services in test checked Health Institutions

Scrutiny of the records of test checked Specialty Hospitals, AHs and CHCs relating to LAMA and Absconding cases during the period from 2016-17 to 2021-22 revealed the following:

Table 3.21- Outcome Indicators of IPD services in Specialty Hospitals

Name of the Hospital	Number of Admissions	Patients became LAMA	Patients Absconded
MNJ Cancer Hospital	1,34,091	2,724*	NA
Osmania General Hospital	2,93,792	NA	NA
Niloufer Hospital	3,87,283	10,634	961

*Source: - Information furnished by the Hospitals   * information available only up to 2020-21*

Table 3.22- Outcome indicators of IPD services in test checked AHs and CHCs during 2021-22

Name of the AH , CHC	Average bed occupancy rate (%)	Average bed turnover rate (No. of patients per bed in a year)	Discharge Rate (%)	Average Referral out rate (%)	Average length of stay (No. of days)	LAMA rate per 1000 patients	Absconding rate per 1000 patients
AH, Golconda	17	16	94	12	2 to 5	0	0
AH, Malkapet	94	94	97	1	2 to 5	1	3
CHC, Amberpet	NF	NF	NF	NF	NF	NF	NF
CHC, Wardhannapet	120	16	96	8	5	0	0
CHC, Badepally	77	2	61	6	3	14	15

Source: Information furnished by test checked Health Institutions; NF – Not Funished

Audit observed that Average Referral Out Rate ranged from 12 *per cent* in AH Golconda to 1 *per cent* in AH Malkpet.

3.3.4.2   Other indicators

The Performance of the MCH Services in Distict Hospitals and other test checked health facilities on certain outcome indicators evaluated by Audit is as follows.

Table 3.23 - Average ROR/LAMA/AR in MCH Wards in DHs during 2021-22

Name of the DH	Total IPD Maternity	ROR		LAMA		Absconding	
		Cases	Rate	Cases	Rate	Cases	Rate
BOD	1,519	66	4.34	0	0	0	0
GAD	3,621	3,595	99*	12	0.33	13	0.36
GAJ	4,474	457	10.2	0	0	0	0
HYD	1,282	10	0.78	6	0.5	20	1.6
KDP	2,548	565	22.2	20	0.8	0	0
MDK	3,428	386	11.3	137	4	76	2.2
MED	931	65	7	6	0.6	4	0.4
MUL	1,937	86	4.4	86	4.4	86	4.4
NRY	4,564	0	0	325	7.1	353	7.7
NRS	1,802	109	6	48	2.66	0	0
PED	1,694	305	18	0	0	0	0
TDR	7,392	0	0	0	0	0	0
UT	683	92	13.5	34	5	0	0
YB	NA	NA	NA	NA	NA	NA	NA

Source: Information furnished by test checked DHs

* In DH of Jogulamba Gadwal, there are no dedicated wards for OBG. Patients were extended OBG services and were being accommodated in the Female wards of DH Jogulamba Gadwal as the MCH Centre in the District of Jogulamba Gadwal is not fully functional and provides Antenatal care to the patients

Among the above District Hospitals, the Referral out Rate (ROR) of DH Jogulamba Gadwal was found to be highest and the reason was the hospital did not have OBG service as a result of which referral was more.

Table 3.24- Average ROR/LAMA/AR in test checked AHs, CHCs, PHCs during 2021-22

Name of the AHs/CHCs/PHCs	Total IPD Maternity	ROR		LAMA		Absconding	
		Cases	Rate	Cases	Rate	Cases	Rate
AH Golconda	736	0	0	0	0	0	0
AH Malakpet	2,693	104	3.86	1	0.04	3	0.11
CHC Amberpet	NF	NF	NF	NF	NF	NF	NF
CHC Wardhannapet	1,179	0	0	0	0	0	0
CHC Badepally	790	18	2	0	0	0	0
PHC Edira	16	0	0	0	0	0	0
PHC Duggondi	1	0	0	0	0	0	0

Source: Information furnished by test checked Health facilities; NF – Not furnished

Audit observed that the Referral out Rate in respect of Maternity cases was ranging from 3.86 *per cent* (AH Malakpet) to 2 *per cent* (CHC Badepally). The information was not furnished by CHC Amberpet.

3.3.5 Requirement and Availability of Doctors and Nurses

Doctors and Nurses

In respect of DHs/AHs/CHCs, the requirement of Doctors and Nurses were considered with reference to the IPHS norms.
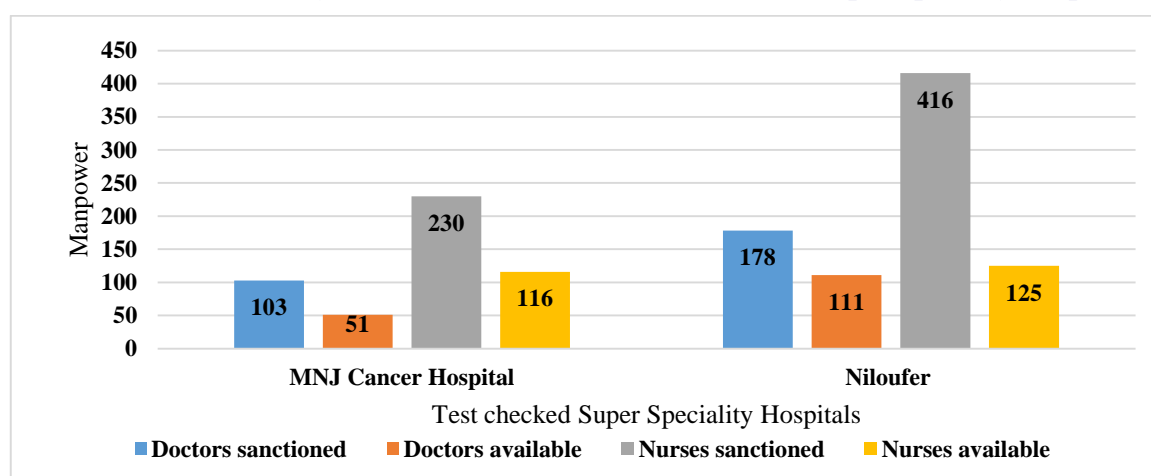
Chart 3.8 – Availability of Doctors and Nurses in test checked DHs, AHs, CHCs
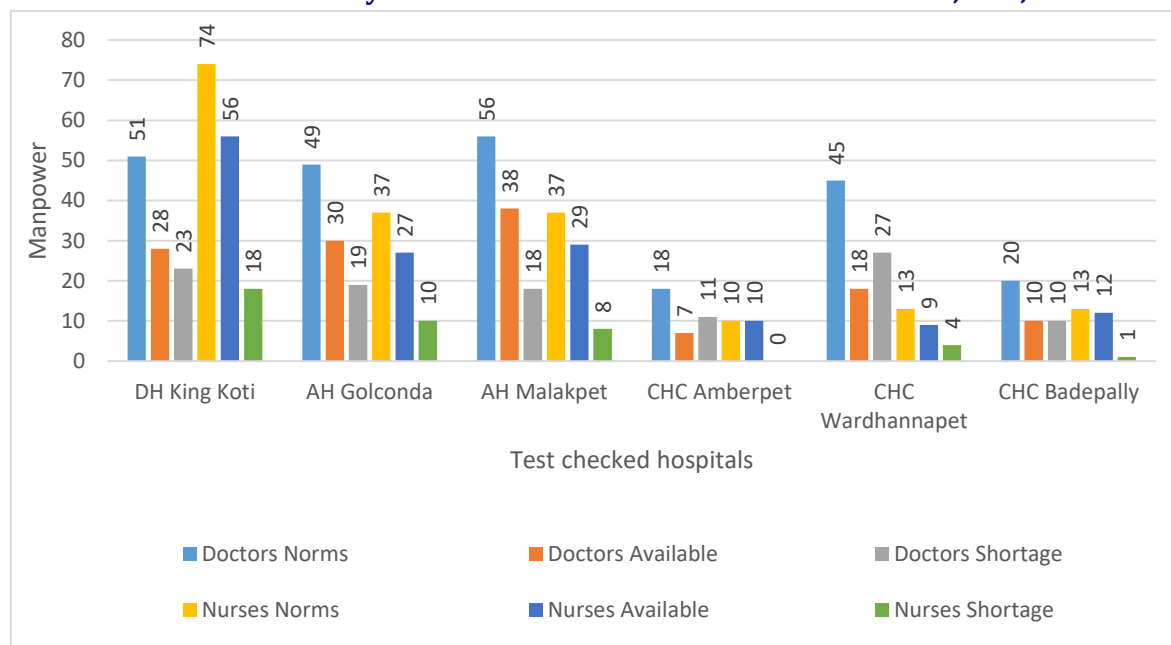
Source: Information furnished by the Hospitals.

In the absence of specific norms for Super Specialty Hospitals, the shortage was calculated with reference to the Sanctioned Strength.

Chart 3.9 - Availability of Doctors and Nurses in test checked Super Specialty Hospitals

Source: Information furnished by the Hospitals

Rosters for Nurses

Nursing Council of India (NCI) recommends one nurse per six beds in the general ward of a DH/AH/CHC. The bed load in respect of the test checked hospitals is as given below.

Table 3.25- Bed load per Nurse in test checked Hospitals

Name of the Hospital	Bed Strength	Availability of Staff Nurse	Bed Load of No. of beds per nurse[16]
MNJ Cancer Hospital	525	116	14
Osmania General Hospital	1,380	259	16
Niloufer Hospital	1,000	125	24
DH King Koti, Hyderabad	200	56	11
AH Golconda, Hyderabad	100	27	11
AH Malakpet, Hyderabad	100	29	10
CHC Amberpet, Hyd	30	10	9
CHC Wardhannapet	30	9	10
CHC Badepally	30	12	8

Source : Information furnished by the Hospitals.

➢ As seen from the above, in all the test checked hospitals above PHC level, the bed load for the nurses was more than the required norms of six beds per each nurse.

➢ In Niloufer Hospital, the bed load per each nurse was almost four times the norm, whereas in other test checked hospitals, it was more than the stipulated norm.

Government in its response stated (August 2023) that, the recruitment of Nursing Staff by Telangana State Public Service Commission (TSPSC) was delayed due to Court cases and that Nursing Staff were recruited on contract/ outsourcing basis to meet the needs of the Hospitals. The Department had initiated steps to fill 5,204 Staff Nurse posts on regular basis and they will be filled by October 2023.

However, Government had not furnished the actual number of Nurses who were recruited pursuant to these notifications and the District-wise, hospital-wise filling up of vacancies.

3.3.6   Emergency Services

Emergency services in DH are provided by Emergency Ward or Emergency Room (ER) which is a facility specialising in acute care of patients who come in emergency. IPHS envisages 24x7 operational emergency with dedicated emergency room in every District Hospital.

Chart 3.10: Flow chart of Emergency Department
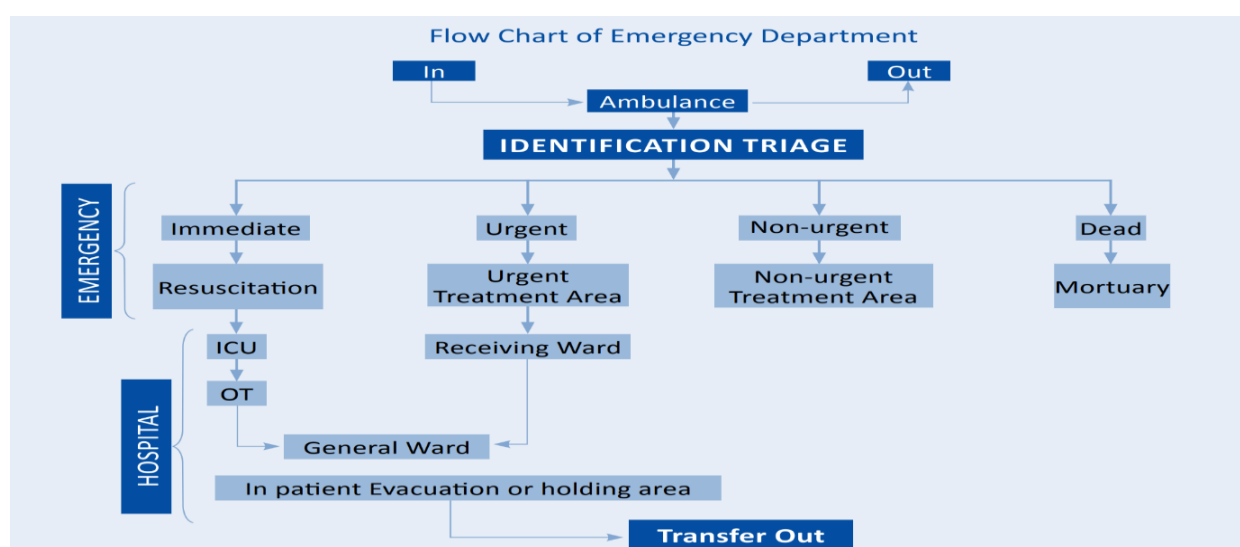
Source: IPHS Guidelines

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[16] Beds covered by each nurse per shift (3 shifts) = (bed strength*3 shifts) / Available staff nurses

3.3.7 Availability of Emergency services in District Hospitals

According to the Indian Public Health Standards (IPHS), a 24x7 operational emergency room with dedicated staff should be available, equipped with mobile X-ray and laboratory services, as well as side labs, a plaster room and minor operating theatre facilities. Additionally, separate beds specifically for emergency cases should be provided.

Table 3.26- Availability of Emergency Services in DHs

Particulars	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Specific OT *viz.*, Cardiac, Gynaec, Trauma Care, etc	A	NA	A	A	A	A	A	A	A	A	A	NA	A	A
Functioning of emergency OT	A	NA	A	A	A	NA	NA	A	A	A	A	A	NA	A
Infrastructure relating to trauma ward such Bed Capacity, Machinery & equipment etc	NA	NA	A	NA	A	NA	NA	A	A	NA	NA	NF	NA	A
Triage procedure to sort patients	A	NA	A	A	A	A	NA	A	A	A	A	A	A	A
Surgical facilities for emergency appendectomy	A	A	A	A	A	A	A	A	A	NA	A	A	NA	A
Diagnose and to treat for hypoglycemia, ketosis and Coma	A	A	A	A	A	A	NA	A	A	A	A	A	NA	A
Assault injuries/bowel injuries/ head injuries/stab injuries/ multiple injuries/perforation/ intestinal obstruction	A	NA	A	A	A	A	NA	A	A	A	NA	A	NA	NA
Emergency laboratory services	A	A	A	A	A	A	NA	A	A	A	A	A	A	NA
Blood bank near emergency Department	A	A	A	A	A	A	NA	A	A	A	A	A	A	A
Mobile X-ray laboratory, side labs/ plaster room in Accident and emergency service	A	NA	A	A	A	A	NA	A	A	A	A	A	A	NA
Emergency operation theatre for Maternity, orthopaedic emergency, burns and plastic and neurosurgery cases round the clock	A	NA	A	A	A	A	NA	A	A	A	A	A	A	A
Facility for accidents and emergency services including trauma care	A	A	A	NA	A	A	NA	A	A	A	A	A	A	A

Particulars	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Separate provision for emergency ward for examination of rapes/sexual assault victim	NA	NA	A	A	A	NA	NA	A	A	A	A	NA	NA	NA
Sufficient separate waiting area and public amenity in emergency ward for patients and relatives	A	NA	A	A	A	NA	NA	A	A	A	A	A	A	NA
Emergency protocols in emergency ward	A	A	A	A	A	NA	A	A	A	A	A	NA	A	NA
Disaster Management Plan in emergency ward	A	NA	A	A	A	NA	A	A	A	A	A	NA	A	NA

Source: Information furnished by test checked Health Institutions

Colour code: Green colour/A= Available; Red colour/NA=Not available; Yellow=Available but not functional; Blue – Not furnished

As seen from the table above, specific OTs for cardiac, gynaec and trauma care were available in all DHs except DHs Jogulamba Gadwal and Tandur. Surgical facilities for emergency appendectomy were available in all DHs except DHs Narsampet and Utnoor. Emergency laboratory services were available in all DHs except DHs Medchal Malkajgiri and Yadadri Bhuvanagiri. Due to non-availability of all the emergency services the patients were being referred to other hospitals for the treatment.

Government in its response stated (August 2023) that Cardiac OTs were available in Super Specialty Hospitals and that all the DHs have OTs for Gynaec and Trauma. It was also stated that since Telangana Diagnostics Hub (T-Hub) services were available in all the DHs, round the clock emergency lab services were available.

Audit however observed that all samples collected were not tested in the Telangana Diagnostics Hub. It was also observed that some of the samples were also rejected for reasons not on record.

3.3.8 Availability of Emergency Care in DHs/AHs/CHCs

Table 3.27- Availability of Emergency Care

Name of Routine and emergency care services	District Hospitals	Area Hospitals	Community Health Centres
No.of Health facilites test checked	**14**	**2**	**3**
Dengue Haemorrhagic fever	7	2	0
Cerebral Malaria	8	2	0
Dog and Snake Bites cases	14	2	3
Poisoning	14	2	2
Congestive Heart Failure	3	1	1
Left Ventricular Failure	4	1	0
Pneumonia	12	1	1
Meningoencephalitis	5	1	0
Acute Respiratory Conditions	13	1	1

Name of Routine and emergency care services	District Hospitals	Area Hospitals	Community Health Centres
Status Epilepticus	12	1	2
Burns	14	1	1
Shock	12	2	1
Acute Dehydration	14	2	3
Obstetric Care including surgical interventions like Caesarean Sections and other medical intervention	13	2	3

Source: Information furnished by the Hospitals

Colour code:

Availability of services in 50% and more		Availability of services in more than 25% and less than 50%		Availability of services in less than 26%			

Audit observed that all the required emergency care services were not available in the test checked DHs and CHCs. In the Area Hospitals, most of emergency care services were available.

3.3.8.1 *Emergency cases referred to other hospitals*

Table 3.28- Emergency cases referred to other hospitals from District Hospitals

District Hospital	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
BOD	3	5	3	1	1	1
GAD	15	14	14	15	18	12
GAJ	4	4	3	3	3	4
HYD	1	1	1	1	0	6
KDP	4	6	20	7	18	11
MDK	5	5	6	7	8	9
MED	0	0	3	5	6	8
MUL	0	0	4	5	1	5
NRY	20	20	25	20	5	2
NRS	8	8	8	8	17	20
PED	5	4	3	6	4	3
TDR	2	2	2	2	2	2
UT	10	14	13	17	11	10
YB	NF	NF	NF	NF	NF	NF

Source: Information furnished by the Hospitals; NF – Not Furnished

Audit observed that the number of emergency cases referred out was highest in DH Narayanpet (92 cases) and least in DH Hyderabad (King Koti) (10 cases) during the period 2016-17 to 2021-22. The information was not furnished by DH Yadadri Bhuvanagiri.

3.4   Delivery of Support Services

3.4.1   Maternity services

3.4.1.1   *Achievement of required four Antenatal Check-ups (ANC) and delivery of Iron Folic Acid (IFA) tablets to Pregnant Women*

Table 3.29- Indicators of ANC, Tetanus Toxoid (TT) administration and IFA tablets in the State

Indicators	2015-16 *(In per cent)*	2019-20 *(In per cent)*
ANC received in the first trimester	83.1	88.5
Pregnant women received at least four ANC	74.9	70.4
IFA (180 days)	28.8	34.4

Source: NFHS-5 Survey Report

The performance of the State with regard to maternity services like ANC received in the first trimester and consumption of Iron Folic Acid tablets has improved in 2019-20 as compared to 2015-16, while it had not shown any improvement in respect of pregnant women receiving at least four ANC.

3.4.1.2   *Status of Institutional Deliveries*

To minimise the Maternal Mortality Rate (MMR), deliveries in hospital and health institutions are encouraged for safe delivery and survival of the child as well as mother.

Table 3.30- Institutional births, Home birth by Skilled Health Personnel in the State

(In per cent)

Indicators	2015-16	2019-20
Institutional births	91.5	97.0
Institutional births in Public Health Facility	30.5	49.7
Home Birth by Skilled Health Personnel	2.8	1.3

Source: NFHS-5 survey report

As seen from the table above, there has been improvement in the institutional births, institutional births in public health facility. However, Home Birth by Skilled Health Personnel has declined.

Government in its response (August 2023) while confirming the figures included in the Table above stated that KCR Kit data indicated 99.90 *per cent* of institutional deliveries in 2022-23 and that as per NFHS V, Telangana stands 4th in the country in institutional deliveries. It was also stated that the State was focusing on ensuring 100 *per cent* safe institutional deliveries for reducing MMR and IMR.

3.4.1.3   *Labour room facilities in CHCs/UPHCs/PHCs*

Table 3.31- Availability of Labour Room in test checked CHCs/PHCs/UPHCs

Type of Health Institutions	Total Number of HIs	Availability of Labour Room in no. of HIs
CHCs	3	3
PHCs/ UPHCs	9	8

Source: Information furnished by Hospitals
Note: Colour grading has been done on colour scale with Green colour depicting satisfactory performance, while Red colour depicting poor performance

Labour Room was available in all the test checked CHCs and PHCs/UPHCs except UPHC Niloufer, Hyderabad.

3.4.2 Caesarean Deliveries (C-Section)

Table 3.32- Status of Caesarean deliveries (C-Section) in the State

(In *per cent*)

Indicators	2015-16 (NFHS 4)	2019-20 (NFHS 5)
C-section deliveries	57.7	60.7
Private health facility C-section deliveries	74.5	81.5
Public health facility C-section deliveries	40.3	44.5

Source: NFHS-5 Survey Report
Note: *Colour grading has been done on colour scale with Yellow depicting moderate performance while Red colour depicting poor performance.*

Audit observed that C-Section deliveries had increased in the State from 57.7 *per cent* (NFHS 4) to 60.7 *per cent* (NFHS 5).

Table 3.33- Number and Percentage of Normal and C-Section deliveries conducted in the Districts during 2016-22

Sl.No.	District	Total Deliveries	Normal Deliveries	Normal Deliveries (%)	C-Section Deliveries	C-Section Deliveries (%)
1	Adilabad	71494	43010	60	28484	40
2	Bhadradri Kothagudem	74802	37373	50	37420	50
3	Hanumakonda	64611	18029	28	46582	72
4	Hyderabad	426073	219192	51	206877	49
5	Jagtial	73647	16386	22	57260	78
6	Jangaon	32275	9664	30	22610	70
7	Jayashankar Bhupalpally	17628	4184	24	13444	76
8	Jogulamba Gadwal	57273	34914	61	22359	39
9	Kamareddy	77936	33301	43	44635	57
10	Karimnagar	76742	16753	22	59989	78
11	Khammam	90516	26384	29	64122	71
12	Kumuram Bheem Asifabad	36617	26603	73	10014	27
13	Mahabubabad	42966	9354	22	33612	78
14	Mahabubnagar	86366	49376	57	36990	43
15	Mancherial	54225	16915	31	37308	69
16	Medak	48753	23814	49	24939	51
17	Medchal Malkajgiri	183354	90745	49	92576	50
18	Mulugu	21073	10358	49	10714	51
19	Nagarkurnool	60309	27379	45	32926	55
20	Nalgonda	105723	28857	27	76850	73
21	Narayanpet	48868	35008	72	13859	28
22	Nirmal	59324	14421	24	44901	76
23	Nizamabad	135299	39240	29	96058	71
24	Peddapalli	45473	9107	20	36358	80
25	Rajanna Sircilla	36156	7593	21	28557	79

Sl.No.	District	Total Deliveries	Normal Deliveries	Normal Deliveries (%)	C-Section Deliveries	C-Section Deliveries (%)
26	Rangareddy	139686	67125	48	72560	52
27	Sangareddy	121581	69207	57	52373	43
28	Siddipet	82840	26662	32	56174	68
29	Suryapet	62674	13535	22	49137	78
30	Vikarabad	64501	35491	55	28992	45
31	Wanaparthy	44037	21378	49	22659	51
32	Warangal	73273	24069	33	49202	67
33	Yadadri Bhuvanagiri	43791	10332	24	33458	76
	Total	2659883	1115759	42	1543999	58

Source: KCR-kit.telangana.gov.in; and figures above includes total C-section deliveries of all health facilities of the entire district.

Colour code:

C Section deliveries less than 26%	(green)	C Section deliveries between 26% and less than 50%	(yellow)	C Section deliveries 50% and more	(red)

Audit observed that C-Section deliveries was more than 50 *per cent* of the total deliveries in 23 out of the 33 Districts of the State.

3.4.2.1   Still Births

World Health Organisation (WHO) defines Still Birth for international comparison as a baby born with absolutely no signs of life at or after 28 weeks of gestation. Still birth rate is a key indicator of quality of care during pregnancy and childbirth.

Table 3.34 - Still Birth Rate (out of Total Live Births) in District Hospitals

Year	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
2016-17	0	0.52	0.36	0	3.31	0	0	0	2.44	3.5	0	0.57	0	0
2017-18	0	5.6	0.27	0	4.62	0	0	0	2.73	0	0	0.46	0	0
2018-19	0	11.72	1.08	0	5.11	0	0	0	1.04	1.79	0	0	0	0
2019-20	1.21	10.29	0.30	0	1.13	0.65	0	0	2.4	0	0	0	0	0
2020-21	1.25	8.21	1.63	0	0	0.66	0	0	1.99	1.63	0	0	0	0
2021-22	2.07	13.24	1.12	0	1.42	1.46	2.88	1.41	1.85	0.75	0	0	0	0

Source: Information furnished by the Health facilities.

Compared to other District Hospitals, the incidence of Still Birth was high in the District Hospital Jogulamba Gadwal during the year 2021-22.

Table 3.35 - Still Birth Rate (out of Total Live Births) in test checked AHs / CHCs

Year	AH Golconda	AH Malakpet	CHC Amberpet	CHC Wardhannapet	CHC Badepally
2016-17	0	0	NF	0	2
2017-18	0	0	NF	0	5.42
2018-19	1.77	1.1	NF	0	0
2019-20	0.53	0	NF	0	0
2020-21	0	0	NF	0	5.15
2021-22	2.20	0	NF	0	2.59

Source: Information furnished by the Health facilities. NF – Not furnished

Among the two test checked AHs, AH Golconda had the highest Still Birth Rate and CHC Badepally had the highest Still Birth Rate among the CHCs during 2021-22.

3.4.2.2 Death Review

The Maternal Death Review Guidebook (NHM) stipulates that, at District Hospital, a Committee comprising of Hospital Superintendent, Facility Nodal Officer (FNO) (Obstetrician from the Department), at least two Obstetricians/ MO in Obstetrics and Gynaecology (OBG) Department, one Anaesthetist, one Blood Bank MO, Nursing representative and one Physician should be formed to review the causes of maternal and child deaths. Maternal and Neonatal Death Review was being done in health facilities regularly.

As nine[17] DHs did not have any Maternal Deaths or Neonatal Deaths, there was no need for conducting reviews.

Of the remaining five DHs, details of Maternal death review conducted in the District Hospitals and test checked hospitals during the period 2016-22 are as follows:

Table 3.36- Maternal Death Review/ Neonatal Death Review conducted in DHs

Name of the DH	Maternal Deaths			Neonatal deaths		
	No. of Maternal deaths	No. of Maternal death reviews conducted	Shortfall (%)	No. of Neonatal deaths	No. of Neonatal death reviews conducted	Shortfall (%)
BOD	0	0	0	2	2	0
GAD	2	0	100	0	0	0
MDK	0	0	0	13	13	0
NRY	2	0	100	34	34	0
TDR	0	0	0	414[18]	414	0

Source: Information furnished by the Health facilities.

Note: Colour grading has been done on colour scale with Green colour depicting satisfactory performance; while Red colour depicting poor performance.

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[17] DHs Gajwel; Hyderabad; Kondapur; Medchal Malkajgiri; Mulugu; Narsampet; Peddapalli; Utnoor and Yadadri Bhuvanagiri
[18] DH Tandur Neonatal deaths: 2016-17: 114; 2017-18: 99; 2018-19: 73; 2019-20: 49; 2020-21: 41 and 2021-22: 38

As seen from the Table 3.36, DHs Jogulamba Gadwal and Narayanpet had not conducted any Maternal Death Review for the deaths. The number of neonatal deaths in the DH, Tandur was very high and Government needs to investigate the specific reasons for such high incidence of Neonatal deaths.

Government in its response stated (August 2023) that, SNCU of Vikarabad District was located in a remote tribal area Tandur. Apart from neonates born in DH Tandur, out-born neonates are referred from distant delivery points to the SNCU, Tandur and that SNCU deaths in Tandur have been considerably reduced from 99 (2017-18) to 36 (2022-23). No specific response was furnished by Government regarding non-conduct of Maternal Death Review.

Table 3.37- Maternal Death Review/Neonatal Death Review conducted in test checked PHCs and CHCs for 2021-22

Name of the PHC/ CHC	Maternal Deaths			Neonatal deaths		
	No. of Maternal deaths	No. of Maternal death reviews conducted	Shortfall (%)	No. of Neonatal deaths	No. of Neonatal death reviews conducted	Shortfall (%)
CHC Badepally	0	0	0	2	0	100
PHC Edira	2	1	50	5	5	0

Source: Information furnished by the Health facilities

Note: Colour grading has been done on colour scale with Green colour depicting satisfactory performance; while Red colour depicting poor performance while yellow depicts moderate performance

Audit observed that CHC Badepally had not conducted the Neo-natal death review in both the Neo-natal deaths.

3.4.2.3   *Monthly Satisfaction Survey and Form III Register in Maternity Wing*

Table 3.38- Details of survey conducted by Maternity Wing for 2021-22

Name of the AH/CHC/PHC/UPHC	No. of Mothers surveyed	No. of satisfied mothers	%. of satisfied mothers
AH Golconda	189	189	100
AH Malakpet	338	338	100
CHC Amberpet	No Survey conducted		
CHC Wardhannapet	1179	1179	100
CHC Badepally	No Survey conducted		
UPHC Gaganmahal	No Survey conducted		
UPHC Azampura	No Survey conducted		
UPHC Niloufer	No Survey conducted		
PHC Edira	11	11	100
PHC Addakal	22	22	100
PHC Rajapur	514	514	100
PHC Alankanipet	No Survey conducted		
PHC Geesugonda	745	745	100
PHC Duggondi	No Survey conducted		

Source: Information furnished by test checked Health Institutions

Audit observed that Monthly Satisfaction Survey were not conducted by CHCs Amberpet and Badepally, UPHCs Gaganmahal, Azampura and Niloufer and PHCs Alankanipet and Duggondi.

3.5 Diagnostic Services

As per IPHS, District Hospital Laboratory shall serve the purpose of public health laboratory and should be able to perform all tests required to diagnose epidemics or important diseases from the public health point of view. The availability of diagnostic services in the District hospitals are shown in the *Appendix 3.1.*

From the data collected it can be seen that in none of the District Hospitals had diagnostic services relating to ENT, Oesophagus, Stomach, Colonoscopy, Bronchoscopy, Arthroscopy, Hysteroscopy. Similarly, except in DH, Kondapur, Pulmonary function tests were not available in the remaining 13 DHs.

Government in its response stated (August 2023) that, separate Super Specialty Departments were available in all Medical Colleges in the Districts where the above diagnostic facilities were available. However, details of the District-wise Medical Colleges, Specialty Departments and Human Resources available in each Medical College were not furnished.

3.5.1 Radiology Services

IPHS 2012, prescribes the list of Radiology services for the DHs/SDHs/CHCs as indicated in table.

Table 3.39 - List of services for the DHs/SDHs/CHCs

Type of Hospitals	Services prescribed by IPHS norms
DH	X-ray, Dental X-ray, Ultrasonography, Computed Tomography (CT) scan
SDH	X-ray, Dental X-ray, Ultrasonography
CHC	X-ray, Dental X-ray

Source: IPHS Norms

Table 3.40 - Availability of Radiology services in the test checked AHs and CHCs

Name of the Hospital	Nature of Diagnostic Service			
	X-Ray	Dental X-Ray	Ultrasonography	CT-Scan
AH Golconda	A	NA	A	NA
AH Malakpet	A	NA	A	NA
CHC Amberpet	A	NA	A	NR
CHC Wardhannapet	A	NA	A	NR
CHC Badepally	A	NA	A	NR

Source: - Information furnished by the Hospitals

Colour Code-Green/A = Available; Red/NA=Not available; Yellow/NR i.e. Not required

Audit observed that Dental X-Ray was not available in both the AHs Golconda and Malakpet and in the CHCs Amberpet, Wardhannapet and Badepally.

3.5.2 Non-registration of imaging equipment (like X-Ray, CT scan, MRI) from AERB

As per Atomic Energy (Radiation Protection) Rules 2004, for establishing X-Ray and CT Scan Unit, a license from the Atomic Energy Regulatory Board (AERB) is necessary.

Contrary to the provisions of the said Rules, the requisite license from AERB had not been obtained in the District Hospitals providing X-Ray service.

Table 3.41- Non-registration of Imaging Equipment in District Hospitals

Name of the DH	Installation	Functional	Licence
BOD	Yes	Yes	No
GAD	Yes	Yes	No
GAJ	Yes	Yes	Yes
HYD	Yes	Yes	No
KDP	Yes	Yes	Yes
MDK	Yes	Yes	No
MED	Yes	Yes	No
MUL	Yes	Yes	Yes
NRY	Yes	Yes	Yes
NRS	Yes	Yes	No
PED	Yes	Yes	Yes
TDR	Yes	No	Yes
UT	Yes	Yes	No
YB	Yes	Yes	No

Source: Information furnished by test checked Health Institutions
Colour Code-Green = Yes; Red=No

As seen from the table above, Imaging equipment available with DHs Bodhan, Jogulamba Gadwal, Hyderabad, Medak, Medchal Malkajgiri, Narsampet, Utnoor and Yadadri Bhuvanagiri did not have the requisite Licence from AERB authorities. The equipment available in DH Tandur was not functional.

In the absence of AERB certificate, the DHs not only violated the prescribed regulatory requirements but also compromised the safety of patients and staff in the Radiology Departments of these hospitals.

Government in its response stated (August 2023) that the hospitals which did not have AERB licences were in the process of obtaining the licence. Regarding the non-functional equipment in DH Tandur, it was stated that cost of bringing the equipment into working condition was around 50 *per cent* of equipment cost and Hospital authorities were conveyed to obtain approvals for purchasing new equipment.

3.5.3   Thermo Luminescent Dosimeters (TLD) for Radiation Protection

The Atomic Energy (Radiation Protection) Rules, 2004 prescribes that, hospitals have to provide Thermo Luminescent Dosimeter (TLD) badges, a protective device indicating permissible radiation levels to personnel working with X-ray unit.

Further, as per the Atomic Energy Board Regulatory guidelines on personal monitoring of Radiation workers in Radiation facilities, Pocket Dosimeters are required to be provided to the personnel for monitoring the radiation levels.

Table 3.42- Availability of TLD badges and Pocket Dosimeters in DHs

Name of the DH	TLD Badges	Pocket Dosimeters
BOD	No	No
GAD	No	No
GAJ	Yes	No
HYD	No	No
KDP	Yes	Yes
MDK	No	No
MED	No	No
MUL	Yes	No
NRY	No	No
NRS	No	No
PED	No	No
TDR	Yes	No
UT	No	No
YB	No	No

Source: Information furnished by District Hospitals

Out of the 14 DHs, Thermo Luminescent Dosimeter (TLD) badges were not provided to personnel working with X-ray unit in 10 DHs. Similarly, except in DH Kondapur, Pocket Dosimeters[19] were not available in any of the District Hospitals.

Table 3.43- Availability of TLD Badges and Pocket Dosimeters in test checked AH/CHCs

Name of the Hospital	TLD	Pocket Dosimeter
Area Hospital, Golconda	No	No
Area Hospital, Malakpet	No	No
CHC, Amberpet, Hyderabad	No	No
CHC, Wardhannapet, Warangal	No	No
CHC, Badepally, Mahabubnagar	Yes	No

Source: Information furnished by test checked Health Institutions

Government in its response stated (August 2023) that, TLD Badges were provided to the personnel working with X Ray units based on the indent raised from the institutions. However, documents in support of provision of TLD Badges to personnel working with X Ray units were not provided to Audit.

In the absence of TLD Badges, the safety of the technicians was therefore, compromised.

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[19] A small ionization detection instrument that indicated ionizing radiation exposure directly

3.6   Pathology Services

Pathology services are the backbone of any hospital for extending evidence based healthcare to the public. Availability of essential equipment, reagents and Human Resources are the main drivers for the delivery of quality pathology services through in-house laboratories.

3.6.1   Availability of Pathology Diagnostic Services in DHs

IPHS prescribe 79 types of pathological investigations in the categories of clinical, microbiology, serology and biochemistry to be carried out in the District Hospitals.

Table 3.44- Availability of Pathological Diagnostic Services in DHs

Name of the DH	Clinical Paathology (36)	Pathology (08)	Microbiology (07)	Serology (07)	Bio-Chemistry (21)
BOD	23	0	0	2	6
GAD	22	0	0	4	10
GAJ	20	0	0	4	4
HYD	24	0	0	4	11
KDP	18	0	0	2	3
MDK	11	0	0	1	1
MED	5	0	0	3	1
MUL	22	1	0	3	10
NRY	24	2	0	3	10
NRS	18	0	1	4	5
PED	16	0	0	2	6
TDR	28	0	0	6	12
UT	15	2	0	4	2
YB	25	0	0	7	5

Source: Information furnished by District Hospitals

Colour code:

Available services 50% and more		Available services more than 25% and less than 50%		Available services less than 26%	

It is seen from the table above that, microbiology services were not available in any of the DHs except DH Narsampet. Pathology services were also not available in 11 out of 14 DHs.

Government in its response stated (August 2023) that, the DHs were linked to Telangana Diagnostics Hubs where Microbiology and Pathology services were provided.

3.6.2   Availability of tests in test checked hospitals

Table 3.45 - Hospital-wise tests required as per IPHS norms and their availability

Name of the hospital	No. of tests required as per IPHS norms	Available	Not available (%)
AH, Golconda, Hyderabad	51	23	28 (55)
AH, Malakpet, Hyderabad	51	21	30 (59)
CHC, Amberpet, Hyderabad	36	10	26 (72)
CHC, Wardhannapet, Warangal	36	19	17 (47)
CHC, Badepally, Mahabubnagar	36	17	19 (53)

Source:- Information furnished by the Hospitals

Colour code:

Available in more than 50%		Available in more than 25% upto 50%		Not available in more than 50%	
	(green)		(yellow)		(red)

Scrutiny of the details of tests revealed the following:

➢ Tests relating to Endoscopy and Respiratory issues were not available in AH, Malakpet and AH, Golconda, Hyderabad.

➢ Tests related to ENT were not available at AHs Golconda and Malakpet. Test relating to Ophthalmology was not available at AH Golconda. In all the test checked CHCs, tests related to ENT and Opthalmology were not available.

Government in its response stated (August 2023) that, tests related to ENT, Opthalmology are specialty investigations and are available in Medical College attached hospitals in every District.

3.6.3   Ambulance Services

Emergency Medical Service (EMS) is an essential part of the overall healthcare system as it saves lives by providing emergency care immediately. To develop and operationalise comprehensive emergency services in the State, agreement was entered in March 2016 with GVK Emergency Management Research Institute (GVK EMRI) for the period 2nd June 2014 to 30th September 2016. After completion of the agreement period, it was extended up to 31st March, 2018 initially and further extended (June 2019) till the date of finalisation.

Scrutiny of the information revealed that, as per the agreement in 2016, initially 316 vehicles were provided which were later increased to 426 in 2022 for providing services to the patients in 594 mandals.

It was observed that at least one ambulance per mandal was not available to provide the services. When the issue was brought to the notice of Commissioner, HM&FW, it was replied that depending upon the accident prone areas and as per the maximum number of emergency calls received from particular area/mandals, ambulances have been deployed. Further as per the MoU entered into with GVK EMRI, the stipulated average time to be taken for call to scene in different areas was Urban -20 minutes, Rural -25 minutes and Tribal - 30 minutes.

Government in its response stated (August 2023) that, ambulances were provided on the basis of population and not on mandal basis. It was also stated that, as against the requirement of 380 ambulances the State had 488 ambulances which resulted in an ambulance per 78,000 population which was well below the average recommended.

3.6.3.1   Response time

Table 3.46- Area-wise Response Time for Emergency calls from 2016-17 to 2021-22

Response Time Range	Urban	%	Rural	%	Tribal	%
0 - 15 Min	5,92,412	57	5,56,843	38	1,13,981	37
15 - 30 Min	3,24,905	31	5,17,177	35	91,141	30
30 - 60 Min	1,12,404	11	3,51,244	24	77,856	26
60 -120 Min	13,170	1	51,699	3	21,713	7
120-240 Min	12	0	1,195	0	550	0
240-360 Min	2	0	0	0	1	0
Total	**10,42,905**		**14,78,156**		**3,05,241**	

Source: Information furnished by the hospitals

It is seen from the above table that, in Urban areas, 12 *per cent* of the emergency calls could not be attended to within the stipulated norms, while the same was 27 *per cent* in Rural areas and 33 *per cent* in Tribal areas.

Government in its response stated (August 2023) that, the average response time for the financial year 2022-23 was achieved and that it was natural that in some cases the response time would be more and in some cases less as it is average response time being monitored. It was also stated that an integrated call centre has become functional from 1st August 2023.

3.6.4   Oxygen Services in District Hospitals

Oxygen is an essential element of basic emergency care and 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 the WHO Model list of Essential Medicines (EML) due to its proven lifesaving properties, safety and cost-effectiveness.

The availability of Centralised Oxygen supply system was installed in 11 DHs (out of 14 DHs). Details of availability of Oxygen services in the District hospitals are shown in the *Appendix 3.2.*

From the data collected it can be seen that Agreements had not been entered into for supply of uninterrupted Oxygen by 7 out of the 14 DHs. Oxygen reservoir was not available for each bed at Special New-born Care Unit in 7 out of the 14 DHs.

Government in its response stated (August 2023) that all the hospitals were having an agreement with the Oxygen suppliers to avoid interruption of Oxygen (O2) services. It was also stated that, at present there were 7 Liquid Oxygen Tanks (LOTs) and 52 Pressure Swing Adsorbtion (PSA) plants in secondary level hospitals. Documentary evidence in respect of entering into agreements by the 6 DHs were not furnished.

3.6.4.1   Oxygen Services in the Test checked AHs/CHCs

Although the requirement of oxygen of the hospital was assessed and Standard Operating Procedures (SOPs) were available in test checked AHs and CHCs, agreements to ensure uninterrupted supply of oxygen was not ensured. In three CHCs centralised Oxygen supply was not available.

3.7   Dietary Services

As per the IPHS Guidelines, the dietary service of a hospital is an important therapeutic tool. It should easily be accessible from outside along with vehicular accessibility and separate room for dietician and special diet. It should be located such that the noise and cooking odours emanating from the Department do not cause any inconvenience to the other Departments.

3.7.1   Dietary Services in DHs

While dietary services were provided in all DHs, availability of standard procedure for preparation, handling, storage and distribution of clean, hygienic and nutritious diet to the indoor patients as per their caloric requirement was not available in DHs Jogulamba Gadwal, Medak, Narsampet and Peddapalli. Availability of policy and procedure for regular quality checking of raw material, kitchen sanitation, cooked food etc. was not available in DHs Medak, Tandur and Peddapalli. Quality testing of diet supplied in health facilities was not ensured in DHs Medak, Medchal Malkajgiri, Peddapalli and Mulugu. Evaluation of dietary services was not being done in DHs Jogulamba Gadwal, Medak, Medchal Malkajgiri, Mulugu, Peddapalli, Tandur and Yadadri Bhuvanagiri. Dietary research on menu planning, preserving nutritional values, storage of food items, modern methods of cooking, etc. was not conducted to improve the Dietary Services in the hospitals at DHs Jogulamba Gadwal, Kondapur, Medak, Medchal Malkajgiri, Narayanpet, Narsampet, Peddapalli, Tandur and Yadadri Bhuvanagiri. Thus, the DHs were not compliant with the prescribed norms for supply of diet.

Government in its response stated (August 2023) that, it had issued new Diet Policy. Calorific Diet was provided to the patients in all the Hospitals and RMOs were made responsible to look after the standard procedure of diet, storage of food items, handling and distribution of clean hygienic/nutritious diet to the inpatients.

Government had not furnished the copy of the new Diet Policy.

3.7.2   Providing of Diet in test checked hospitals

Out of the three-test checked CHCs, diet was not supplied to inpatients in CHC, Amberpet due to non-availability of sufficient funds.

Details of the Dietary Services in the test checked hospitals are indicated in the table below:

Table 3.47- Dietary Services in test checked hospitals

Name of Service	Area Hospitals		CHCs		
	Golconda	Malakpet	Amberpet	Badepally	Wardhannapet
Availability of dietary service	A	A	NA	A	A
If available, in-house/ outsourced	In house	In house	NA	In house	Out Sourced
Availability of Kitchen	A	A	NA	A	NA

Name of Service	Area Hospitals		CHCs		
	Golconda	Malakpet	Amberpet	Badepally	Wardhannapet
Availability of standard procedures for preparation, handling, storage and distribution of clean, hygienic and nutritious diet to the indoor patients as per their caloric requirement	A	A	NA	A	NA
Availability of policy and procedure for regular quality checking of raw material, kitchen sanitation, cooked food etc.	NA	A	NA	NA	NA
Availability of Quality testing of diet supplied in health facilities	NA	NA	NA	NA	A
Evaluation of dietary services in health facilities	NA	A	NA	A	NA
Dietetic research on menu planning, preserving nutritional values, storage of food items, modern methods of cooking, etc. was not conducted to improve the dietary services in the hospitals	NA	NA	NA	A	NA

Source: Information furnished by test checked Hospitals

On this being pointed out, it was replied that, during the period from December 2017 to December 2020, instead of providing diet, funds were transferred to the concerned beneficiaries. Thereafter no amount was paid to the patients towards diet due to non-availability of sufficient funds.

In all the test checked hospitals, it was observed that, the diet contract was extended without calling for fresh tenders.

Government in its response stated (August 2023) that, at present diet was being supplied in all hospitals of TVVP. Menu had been fixed as per the calorific value and as per the Doctor's advice and that the diet menu has been displayed prominently in the concerned hospitals and RMO's were made responsible to look after the standard procedure of diet, storage of food items, handling and distribution of clean hygienic/nutritious diet to the inpatients.

Government had not furnished any specific reply for non-provision of diet in CHC Amberpet.

3.8   Laundry Services

As per IPHS, the number of linen (OT coat, bed sheets, bed covers, pillow, blankets, pillow covers) required in DHs has been quantified as per the bed strength of the DH.

The laundry services were available in all the 14 District hospitals and two test checked Area Hospitals. Details are shown in the *Appendix 3.3* and *Appendix 3.4.*

3.9   Blood Banks

As per IPHS, Blood Bank is one of the essential services that has to be provided by District Hospital. Blood bank should be in close proximity to pathology Department and at an accessible distance to operation theatre, intensive care units and emergency and accident Departments.

Table 3.48 - Availability of Blood Bank in District Hospitals

Name of Service	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Whether Blood Bank is available	A	A	NA	A	A	A	NA	A	A	A	A	A	A	A
If available license obtained or not	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	A	A	A
Whether General Equipment is available in the Blood Bank	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	NA	A	A
Whether Emergecy Equipment is available in the Blood Bank	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	Data not furnished	A	A
Whether Blood Storage Equipment is available in the Blood Bank	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	NA	A	A
Whether Laboratory Equipment is available in the Blood Bank	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	Data not furnished	A	A
Whether sufficient Manpower available in the Blood Bank	A	A	Not Applicable	A	A	A	Not Applicable	A	A	A	A	A	A	A

Source: Information furnished by the DHs
Code: A= Available; NA = Not available

Audit observed that the essential service of Blood Banks were not available in DHs Gajwel and Medchal Malkajgiri.

3.9.1   Availability of Blood Banks in test checked hospitals

Table 3.49 Availability of Blood Bank and Blood Storage unit in test checked hospitals

Name of the Hospital	Blood Bank	Blood Storage Unit
MNJ Cancer Institute, Hyderabad	A	A
Osmania General Hospital, Hyderabad	A	A
Niloufer Hospital, Hyderabad	A	A
Area Hospital, Golconda	NA	NA
Area Hospital, Malakpet	NA	NA
CHC, Amberpet	Not required	NA
CHC, Wardhannapet	Not required	A
CHC, Badepally	Not required	NA

Source: - Information furnished by the Hospitals   Code: A= Available; NA = Not available

Neither blood bank nor blood storage unit was available in the test checked Area Hospitals. Blood storage facilities were not available as per the norms in the CHCs Amberpet and Badepally.

Government in its response confirmed (August 2023) that, Blood Storage Centre was not available in CHC Badepally as it nearer to GGH, Mahabubnagar and whenever blood was required, the same was being obtained from GGH, Mahabubnagar. It was also stated that there was no need for establishment of Blood Storage Centre at CHC Amberpet as IPM was nearer to it. Government did not furnish any response regarding the non-availability of Blood Bank in AHs Golconda and Malakpet.

3.10 Delivery of auxiliary services

3.10.1 Bio-Medical Waste Management

The Bio Medical Waste (BMW) Rules required the hospitals generating BMW to obtain authorisation[20] from the State Pollution Control Board (SPCB). The category-wise quantity of BMW generated and their disposal were to be forwarded to SPCB in a prescribed format annually.

As per BMW (Management and Handling) Rules, 2016, it was the duty of every institution generating BMW to take all steps to ensure that such waste is handled without any adverse effect to human health and the environment. Further, no untreated BMW should be stored beyond a period of 48 hours. Hazardous and toxic BMW has to be separated for its safe transportation to a specific treatment facility. In terms of the BMW (Management and Handling) Rules, 2016, colour coded plastic containers of four different colours were to be used for collection of different types of hospital wastes.

Table 3.50- Bio Medical Waste Management services in test checked Health Institutions

Name of Service	DHs (14)	AHs (2)	CHCs (3)	UPHCs (3)	PHCs (6)
	Available	Available	Available	Available	Available
Authorisation for generating bio-medical waste was obtained by the hospital from State Environment Protection and Pollution Control Board	14	2	3	0	0
Availability of Waste Management Committee[21] under the Chairmanship of head of hospital	11	2	3	0	0
Waste Management Committee met regularly to review the performance of the hospital as regards waste disposal	11	2	3	0	0
Availability of proper system for disposal of bio-medical liquid waste	14	2	3	0	1
Plastics bags which contained bio-medical waste had been labelled as per guidelines i.e., symbols for biohazard and cytotoxic	14	2	3	3	2

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[20] Permission granted by the prescribed authority for generation, collection, handling and disposal of Bio-Medical Waste in accordance with the Rules and Guidelines prescribed by the Pollution Control Board

[21] The Head of the Hospital shall form a Waste Management Committee under his Chairmanship. The Waste Management Committee shall meet regularly to review the performance of the waste disposal. This Committee should be responsible for making hospital specific action plan for hospital waste management and for its supervision, monitoring implementation and looking after the safety of the bio-medical waste handlers

Name of Service	DHs (14)	AHs (2)	CHCs (3)	UPHCs (3)	PHCs (6)
	Available	Available	Available	Available	Available
The hospital and healthcare authorities had ensured that personal protective equipment was provided to waste handlers	13	2	3	2	2
Availability of barcode system, for bags or containers containing biomedical waste that were to be sent out of the premises, was ensured by the hospital	9	2	1	3	0
Periodic medical check-up and immunisation of staff were carried out.	14	2	1	3	3

Source: Information furnished by the Hospitals

Colour code:

Services Available in 50% and more		Services Available in more than 25% and less than 50%		Services not available in more than 50%	

It was observed that 3 UPHCs and 6 PHCs had not obtained the requisite authorisation[22] from the authorities for generating Bio-Medical Waste. Waste Management Committees[23] were not available in 3 DHs, 3 UPHCs and 6 PHCs. Bar Code System[24] for bags or containers containing Bio-Medical Waste was not ensured by 5 DHs, 2 CHCs and 6 PHCs.

Government in its response stated (August 2023) that, authorisation certificate in respect of bio-medical management system had been obtained by all the TVVP hospitals. The Barcode system bags were being supplied from the concerned hospitals authority. However, documents in support were not furnished.

3.11   Observations in test checked hospitals

Scrutiny of test checked hospitals revealed the following:

Table 3.51 – Details of Availability of Authorisation from TPCB and Waste Management Committee in the test checked Hospitals

Name of the Hospital	Waste Management Committee	Authorisation from TPCB
MNJ Cancer Hospital	NA	A
Osmania General Hospital	A	A
Niloufer Hospital	A	A
AH Golconda	A	A
AH Malakpet	A	A
CHC Amberpet	A	A
CHC Wardhannapet	A	A
CHC Badepally	A	A

Source: - Information furnished by the Hospitals

A = Available	NA = Not available

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[22] In all the test checked UPHCs and PHCs
[23] DHs: Medak, Narayanpet, Narsampet; in all the test checked UPHCs and PHCs
[24] DHs: Jogulamba Gadwal, Medak, Medchal Malkajgiri, Narayanpet, Peddapalli; CHCs Wardhannapet and Amberpet and in all test checked PHCs

Government did not furnish any specific response on the issue of non-availability of Waste Management Committee in some of the test checked hospitals.

➢ All the test checked hospitals are categorising the BMW following the colour-coded plastic containers for the collection of different types of hospital wastes.

➢ Regarding the formation of the Waste Management Committee, PCB authorisation in the test checked health institutions it was noticed that, Waste Management Committees were not formed in MNJ Cancer Hospital.

3.12   Mortuary Services

As per IPHS, there should be mortuary in a separate building in the hospital premises for keeping of dead bodies and conducting autopsy and there should be a mortuary van in the DH. In mortuary, there should be a post-mortem room having stainless steel autopsy table with sink, running water in sink for specimen washing, cleaning and cup-board for keeping instruments.

DHs[25] Hyderabad, Kondapur and Medchal Malkajgiri did not have the mortuary services. Except for DH Gajwel, other DHs did not have mortuary van. Similary, facilities for pathological post mortem were not available in any of the DHs except Gajwel and Tandur. In the test checked CHCs Wardhannapet and Badepally, mortuary van services were not available. None of the test checked AHs have the mortuary services. Out of three CHCs, mortuary facility was available in Badepally and Wardhannapet. Out of these two CHCs, facilities for pathological post mortem were not available in Wardhannapet.

Government in its response stated (August 2023) that mortuary van was to be provided as per need of hospitals and that it had provided free hearse vehicles at different health facilities across the State. Scrutiny of the information relating to availability of free hearse vehicles revealed that the Districts of Rangareddy (DH Kondapur), Medak (DH Medak), Medchal Malkajgiri (DH Medchal Malkajgiri), Mulugu (DH Mulugu), Narayanpet (DH Narayanpet), Peddapalli (DH Peddapalli), Vikarabad (DH Tandur) and Yadadri Bhuvanagiri (DH Yadadri Bhuvanagiri) were still not provided either a mortuary van or free Hearse service.

No response was furnished by Government regarding the non-availability of mortuary services in some of the DHs/AHs. As regards post-mortem facilities, it was stated that with advent of Medical College in every District, post-mortems were being conducted preferably at Medical Colleges only to ensure quality.

3.12.1   Water availability

As per IPHS Guidelines for DH, there should be uninterrupted water supply for 24 hours. Assessment of water requirement per bed per day after excluding requirements for fire-fighting, Horticulture and steam had not been done in 6[26] DHs, 2[27] CHCs, 3[28] UPHCs and

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[25] These facilities are using mortuary services of other hospitals in Hyderabad
[26] DHs Jogulamba Gadwal; Kondapur; Medak, Mulugu, Utnoor and Yadadri Bhuvanagiri
[27] CHCs Badepally and Wardhannapet
[28] UPHCs Azampura; Gaganmahal and Niloufer

5[29] PHCs. AMCs for water purifiers were not available in any of the test checked AHs, CHCs, UPHCs and PHCs.

Government in its response stated (August 2023) that all the hospitals were provided water supply for 24 hours either by Mission Bhagirata or local Municipal water or by the Borewell.

3.12.2   Power Supply

Public Health facilities should have access to adequate, affordable and reliable electricity supply. Distribution of electric load along with the load balancing to various equipment and installations in a facility is very important since overloading at any point can result in a mishappening like an electric fire hazard or can even damage the equipment.

DHs Medchal Malkajgiri, Kondapur and Utnoor did not have the availability of 24-hour uninterrupted stabilised power supply. Although inverters and back up generators have been installed in CHC Wardhannapet, UPHC Azampura, Gaganmahal and PHC Geesugonda the same were non-functional. Generator or invertor facility was not available in CHC Amberpet, UPHC Niloufer and PHC Duggondi. As a result, the availability of 24-hour uninterrupted stabilised power supply in these health institutions cannot be vouchsafed.

Government in its response stated (August 2023) that, all the hospitals were provided with back-up generators that were installed and functional. As per the documentary evidence provided by the Government, DH Utnoor did not have uninterrupted power supply and the facility of back up generator was restricted to Dialysis unit and Blood Bank.

3.12.3   Grievance/Complaint Redressal

As per IPHS Guidelines, every facility should have a robust grievance redressal mechanism. Apart from any centralised system introduced by the State (*viz*., Call Centre), there should also be a method to lodge local complaints (*viz*., complaints box, receipt provided for a complaint letter or an opportunity to meet with the Medical Superintendent).

Table 3.52- Availability of Services related to Grievance/Complaint Redressal

Name of Service	DHs (14)	AHs (2)	CHCs (3)	UPHCs (3)	PHCs (6)
Availability of Grievance Redressal Cell or Complaint cell to register patients' grievances regarding quality of supplied food to them	10	1	1	0	0
Availability of mechanism for receipt of complaints and whether suggestion boxes had been placed at appropriate places	10	2	3	3	2
Formation of Grievance Redressal Committee and redressal of complaints in a timely manner	10	2	0	1	0

Source: *Information furnished by the DHs/AHs/CHCs/UPHCs/PHCs*

Colour code:

Services Available in 50% and more		Services Available in more than 25% and less than 50%		Services not available in more than 50%	

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[29] PHCs Addakal; Edira; Rajapur; Duggondi and Geesugonda

Audit observed the following:

➢ Availability of Grievance Redressal Cell or Complaint cell to register patients' grievances regarding quality of supplied food to them was not there in 4 DHs (out of 14), 1 AH (out of 2 test checked), 2 CHCs (out of 3) and in none of the test checked UPHCs (3) and PHCs (6).

➢ Availability of mechanism for receipt of complaints and suggestion boxes had not been placed at appropriate places in 4 DHs and 4 PHCs.

➢ Formation of Grievance Redressal Committee and redressal of complaints in a timely manner was not ensured in 4 DHs, 3 CHCs, 2 UPHCs and 6 PHCs".

3.12.4   Other issues

Table 3.53 – Details of services available in Health Institutions

Name of Service	DHs (14)	AHs(2)	CHCs (3)	UPHCs (3)	PHCs (6)
Patient Satisfaction Survey (OPD)	8	1	0	0	3
Legibility of prescription slips	14	2	2	NF	6
Availability of Citizen charter at OPD	12	2	2	NF	5
Providing unique ID at the time of registration	11	2	2	NF	1

Source: Information furnished by the DHs/AHs/CHCs/UPHCs/PHCs

Colour code: **Blue – Not furnished**

Services Available in 50% and more		Services Available in more than 25% and less than 50%		Services not available in more than 50%	

Audit observed that Patient Satisfaction Survey (OPD) was not conducted by any of the test checked CHCs and UPHCs.

3.12.5   Infection Control Management

Infection control practices are important in maintaining a safe environment for both patients and staff in the hospitals by reducing the risk of potential spread of hospital associated infections. NHM Assessor's Guidebook recommends boiling, autoclaving, high level disinfection (HLD) and chemical sterilisation process for disinfection/ sterilisation in the DHs.

IPHS Guidelines provide that each hospital should constitute an Infection Control Team and develop Standard Operating Procedures (SOP) for septic procedures, culture surveillance and determination of hospital-acquired infections (HAI). Apart from safe injection administration practices, safe disposal of bio-medical waste, general cleanliness and adoption of hygienic practices are important tools in the prevention of infection.

Table 3.54- Availability of services related to Infection Control in District Hospitals

Particulars	Disrict Hospitals													
	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Checklist for Hygiene and infection control	A	A	A	A	A	NA	A	A	A	A	A	A	A	A
Hospital Infection Control Committee (HICC)	A	A	A	A	A	A	A	A	A	NA	A	A	A	A
Conducting meeting of HICC	A	A	A	A	A	A	A	A	A	NA	A	A	A	A
Pest control	A	NA	A	A	A	A	A	A	NA	NF	A	A	A	A
Rodent control	A	NA	A	A	A	A	A	A	NA	NF	A	A	A	A
Availability of anti-termite treatment	A	NA	A	A	A	A	A	A	NA	A	A	A	A	A
Installation of cattle trap	A	A	A	NA	A	NA	NA	A	A	A	A	A	A	NA
Procedure for Disinfection and Sterilisation														
Boiling	NA	NA	A	A	A	A	A	NA	A	A	A	NA	A	NA
High level disinfection	A	NA	A	A	A	A	A	A	NA	A	A	NA	A	NA
Chemical sterilisation	A	NA	A	A	A	A	A	NA	NF	A	A	NA	A	NA
Autoclaving	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Source: Information furnished by the DHs; Code: A= Available; NA = Not available NF – Not furnished

Audit observed that DH Narsampet did not have Hospital Infection Control Committee (HICC). Pest and Rodent control activities were not taken up by DHs Jogulamba Gadwal, Narayanpet and Narsampet.

Scrutiny of test checked Super Specialty Hospitals revealed the following:

Table 3.55 – Availability of Services related to Infection Control in test checked Specialty Hospitals

Name of the Hospital	Infection Management Policy/ Strategy	Infection Control Committee
MNJ Cancer Hospital	Yes	No
Osmania General Hospital	Yes	Yes
Niloufer Hospital	Yes	Yes

Source :- Information furnished by the Hospitals

Audit observed that, Infection Control Committee was not available in MNJ Cancer Hospital, a Super Specialty Hospital in Hyderabad.

Table 3.56 - Availability of Services related to Infection Control in test checked AHs/CHCs/UPHCs/PHCs

Name of Service	Area Hospitals		CHCs			UPHCs			PHCs					
	Golconda	Malakpet	Amberpet	Badepally	Wardhanna pet	Azampura	Gagammahal	Niloufer	Addakal	Edira	Rajapur	Alankanipet	Duggondi	Geesugonda
Checklist for Hygiene and infection control	A	A	A	A	A	NA	NA	NA	NA	NA	NA	A	NA	NA
Hospital Infection Control Committee (HICC)	A	A	A	A	A	NA	NA	NA	NA	NA	NA	NA	A	NA
Conducting meeting of HICC	A	A	A	A	A	NA	NA	NA	NA	NA	NA	NA	A	NA
Pest control	A	A	A	NA	A	NA	NA	NA	NA	NA	NA	A	A	NA
Rodent control	A	A	A	NA	A	NA	NA	NA	NA	NA	NA	A	A	NA
Availability of anti-termite treatment	A	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A	NA
Installation of cattle trap	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	A	NA	NA	A
Procedure for Disinfection and Sterilisation														
Boiling	A	A	A	A	A	NA	NA	NA	A	A	A	NA	A	NA
High level disinfection	A	A	A	A	A	NA	NA	NA	NA	NF	NA	NA	NF	NA
Chemical sterilisation	A	A	A	A	A	NA	NA	NA	NA	NF	NA	NA	NF	NA
Autoclaving	A	A	A	A	A	NA	NA	NA	A	A	A	A	A	A

Source: Information furnished by the Health Institutions

Code: A - Available; NA - Not Available NF - Not Furnished

Audit observed that, all the required services relating to Infection Control were not available in the test checked AHs/CHCs/UPHCs/ PHCs.

Thus, maintaining a safe environment for both patients and staff in the hospitals by reducing the risk of potential spread of hospital associated infections cannot be vouchsafed in these institutions.

Government in its response stated (August 2023) that, it had given instructions to form Hospital Infection Control Committees in all the Hospitals. It was also stated that it had provided air samplers which were used in OT complex as part of microbial surveillance. As a part of new policy of IHMS, pest control and rodent control activities were incorporated and that the amounts were released to the agencies based on their performance.

3.13 Patient Safety

The only rational manner in which Hospitals can be prepared for disasters is by increasing their resilience and reducing their vulnerability both structural and operational aspects of the Hospital such that they achieve reasonable degree of safety. For achieving this, the hospital authorities should have SOPs, periodic plans and a Monitoring Committee to evaluate the patient safety.

3.13.1   Availability of Patient Safety Services in DHs

Services for Patients safety were not available in DHs Jogulamba Gadwal, Medak, Medchal Malkajgiri and Narsampet. Standard Operating Procedures in respect of patient safety were not available in DHs Jogulamba Gadwal, Medak, Medchal Malkajgiri, Narayanpet, Narsampet and Tandur. Standard Operating Procedures in respect of Disaster Management Plan for patient safety and Monitoring Committees were not available in DHs Jogulamba Gadwal, Medak, Medchal Malkajgiri, Narayanpet, Narsampet and Yadadri Bhuvanagiri. In view of this, the hospitals were not in a position to prepare themselves for unexpected events.

Government in its response stated (August 2023) that, in all secondary level hospitals fire safety precautions were taken up in cooperation with Fire Department and gaps in respect of fire safety work and electrical safety equipment were identified and corrective measures taken. In these health facilities, training to staff of the hospitals have been provided along with SOPs by Telangana Academy for Skill & Knowledge (TASK). However, only documents in support of training to staff of hospital by Telangana Academy for Skill & Knowledge (TASK) was provided to Audit.

3.13.2   Fire Fighting Equipment

3.13.2.1   Availability of Fire-Fighting Equipment

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

Table 3.57: Availability of Fire Fighting equipment in the District Hospitals

Name of the Item	BOD	GAD	GAJ	HYD	KDP	MDK	MED	MUL	NRY	NRS	PED	TDR	UT	YB
Fire Hydrant	NA	NA	A	A	NA	Work in Progress	A	NA	NA	NA	NA	NA	NA	Work in Progress
Smoke detector	NA	NA	A	A	A	Work in Progress	A	NA	NA	NA	NA	A	NA	Work in Progress
Fire extinguisher	A	A	A	A	A	Work in Progress	A	A	A	A	A	A	A	Work in Progress
Sand buckets	A	NA	NA	A	A	Work in Progress	A	NA	A	A	NA	A	NA	Work in Progress

Source: Data furnished by the DHs

Available	Not Available	Work in Progress

As per the instructions of the Fire and Emergency Service Department, it is mandatory to install emergency and firefighting system in the hospital, for which water capacity system at the top of the building or in the nearby area and fire alarm and water sprinklers, mock drills must be made available in the Hospital. Further, as per the Guidelines of the IPHS

2012, "No Objection Certificate" has to be obtained from the Competent Fire Authority to protect the patients, attendants, Doctors and other staff and the properties of the hospital from any fire incidents.

Table 3.58 – Availability of mandatory requirements relating to Fire Safety

Name of the Hospital	Availability of firefighting equipment	No objection certificate	Fire control drill	Safety /hazard /caution sign
MNJ Cancer Hospital	No	No	Yes	No
Osmania General Hospital	Yes	No	Yes	Yes
Niloufer Hospital	Yes	No	No	Yes
DH King Koti, Hyderabad	Yes	No	No	Yes
AH Golconda	No	No	No	No
AH Malakpet	Partially	No	No	Yes
CHC Amberpet	Yes	Yes	Yes	No
CHC Wardhannapet	Yes	No	No	Yes
CHC Badepally	Yes	No	No	Yes

Source :- Information furnished by the Hospitals

Yes/Available	No/Not Available	Partially Work in progress

In the absence of fire-fighting equipment like fire hydrant and smoke detectors, the hospitals were non-compliant with the fire safety norms.

3.13.2.2 *Non-completion of Fire Safety Systems at various Health Facilities*

With a view to addressing the deficiencies pointed out by the Fire Services Department and to comply with the Fire Safety requirements in Health facilities, Government accorded (October 2021) administrative sanction for the completion of the 153 works in the Government Hospitals for ₹31.03 crore through TSMSIDC, the Executing Agency

Scrutiny of the works revealed the following:

➢ Out of 153 works, works in 104 Health facilities were completed by the end of October 2022 and handed over to the health facilities. The remaining 49 works are in progress.

Government in its response stated (August 2023) that, out of the 153 works as on 15 July 2023, 134 works were completed, 17 works were in progress and two works were not feasible and not taken up but sufficient fire extinguishers and sand buckets were kept in place. However, documents in support of this was not furnished to Audit.

➢ Completion of the works in five major hospitals which were at different stages revealed the following:

Table 3.59 – Status of Works

(₹ in Lakh)

Sl. No.	Name of the Health Facility	ECV [30] value	Agreement Value	Present Stage of work
1	Osmania General Hospital, Hyderabad	169	--	Internal hydrant works completed. Commissioning of work in progress
2	Government Dental College and Hospital, Hyderabad	82	65.81	Work in progress
3	Modern Government Maternity Hospital, Petlaburz, Hyderabad	125	98.29	Fire Extinguishers installed. Alarm work in progress
4	Modern MNJ Cancer Hospital, Hyderabad	108		Fire Extinguishers installed. Alarm work in progress
5	Sarojini Devi Eye Hospital, Hyderabad	50.50	40.17	Work in progress

Source: Information furnished by TSMSIDC

Government in its response stated (August 2023) that, out of the works in five major hospitals, works were completed in two hospitals and were in progress in the remaining three hospitals. Government attributed the delay in installation of fire fighting equipment due to patient load during week days and the work could be carried out only in evenings and Sundays.

It could be seen from the above table, that some of major health facilities do not have full-fledged firefighting systems. In the event of any unforeseen event at any health facility, the consequences could be disastrous. Thus, there is an inherent need for early completion of firefighting systems in health facilities.

3.14 Results of Doctors' and Patients' Survey

Survey of 89 Doctors and 581 (206 IPD and 375 OPD) patients of the test checked health facilities was conducted and the results of the survey have been given in the *Appendix 3.5* of the Report. Further, Joint Physical Verification (JPV) of 15 test checked hospitals have also been conducted with regard to healthcare service deliveries and the results are given *Appendix 3.6.*

3.15 Conclusion

Out of the total 3,206 HWCs that were converted into Palle Dawakhanas, 122 Palle Davakhanas were operating without the services of MOs.

Due to shortage of registration counters in four out of nine test checked hospitals, each counter per hour was faced with an increased patient load. Thus, the patients were forced to wait a longer time for registration.

Non-provision of some Specialist out-patient service was observed in the District Hospitals, Area Hospitals and Community Health Centres. Out of 394 health facilities where AYUSH facilities were available, AYUSH Medical Officer was not available in 204 health facilities.

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[30] ECV – Estimated Contract Value

The post of Pharmacist was lying vacant in 124 health facilities. Thus, the provision of AYUSH services has not been done fully in the State.

Patient Satisfaction Survey for evaluation of the services provided in OPD through certain outcome indicators for Quality assurance was not done in all health institutions. In all the test checked health institutions MNJ Institute of Oncology and Regional Cancer Centre, Osmania General Hospital, Niloufer Hospital, AHs Golconda and Malakpet, CHCs Amberpet, Wardhannapet and Badepally the Bed strength for the Nurses was more than the required norm of six beds per Nurse. In Niloufer Hospital, the Bed strength per Nurse was almost four times the norm.

The performance of the State with regard to maternity services like ANC received in the first trimester and consumption of Iron Folic Acid tablets has improved in 2019-20 as compared to 2015-16, while it had not shown any improvement in respect of pregnant women receiving at least four ANC.

Of the 14 District Hospitals, none of the DHs had diagnostic services relating to ENT, Oesophagus, Stomach, Colonoscopy, Bronchoscopy, Arthroscopy, Hysteroscopy. Similarly, except in DH, Kondapur, Pulmonary function tests were not available in the remaining 13 DHs.

Imaging equipment available with District Hospital Bodhan, Hyderabad, Jogulamba Gadwal, Medak, Medchal Malkajgiri, Narsampet, Utnoor and Yadadri Bhuvanagiri did not have the requisite Licence from AERB authorities. Thermo Luminescent Dosimeter (TLD) badges, a protective device indicating permissible radiation levels were not provided to personnel working with X-ray unit in 10 DHs. Pathology services were also not available in 11 out of 14 DHs. Microbiology services were not available in any of the DHs except DH Narsampet.

Blood banks were not available in DHs Gajwel and Medchal Malkajgiri, AHs Golconda and Malakpet. DHs Hyderabad, Kondapur and Medchal Malkajgiri did not have the services of mortuary.

DHs Medchal Malkajgiri, Kondapur and Utnoor did not have the availability of 24-hour uninterrupted power supply.

In the absence of fire-fighting equipment like fire hydrant and smoke detectors, the hospitals were non-compliant with the fire safety norms.

3.16   Recommendations

➢ Government may ensure Medical Officers are posted in all Palle Dawakhanas so as to achieve the objective of providing healthcare services at the doorstep.

➢ Government may ensure that all District Hospitals are equipped with imaging equipment and services relating to endoscopy and blood banks in a time bound manner.

- ➢ Government may ensure adequate facilities like the availability of adequate fire fighting equipment at all health institutions to ensure safety of patients and uninterrupted power supply.

- ➢ Patient Satisfaction Survey Report may be maintained by every health institution to know the level of patient satisfaction and also to initiate remedial measures wherever necessary.

- ➢ Government may provide the protective Thermo Luminescent Dosimeter (TLD) badges to personnel working with X-ray unit to protect them from radiation.