

Chapter III

Health Care Services

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Out of eight test checked PHCs, primary management of fracture is not available in four PHCs and the services of tubectomy and vasectomy are not available in five PHCs. Out of 175 CHCs in the state, 83 CHCs are functioning without having OPD services for General Medicine, 47 CHCs without General Surgery, 15 CHCs without Gynaecology and 34 CHCs without Paediatrics. ICUs are not available in five out of twelve DHs. Obstetric High Dependency Units (HDUs) are functioning without dedicated manpower in two test-checked DHs. Equipment for HDU were received in two test checked DHs. Due to non-completion of civil works, HDUs are not functional. Laboratory services are deficient in test checked HCFs. Dietary services, fire safety, mortuary services, dedicated ambulance services and provision of linen are also deficient in test checked HCFs.

3.1 Introduction

Services provided by the Healthcare Institutions are 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/ Laboratory 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.

3.2 Service Delivery in Primary Healthcare

Outpatient Department (OPD) is the first point of contact between patient and the hospital. To avail the 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 treatment and/or medicines/ drugs are prescribed or admission to In-Patient Department (IPD) is advised based on the requirement.

3.2.1 Service Delivery at PHCs

As per IPHS 2012, PHCs are required to provide services such as out-patient department (OPD), antenatal care (ANC), postnatal care (PNC), immunisation, and treatment of diarrhoea, emergency obstetric care, primary management of fractures, management of low-birth-weight babies, facility for tubectomy and vasectomy.

We observed in test-checked PHCs that availability of services such as out-patient department (OPD), antenatal care (ANC), postnatal care (PNC), immunisation and

treatment of diarrhoea, *etc.* were adequate. However, services such as emergency obstetric care, primary management of fractures, management of low-birth-weight babies, facility for tubectomy and vasectomy were absent, as detailed below, which need to be addressed.

- Primary management of fracture was not available in four PHCs²⁴ out of eight test checked PHCs. Further, the services of tubectomy and vasectomy were not available in five²⁵ PHCs. PHC Chennur did not provide sterilisations though OT was functional. PHCs stated that family planning services were not available and attributed the reasons to non-functional Operation Theatres.
- Service of Management of Low-Birth-Weight Babies was not available in five²⁶ out of eight test-checked PHCs.

3.2.2 Laboratory Services in PHCs

Under Ayushman Bharat Scheme, Operational Guidelines require 63 tests to be provided at AB-HWC-PHCs in order to provide essential diagnostic services to ensure early detection of disease conditions and also to monitor the treatment outcomes of chronic illness. Ministry of Health and Family welfare (MoHFW), GoI issued guidelines for providing these tests and essential equipment along with the manpower requirements during July 2019.

As per Ayushman Bharat Guidelines, labs in PHC should conduct 21 tests. For Hub Laboratory at CHC/ Area Hospital/ District Hospital, samples for 45 tests are to be collected at the PHC and transported to Hub Laboratory. We observed in the test checked PHCs that only 10 to 15 tests²⁷ were being conducted by them. PHC Kondapuramu stated that due to non-availability of equipment, requisite tests were not performed. PHC Chennur stated that Hub sample collection vehicle or sample collection person was not available to transport the samples to the hub laboratory.

Government in their reply (August 2023) stated that now all the PHCs were provided with Equipment, and they were conducting 40+ tests in their own premises. As there are no Hub sample collection facilities in Andhra Pradesh, all the tests that can be conducted with the equipment were being done at PHC level only.

However, during the visit of PHCs in Guntur and Krishna districts (September 2023) we observed that only the following number of tests were available: PHCs Durgi-30, Mutukuru-8, Dhulipudi-35, Emani-37, Munnangi-37, Velagaleru-36, Kondapalli-19, Agiripalli-33, Kapileswarapuram-40 and Srikakulam-42 tests.

In PHC Mutukuru, the post of lab technician was not sanctioned.

²⁴ Chennur, Kondapuramu, Kudair and Thummalapenta

²⁵ Inamadugu, Karajada, Kudair, Narpala and Urlam.

²⁶ Inamadugu, Kondapuramu, Kudair, Narpala and Urlam.

²⁷ tests for blood grouping, Haemoglobin, bleeding time & clotting time, malaria, dengue, hepatitis B, HIV, Urine for pregnancy, pH, glucose, ketone, protein, sputum, syphilis and Rapid test for pregnancy.

As the essential laboratory services were not available, evidence based treatment cannot be ensured. Though equipment was made available, it is clear that the same was not put to use to extend the services.

3.3 Service delivery in Secondary Healthcare

As per IPHS, the secondary level of health care essentially includes Community Health Centres (CHCs), constituting the First Referral Units (FRUs) and the Sub-district/ Area Hospitals (AHs) and District Hospitals (DHs).

Patient load in Secondary Healthcare Facilities

During the years 2017-18 to 2021-22, total number of outpatients registered, inpatients admitted, and surgeries performed in secondary HCFs in Andhra Pradesh is given in **Table 3.1**.

Table 3.1: Patient load in Secondary HCFs in Andhra Pradesh

Year	No. of outpatients registered	No. of inpatients admitted	No. of surgeries performed
2017-18	2,27,88,700	19,20,654	91,995
2018-19	2,39,03,222	18,95,026	91,207
2019-20	2,43,46,056	20,19,868	91,038
2020-21	1,36,88,784	14,20,029	76,926
2021-22	1,84,05,676	18,43,502	79,150

Source: Commissioner APVVP records

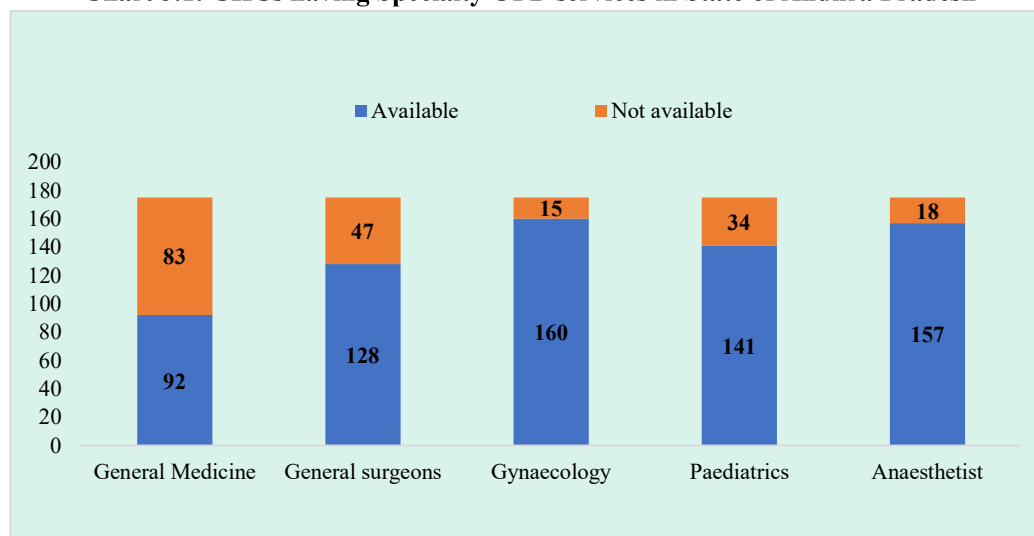
The Commissioner, APVVP attributed decrease in number of surgeries in Secondary HCFs during the years 2020-21 and 2021-22, to COVID-19 pandemic.

3.3.1 Availability of Services in CHCs

The Community Health Centres (CHCs) constitute the secondary level of healthcare to provide referral as well as specialist healthcare to the rural population. IPHS envisages CHC to provide optimal specialised care to the community and achieve and maintain an acceptable standard of quality of care. The essential requirements for a minimum functional grade of a CHC are five medical specialists *viz.*, General Surgeon, Physician, Gynaecologist/Obstetrician, Anaesthetist and Paediatrician along with one Dental Surgeon and two Medical Officers supported by 21 paramedical and administrative staff. It serves as a referral centre for PHCs within the block and provides facilities for obstetric care and specialist consultations. CHC should be provided with 30 beds along with an Operation Theatre, Labour room, X-ray, ECG and Laboratory facilities.

There are 175 CHCs available in the State as of November 2022 and the Specialist OPD services available in the CHCs of the State are given in **Chart 3.1**.

Chart 3.1: CHCs having Specialty OPD services in State of Andhra Pradesh



Source: Data furnished by the Commissioner, APVVP

As seen from the above chart, out of 175 CHCs, 83 CHCs are functioning without having OPD services for General Medicine, 47 CHCs without General Surgery, 15 CHCs without Gynaecology and 34 CHCs without Paediatrics. Further, it was observed that 18 CHCs are functioning without Anesthetist services.

3.3.1.1 Inpatient admissions and availability of beds

As per IPHS 2012, every CHC should have 30 indoor beds. We observed shortfall in availability of beds in two CHCs out of three test checked CHCs. The number of inpatients registered and availability of beds in the test checked CHCs is shown in **Table 3.2**.

Table 3.2: Inpatients registered and beds available in test checked CHCs

Year	CHC Sompeta		CHC Naidupet		CHC Kothacheruvu ²⁸	
	No. of inpatients registered	No. of beds available	No. of inpatients registered	No. of beds available	No. of inpatients registered	No. of beds available
2017-18	3,067	30	4,349	18	--	--
2018-19	3,241	30	4,180	18	--	--
2019-20	3,333	30	6,568	18	--	--
2020-21	2,555	30	3,912	18	2,662	06
2021-22	2,430	30	2,672	18	1,598	06

Source: Hospital records

Though these test checked CHCs are to be 30 bedded, the bed availability at CHC Naidupet and CHC Kothacheruvu are eighteen and six respectively, due to insufficient space.

Government (August 2023) accepted the audit observation and promised future compliance.

²⁸ Upgraded to CHC from PHC during 2019-20

3.3.1.2 Availability of essential services in test checked CHCs

As per IPHS, 2012, the essential services and its availability in test checked CHCs as of August 2022 is given in **Table 3.3**.

Table 3.3: Availability of essential services in test checked CHCs

SI No	Services	Test checked CHCs		
		Sompeta	Naidupet	Kothacheruvu
Specialist/Doctors in OPD services				
1	General surgeon	No	Yes	No
2	Physician	No	Yes	No
3	Obstetrician & Gynaecologist	No	Yes	No
4	Paediatrician	Yes	No	No
5	Anesthetist	No	Yes	No
6	General duty Medical Officer	No	Yes	Yes
7	Dental Surgeon	Yes	Yes	Yes
Essential Services				
1	Full range of Family planning services including Laparoscopic Services	No	Yes*	No
2	Safe abortion services	No	No	No
3	Emergency Obstetric Care including surgical interventions like Caesarean Sections and other medical interventions	No	No	No
4	Emergency care of sick children	Yes	No	No
5	Treatment for STI / RTI	Yes	Yes	No
6	Integrated Counselling and Testing Centre	Yes	No	No

* Only mini-Lap sterilisation available

Source: Hospital Records

It can be seen from the above that out of 13 essential services, eight services in CHC Sompeta (June 2022) and five services in CHC Naidupet (July 2022) were not available. Only two services were available in CHC Kothacheruvu (August 2022).

Government replied (August 2023) that all the 13 essential services were available at CHCs Sompeta and Naidupet. Further, Government accepted that essential services of Physician, full range of Family planning services including Laparoscopic Services and Emergency Obstetric Care were not available in CHC Kothacheruvu.

However, the respective services were not available in Sompeta and Naidupet at the time of our physical verification. As a result, patients would be forced to seek the services outside the service area which would increase Out of Pocket Expenses (OOPE).

3.3.1.3 Clinical Laboratory Facilities

IPHS prescribed 36 types of laboratory services/investigations (**Appendix 3.1**) for Community Health Centres (CHCs) to be carried out in the categories involving clinical pathology, pathology, microbiology, serology and biochemistry. A shortfall in the availability of laboratory services was observed in test checked CHCs.

Shortfall of laboratory services under each category in three test checked CHCs is given in **Table 3.4**.

Table 3.4: Shortfall of Laboratory Services in test checked CHCs

Types of laboratory services	No. of tests required	Number of tests/investigations not available in CHC at		
		Sompeta	Naidupet	Kothacheruvu
Clinical Pathology				
a) Haematology	14	4	8	12
b) Urine Analysis	8	4	6	6
c) Stool Analysis	3	3	3	3
Pathology	1	1	1	1
Microbiology	2	2	2	1
Serology	3	0	1	1
Biochemistry	5	2	5	4
Total	36	16	26	28

Source: Information provided by test checked CHCs

The following tests, which are essential to diagnose certain diseases, were not available under laboratory services:

- Sputum cytology test (pathology) helps to diagnose pneumonia, Tuberculosis, interstitial lung diseases, etc.,
- Differential Leucocyte count test is to diagnose/ monitor other diseases and conditions that affect one or more different types of white blood cells.
- Platelet count test is to measure the number of platelets available in the blood for diagnosing Dengue haemorrhagic fever.
- Hanging drop for V. cholera test (stool analysis) is a crucial test for diagnosing Cholera.
- Occult blood is an important test in screening and diagnosing of Cancer.
- Liver function test (LFT) (Biochemistry) is a blood test that measures different enzymes, proteins and other substances made by the liver.

In the absence of proper diagnosis, doctors cannot treat immediately and in cases of emergency, patients would be forced either to seek the services outside the service area which would increase Out of Pocket Expenses (OOPE).

Government replied (August 2023) that 55 types of tests were being conducted as on July 2023 in all CHCs as per IPHS 2022 and added that in CHC Kothacheruvu, the equipment-such as Bio-chemical analyser, Urine analyser, Calorimeter and the 3-cell & 5-cell counters provided was not installed, pending completion of the civil works.

3.3.1.4 Status of surgeries performed at CHCs

The Surgeries performed at CHCs in the State are given in **Table 3.5**:

Table 3.5: Status of surgeries performed at CHCs in the State

Year	Total no. of CHCs	Surgeries performed	No. of CHCs performed surgeries	No. of CHCs not performed surgeries
2017-18	190	23,860	108	82
2018-19	195	19,441	117	78
2019-20	195	20,889	122	73
2020-21	196	21,486	128	68
2021-22	175*	12,626	102	73

Source: Hospital Activity Indicator Reports over the years furnished by Commissioner, APVVP

* 21 CHCs were upgraded as Area Hospitals

As per IPHS 2012, every CHC shall have one operation theatre (OT) for performing surgeries. During test check of three²⁹ CHCs, we observed that OTs were available only at CHC Sompeta, Srikakulam district and CHC Naidupet, SPSR Nellore district. OT was not available at CHC Kothacheruvu. CHC Kothacheruvu hence did not perform surgeries and MO confirmed the same.

Government accepted the audit observation and added that CHC Kothacheruvu was functioning in the old building where OT was not available and new building for CHC was under construction and expected to be completed by December 2023.

- Only five and three surgeries were performed in 2019-20 and 2021-22 respectively in CHC Naidupet, though OT and General Surgeon³⁰, Gynaecologist³¹, Anaesthetist³² and Orthopaedician³³ were available. MO stated that due to non-availability of sufficient equipment in OT, surgeries were not performed. However, we observed that the minimum equipment required for general surgeries was available as shown in **Table 5.4**.

Government replied (August 2023) that PHC Naidupet was upgraded to 30 bedded CHC in June 2019 and attributed non-performance of surgeries to public unawareness about its upgradation and services during 2019-2020 and added that sufficient equipment was provided and at present all surgeries are being done and 57 surgeries were performed during FY 2022-2023.

As per hospital records new OPD case load during 2019-20 is 57,037 and IPD case load is 6,568. Therefore, the reply of the Government that public were not aware of availability of surgical services, is not acceptable in view of patient inflow, availability of OT and equipment along with dedicated medical officers.

3.3.1.5 Deliveries at CHCs

Every CHC should provide 24-hour delivery services including normal and assisted deliveries. Complicated deliveries are referred to CHCs by the PHCs. All referred cases

²⁹ CHCs Kothacheruvu, Naidupeta and Sompeta

³⁰ Available since August 2017

³¹ Available since April 2017

³² Available since February 2019

³³ Available since August 2019

of complications in pregnancy, labour and post-natal period must be adequately treated in the CHC. Facilities should be provided for a minimum of 48 hours of stay after delivery or/and three-to-seven days stay for managing post-delivery complications.

Number of deliveries conducted in CHCs and CHCs which did not conduct deliveries across the State are given in **Table 3.6**:

Table 3.6: Details of deliveries at CHCs in the State

Year	No. of CHCs	No. of deliveries including C-sections conducted	No. of CHCs not conducted deliveries
2017-18	190	65,886	3
2018-19	195	68,280	5
2019-20	195	65,294	2
2020-21	196	67,742	5
2021-22	175	45,077	3

Source: Commissioner APVVP records

The deliveries conducted at test checked CHCs are detailed in **Table 3.7**.

Table 3.7: Details of deliveries in test checked CHCs

Year	Sompeta			Naidupet		Kothacheruvu	
	Normal deliveries	LSCS ³⁴ (C-section)	Total	Normal deliveries	LSCS (C-section)	Normal deliveries	LSCS (C-section)
2017-18	403	395	798	150	0	-	-
2018-19	247	213	460	167	0	23	0
2019-20	259	499	758	162	0	21	0
2020-21	119	183	302	167	0	4	0
2021-22	50	49	99	59	0	17	0

Source: Test checked CHCs records

- Decrease in deliveries was attributed to non-availability of Gynaecologists by CHC, Sompeta. One Gynaecologist post was vacant from April 2021 to March 2022 and another was vacant from March 2022 to April 2023. The number of deliveries in the first three years in the CHC indicated demand, which declined during 2020-22.

Government accepted (August 2023) the audit observation.

Priority should be given to fill the gaps in Human Resources to address the service demand in the backward areas. Non-availability of services of Gynaecologist would compel pregnant women to seek services outside service area and may increase out-of-pocket expenditure for them.

³⁴ Lower Segment Cesarean Section

- CHC Naidupet cited lack of proper infrastructure viz., space for wards and washrooms as reasons for decrease in number of deliveries from 150 in 2017-18 to 59 in 2021-22. Government stated (August 2023) that 144 deliveries were conducted in 2021-2022, however, the Hospital records showing only 59.



Figure 3.1: Labour Room at CHC Naidupeta (July 2022)



Figure 3.2: Operation Theatre at CHC Naidupeta (July 2022)

- Though Gynaecologist³⁵ and Anesthetist³⁶ were available in CHC Naidupeta, Lower Segment Caesarean Section (LSCS) was not performed during 2017-2022. The Medical Officer attributed the same to non-availability of required equipment in the operation theatre.

The Government accepted the audit observation and added (August 2023) that CHC Naidupeta functioned as PHC till May 2019, OBG specialist was available from 2017, and Anaesthetist joined in February 2019. During 2021-2022, this facility was fully converted into COVID care centre, where every doctor was involved in providing COVID care services. Sufficient infrastructure and fully equipped OT were made available only in 2022. As on date this HCF had Paediatrician (from November 2022) and Anesthetist (from July 2023) also.

However, the Government did not furnish reasons for non-performing LSCS during the non-COVID period, though equipment, infrastructure and human resources were available.

- In CHC Kothacheruvu, out of 65 deliveries, 36 delivered mothers were discharged within 48 hours of delivery during the period from 2018-19 to 2021-22. The Medical Officer replied that due to the lack of facilities for night stay of inpatients in the CHC, the delivered mothers were discharged within 48 hours of delivery. Further, it was replied that the decrease in deliveries was due to pregnant women preferring to go to other hospitals due to unavailability of necessary services.

Government accepted (August 2023) the audit observation and stated that due to lack of night stay facilities, electrical and lighting facilities patients were discharged within 48 hours. Further, Government stated that electricity was provided for the CHC in September 2022 and the services were increased.

3.3.1.6 Newborn Care and Child Health at CHCs

Though FRUs are not intended to provide any intensive care, they should be equipped to ensure safe care of the baby prior to appropriate transfer. Newborn care at CHC level

³⁵ Available since April 2017

³⁶ Available since February 2019

includes routine and emergency care of sick children including facility based IMNCI³⁷ strategy and Prevention and management of routine childhood diseases, infections, and anaemia, *etc* (IPHS 2012).

Out of three test checked CHCs, Newborn care facility was not available at two CHCs, Naidupeta and Kothacheruvu.

Newborn care units are intended to provide early initiation of breast-feeding practices within one hour of birth, counselling on Infant and young child feeding, emergency care of sick children, immunisation of infants, prevention and management of childhood diseases, infections and anaemia. In the absence of a newborn care unit, the above services are not adequately provided which may lead to infant mortality due to lack of quality care at birth or lack of treatment immediately after birth and first days of life.

Reply awaited (March 2024) from Government.

3.3.1.7 Oral Health in CHCs

IPHS 2012 prescribes that a Dental Unit consisting of Dental Chair and set of dental Equipment for examination, extraction and management of Dental and related problems should be available in the CHCs.

Dental Assistant Surgeon and equipment for dental services were available in CHC Sompeta and CHC Naidupeta. Though Dental Assistant surgeon was available in CHC Kothacheruvu, equipment³⁸ for dental services was not provided.

Dental care and Dental Health education services as well as root canal treatment and filling/ extraction of routine and emergency cases are essential services at CHCs as per IPHS norms. However, these services were not available at Kothacheruvu due to lack of equipment though Human resources are available.

Government stated (August 2023) that CHC Kothacheruvu was upgraded from PHC in 2021 and a new Dental Chair was installed and Dental materials for treatment modalities were however under procurement.

3.3.2 Availability of Services in Area Hospitals

3.3.2.1 Specialty Services in Area Hospitals

AH shall provide the following 13 specialty services as per IPHS 2012. However, we observed (August 2022) a shortfall in specialty services in test checked AHs as stated in **Table 3.8**.

Table 3.8: Shortfall in the availability of specialty services in the test checked AHs

SI No	Specialty	Seethampeta	Kavali	Kadiri
1	General Medicine	Yes	Yes	Yes
2	General Surgery	No	Yes	Yes

³⁷ Integrated Management of Neonatal & Childhood Illness

³⁸ Dental Unit consisting of Dental Chair and set of dental Equipment for examination, extraction and management of Dental & related problems.

SI No	Specialty	Seethampeta	Kavali	Kadiri
3	Obstetrics & Gynaecology	Yes	Yes	Yes
4	Dermatologist/Venereologist	No	No	No
5	Paediatrician	Yes	Yes	Yes
6	Anaesthetist (Regular/trained)	Yes	Yes	Yes
7	Orthopaedician	No	Yes	No
8	ENT Surgeon	No	Yes	Yes
9	Ophthalmologist	Yes	No	Yes
10	Radiologist	No	No	No
11	Casualty Doctors/General Duty Doctors	Yes	Yes	Yes
12	Dental Surgeon	Yes	Yes	Yes
13	Pathologist with DCP/MD /MD (Path)/MD (Biochemistry)	No	No	No
	Number of specialty services not available	6	4	4

Source: Test checked Area Hospital records

As seen from the above, following services were not available in three test checked AHs:

- In **AH Seethampeta**, Dermatologist/Venereologist, Radiologist, Orthopaedician, Pathologist, Surgery specialist (General surgery) and ENT surgeon posts were vacant since February 2019.

Government accepted the observation and replied (August 2023) that since September 2022, the services of Dermatologist, Radiologist, Orthopaedician, Pathologist, General surgeon and ENT surgeon were available in AH Seethampeta.

Though Dental Assistant surgeon was available in AH Seethampeta, equipment was not available.

- In **AH Kadiri**, LSCS were not performed during period from 26th March 2020 to 25th August 2021. Due to non-availability of O&G specialist, out of 3,391 admissions in maternity ward, 647 cases were referred for LSCS to GGH, Anantapur.

Government accepted (August 2023) the audit observation and stated that two Gynaecologists were available and also performed LSCS at AH Kadiri. It was further stated that the services of Dermatologist, Orthopedics and Pathologist were also available since September 2022. Radiologist was not posted (August 2023). Government promised future compliance.

- In **AH Kavali**, Ophthalmologist, Dermatologist, Pathologist and Radiologist were not available (August 2022).

Government accepted (August 2023) the audit observation and added that the services of Ophthalmologist, Dermatologist and Pathologist were made available at AH Kavali since September 2022. Radiologist was not posted (August 2023). Government promised future compliance.

3.3.2.2 Laboratory services in Area Hospitals

Medical laboratory testing plays a crucial role in the early detection, diagnosis and treatment of disease in patients.

IPHS prescribed 39 types of laboratory services/investigations for Area Hospitals (AHs) to carry out in the categories of clinical Pathology, Pathology, Microbiology, Serology and Biochemistry (*Appendix 3.2*). The summarised position of laboratory services available required and shortfall in test checked AHs is shown in **Table 3.9**.

Table 3.9: Shortfall in the availability of laboratory Services in test checked AHs

Types of laboratory services	No. of tests required	Number of tests/investigations not available		
		AH Kadiri	AH Seethampeta	AH Kavali
Clinical Pathology	24	6	6	8
Pathology	1	1	0	0
Microbiology	4	4	3	3
Serology	4	0	1	0
Biochemistry	6	2	2	1

Source: Information provided by test checked AHs

In detail, we observed that:

- Hanging drop for V. cholera test, a Stool analysis for diagnosing cholera, was not available in the two test checked AHs, Kadiri and Kavali
- Occult blood in stool test used in screening and diagnosing for cancer was not available in AH Seethampeta and AH Kavali.
- Semen analysis, a basic test for treating infertility was not available in AH Kavali and AH Kadiri.
- Cerebrospinal Fluid analysis (CSF Analysis) for diagnosing and treating meningitis was not available in three test checked AHs. This infection is quite common among children. Delay in diagnosis may lead to high mortality.
- Cell count and cytology tests under aspirated fluids were not available in any of the three test checked Area Hospitals. Hence, aspirated fluids management is compromised in the test checked Area Hospitals. In many conditions, ascitic fluid is aspirated from abdomen to diagnose the condition and treat the patient.
- Grams stain throat swab, sputum *etc.*, a test to identify bacterial infection was not available in three test-checked AHs.
- RPR car test for syphilis, a basic test done in pregnancy was not available in AH Seethampeta.
- The Ortho toluidine (OT) test is important in determining the amount of residual chlorine and is useful during outbreak of diarrhoea. This test is not available in two test checked AHs, Kadiri and Seethampeta.

Due to non-availability of tests, doctors may not prescribe proper preventive treatment and save the patient in time.

Government in its reply stated that 75 laboratory tests were being done as of August 2023 in AHs. Further, it was stated that reagents for the analysers were made available and recruitment of Lab technicians and lab attendants was also completed. Government further accepted that TSH was not being done at AH, Seethampeta due to non-availability of equipment and reagents for some tests such as APTT, D-dimer, ASO Titre and HbA1c and procurement of equipment and reagents was under process.

3.3.2.3 Surgeries performed in the test checked AHs

As per NHM Assessor's Guidebook, surgeries performed per surgeon is an indicator to measure efficiency of the hospitals.

Surgeries performed and surgeries per surgeon per annum in the test checked area hospitals during 2021-22 are shown in **Table 3.10**:

Table 3.10: Surgeries conducted per surgeon

2021-22	AH Seethampeta			AH Kavali			AH Kadiri		
Department	No of Surgeries performed	No of Surgeons available	Surgeries per Surgeon	No of Surgeries performed	No of Surgeons available	Surgeries per Surgeon	No of Surgeries performed	No of Surgeons available	Surgeries per Surgeon
Gynec	47	2	24	524	5	105	52	1	52
Ortho	0	0	0	15	2	8	16	1	16
Ophthalmic	0	1	0	70	1	70	61	1	61
ENT	0	0	0	1	1	1	0	1	0
General	23	2	12	13	2	7	68	2	34

Source: Hospital records

ENT and Ortho surgeries were not performed in AH Seethampeta during 2019-20 to 2021-22. Gynec surgeries were not performed in AH Kadiri during 2020-21 due to lack of Gynaecologists.

3.3.3 Availability of Services in District Hospitals

IPHS 2012 defines District hospital as a hospital at the secondary referral level responsible for a district of a defined geographical area containing a defined population. DHs provide all basic specialty services and need to be ready for epidemic and disaster management. In addition, it should provide facilities for skill-based training for different levels of health care workers.

3.3.3.1 Specialist Services in DHs

As per IPHS 2012, District Hospitals shall provide the following 14 specialty services. In test checked DHs, we observed a shortfall in the availability of services as detailed in **Table 3.11**.

Table 3.11: Availability of Specialty services in test checked DHs

S.No	Specialty	DH Tekkali as in May 2022	DH Atmakur as in July 2022	DH Hindupur as in June 2022
1	Medicine Specialist	Yes	No	Yes
2	Surgery Specialist	Yes	Yes	Yes

S.No	Specialty	DH Tekkali as in May 2022	DH Atmakur as in July 2022	DH Hindupur as in June 2022
3	O&G Specialist	Yes	Yes	Yes
4	Dermatologist/Venerologist	No	No	Yes
5	Paediatrician	No	Yes	Yes
6	Anaesthetist (Regular/trained)	Yes	Yes	Yes
7	Orthopaedician	No	Yes	Yes
8	ENT Surgeon	Yes	No	Yes
9	Ophthalmologist	Yes	Yes	Yes
10	Radiologist	No	No	Yes
11	Casualty Doctors/General Duty Doctors	Yes	Yes	Yes
12	Dental Surgeon	Yes	Yes	Yes
13	Pathologist with DCP/MD (Micro)/MD (Path)/MD (Biochemistry)	No	No	No
14	Psychiatry	No	No	Yes

Source: Hospital Records

Government furnished (August 2023) the present status of availability of specialty services. According to it out of 14 specialist services, Radiologist was not available in DH Tekkali and General Medicine Specialist (since 2018) and Pathologist (since June 2022) were not available at DH Atmakur and Government promised future compliance. Government further stated that in DH Atmakur, two ENT³⁹ posts, one Dermatologist⁴⁰, Psychiatrist, Radiologist were filled in September 2022.

In respect of DH Hindupur, Government stated (August 2023) that the services of Pathologist were available and another Pathologist (MD) was appointed on regular basis in July 2023.

The availability of Specialist Doctors in the nine DHs (other than test-checked DHs) is shown in **Table 3.12**:

Table 3.12: Availability of out-patient services (specialty-wise) in nine DHs (as of May 2023)

S.No.	OPD Specialty / Department available in District Hospital	Paderu	Parvatipuram	Anakapalli	Tanuku	Tenali	Markapur	Madanapalle	Chittoor	Proddatur
1	General Medicine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	General Surgery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

³⁹ (1 DCS + 1 CAS) were sanctioned in ENT specialty in DH Atmakur vide G.O.MS.No.227, HM&FW(D1) Dept., d1.12.09.2022

⁴⁰ vide G.O.MS.No.227, HM&FW(D1) Dept., dt.12.09.2022

S.No.	OPD Specialty / Department available in District Hospital	Paderu	Parvatipuram	Anakapalli	Tanuku	Tenali	Markapur	Madanapalle	Chittoor	Proddatur
3	Obstetrics & Gynaecology	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	Paediatrics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	Eye	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	ENT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	Skin and Venereal Diseases	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
8	Psychiatry	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
9	Orthopaedics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	Dental	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Hospital records

Government replied (August 2023) that DH, Chittoor was under lease to M/s. Apollo Hospital Education and Research Foundation⁴¹ for a period of 33 years which shall provide specialists in respective departments and hence the performance was not included in the data of APVVP. DH Paderu and DH Madanapalle were upgraded as Government General Hospitals and would be handed over to DME, AP. The Psychiatry services (under NHM) are available from January 2023 in DH Tenali. The Psychiatry services (under District Mental Health Programme) are available in DH Proddatur since January 2023.

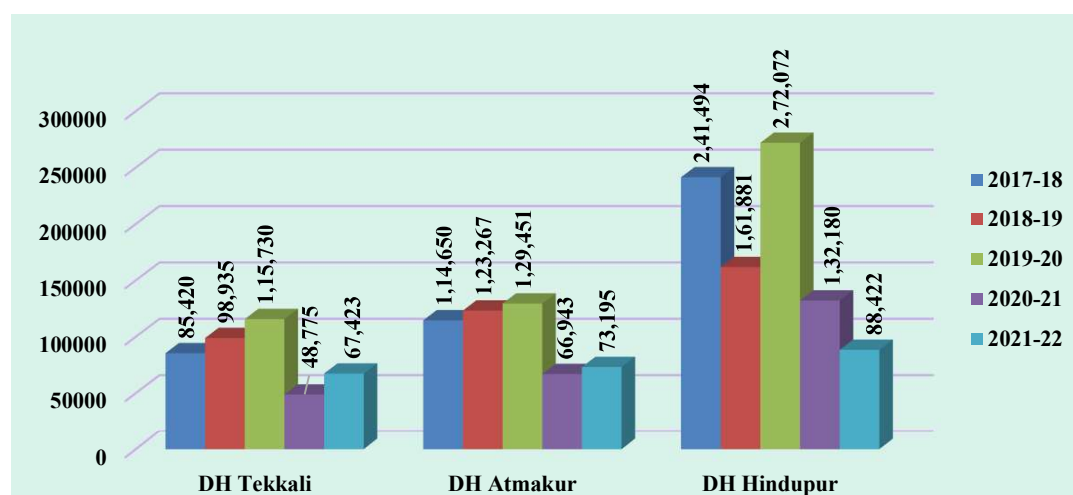
3.3.3.2 Out-patient cases in test checked DHs⁴²

The number of out-patients registered in the test checked three district hospitals during 2017-18 to 2021-22 is shown in **Chart 3.2**:

⁴¹ vide G.O.Ms.No.2, HM&FW(D) Dept., dated 4 January 2016 and G.O.Ms.No.42, HM&FW(D) Dept., dated 28 April 2016

⁴² Tekkali, Atmakur and Hindupur

Chart 3.2: Number of out-patients in test checked DHs



3.3.3.3 Clinical Laboratory services

- As per IPHS (2012), the DH 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 public health point of view.
- IPHS prescribes 70 types of laboratory tests/investigations for DHs to be carried out in the five categories of clinical pathology, pathology, microbiology, serology and biochemistry (*Appendix 3.3*).
- The summarised position in terms of the availability of laboratory services provided under each category in all twelve⁴³ DHs is shown in *Table 3.13* below:

Table 3.13: Shortfall in the availability of Laboratory Services in DHs in Andhra Pradesh

No. of tests not available in DHs													
Types of laboratory services	No. of tests prescribed	Tekkali	Atmakur	Hindupur	Paderu	Parvatipuram	Anakapalli	Tanuku	Tenali	Markapur	Madanapalle	Chittoor	Proddatur
Clinical Pathology	29	14	16	15	3	10	8	12	3	8	8	0	13
Pathology	8	8	8	8	6	8	8	8	4	8	8	0	6
Microbiology	7	7	6	7	2	6	7	6	7	7	7	0	6
Serology	7	4	4	3	3	5	2	5	2	3	3	0	2
Biochemistry	19	13	10	15	5	10	6	10	9	6	9	0	11

Source: Information provided by the District Hospitals

Government stated (August 2023) that in DH Atmakur, 80 types of tests / investigations were being carried out in the categories of Clinical Pathology 14, Hematology 18, Serology 12, Biochemistry 36.

⁴³ Paderu, Parvatipuram, Anakapalli, Tanuku, Tenali, Markapur, Madanapalle, Chittoor, Proddatur, Tekkali, Atmakur and Hindupur

Further, Government stated (August 2023) that equipment⁴⁴ and reagents for the analysers were received and recruitment of Lab technicians and lab attendants was completed. All the 130 types of tests are being conducted at District Hospitals at present. However, the Government had not furnished the list and quantity of reagents supplied to HCFs to ensure sufficiency.

Significant tests:

- Hanging drop for V. cholera test, a crucial test for diagnosing cholera was not available in DHs Tekkali, Atmakur, Hindupur, Paderu, Parvatipuram, Anakapalli, Markapur, Madanapalle, Proddatur.

Government accepted (August 2023) that Hanging drop for V. cholera test was not available in DH Atmakur as Microbiologist post was vacant and promised future compliance. Reply for other DHs is awaited (March 2024).

- Occult blood is an important test in screening and diagnosing for cancer, which is not available in DHs Tekkali, Atmakur, Hindupur, Parvatipuram, Madanapalle and Proddatur.

Government replied (August 2023) that Occult blood in stool test was available in DH Atmakur from April 2023. Reply for other DHs is awaited (March 2024).

- Semen analysis a basic test for treating infertility is not available in DHs Atmakur, Hindupur, Paderu, Parvatipuram, Tanuku, Madanapalle and Proddatur.

Government replied (August 2023) that Semen analysis test was available in DH Atmakur from July 2023. Reply for other DHs is awaited (March 2024)).

- CSF analysis is critical in diagnosing and treating meningitis. The infection is quite common among children and delay in diagnosis can lead to high mortality. This is not available in DHs Tekkali, Atmakur, Hindupur, Parvatipuram, Tanuku, Markapur, Madanapalle and Proddatur.
- Cell count, cytology tests under Aspirated fluids were not available in DHs Tekkali, Atmakur, Hindupur, Parvatipuram, Anakapalli, Tanuku, Markapur, Madanapalle and Proddatur.

Government replied (August 2023) that CSF analysis, Cell count, cytology tests were conducted previously by the Pathologist of DH Atmakur from July 2020 to May 2022. At present the post is vacant and promised to fill the vacancy.

- Grams Stain Throat Swab, Sputum test *etc.* to identify bacterial infections was not available in DHs Tekkali, Atmakur, Hindupur, Parvatipuram, Anakapalli, Tanuku, Tenali, Markapur, Madanapalle, Proddatur.

⁴⁴ Fully automatic analyser, Semi-automatic analyser, TSH, T3, T4 analyser, Hot air oven, Incubators, Urine Analyser, Cell Counter, Electrolyte analyser, Bilurubinometer, Centre-fuse, U.V.Chambers, Bio Safety cabins and Microscopes.

Government accepted (August 2023) the audit observation in respect of DH Atmakur and promised future compliance. Reply for other DHs is awaited. Thyroid (T3, T4, TSH) test are not available in test checked DHs except in DH Paderu and DH Chittoor.

Government replied (August 2023) that Autobio-Autolumo A1000 equipment for testing thyroid were installed in March 2023 and hence Thyroid (T3, T4, TSH) tests were available in DH Atmakur.

- Availability of seven⁴⁵ types of Endoscopy tests/investigations as required under IPHS 2012 in DHs were examined in test checked DHs. Endoscopy tests were not carried out in DHs Atmakur and Hindupur. In DH Tekkali, four tests/investigations viz., Bronchoscopy, Arthroscopy, Laparoscopy (Diagnostic) and Colposcopy were not carried out.

Non-availability of the above tests in the Healthcare facilities would result in increase of OOE as the patients have to approach private/far away HCFs for these non-available tests.

3.3.3.4 Surgeries performed in test checked DHs

As per NHM Assessor's Guidebook, surgeries performed per surgeon is an indicator to measure efficiency of the hospitals.

Surgeries performed and surgeries per surgeon per annum in the test checked DHs during 2021-22 are shown in **Table 3.14**.

Table 3.14: Surgeries conducted in test checked DHs & Surgeries per Surgeon in 2021-22

Department	DH Tekkali			DH Atmakur			DH Hindupur		
	Surgeries	Surgeons	Surgeries per surgeon	Surgeries	Surgeons	Surgeries per Surgeon	Surgeries	Surgeons	Surgeries per Surgeon
Gynec	587	3	196	917	5	183	448	2	224
Ortho	58	2	29	31	1	31	35	2	18
Ophthalmic	270	2	135	391	1	391	188	3	63
ENT	20	1	20	2	1	2	45	2	23
General	100	2	50	15	2	8	199	2	100

Source: Hospital records

Note: Arithmetical accuracy is not a concern for surgeries per surgeon

3.3.4 Availability of other services in Secondary Healthcare

3.3.4.1 X-Ray facility

As per Para 5.3 of the Safety Codes provided by the Atomic Energy Regulatory Board (AERB) viz., Regulatory requirements for use of X-ray equipment stipulates that no diagnostic X-ray equipment shall be operated for patient diagnosis unless a license for operations was obtained from a competent authority.

⁴⁵ Oesophagus, Stomach, Colonoscopy, Bronchoscopy, Arthroscopy, Laparoscopy (Diagnostic) and Colposcopy

Obtaining a license for the operation of Medical Diagnostic X-ray equipment is a statutory requirement as per Atomic Energy (Radiation Protection) Rules, 2004. This is to ensure that equipment meets the quality requirements to acquire an acceptable diagnostic image with optimum radiation dose to the patient.

Commissioner APVVP stated that 85 CHCs out of 175 CHCs did not report any X-rays. We observed that in eight out of nine test checked secondary HCFs, X-ray service was available except AH Seethampeta. However, AERB certificate was available in six⁴⁶ secondary HCFs only. CHCs Sompeta and Kothacheruvu were functioning without the mandatory requirement of AERB license.

The details of AMC (Annual Maintenance Contract) and AERB certification for X-ray machine are given in **Table 3.15**:

Table 3.15: Availability of AERB certificate for X-ray machine in test checked secondary HCFs

Name of the Health facility	Whether Service available	AMC/CMC	AERB certificate
CHC Sompeta	Yes	No	No
CHC Kothacheruvu	Yes	No	No
CHC Naidupeta	Yes	No	Yes
DH, Hindupur	Yes	Yes	Yes
DH, Atmakur	Yes	3 Machine-YES, 2 Machine-NO	Yes
DH, Tekkali	Yes	No	Yes
AH, Kavali	Yes	3 Machine-YES, 3 Machine-No	Yes
AH, Seethampeta	No	No	--
AH, Kadiri	Yes	Yes For 10 MA X-ray & 10 MA Dental X-ray-No AMC	Yes

Source: Hospital records

Andhra Pradesh Medical Services Infrastructure Development Corporation (APMSIDC) installed (September 2018) 'Siemens 300mA, X-ray machine' worth ₹11.14 lakh in AH Seethampeta. As Computed Radiography Unit (CRU), which is essential for developing digital imaging, was not supplied, the X-ray machine was kept idle (June 2022) since its installation.

The Government accepted (August 2023) the observation and replied that the CRU along with accessories were not supplied till date. AH Seethampeta received one CRU (February 2023) from the AH Palakonda and is being utilised for taking X-Rays.

The reply is not tenable as the X-Ray unit supplied to AH Seethampeta was kept idle from September 2018 to February 2023 (52 months) and lack of service would cause more Out of Pocket Expenditure (OOPE) for the patients.

3.3.4.2 Intensive care Unit (ICU)

As per IPHS 2012, an intensive care unit shall be available in the DH. Critically ill patients requiring highly skilled lifesaving medical aid and nursing care are

⁴⁶ CHC Naidupeta, AH Kavali, AH Kadiri, DH Tekkali, DH Atmakur, DH Hindupur

concentrated in ICU. These should include major surgical and medical cases, head injuries, severe haemorrhage, acute coronary occlusion, kidney and respiratory catastrophe, poisoning *etc.* It should be the ultimate medical care the hospital can provide with highly specialised staff and equipment.

Audit observed that at the State level, five⁴⁷ out of 12 DHs did not have ICUs. Due to non-availability of ICU facilities in the DHs, the critically ill patients had to be referred to far away tertiary care facilities.

The ICUs available in seven⁴⁸ DHs were found to be deficient in consumables and equipment as shown in **Table 3.16**.

Table 3.16: DHs where consumables and equipment were not available in ICUs

Name of consumables /equipment	Non Available DHs
Chest Tube	Parvathipuram, Anakapalli and Tenali
Endo Tracheal Tubes	Tenali
Deep Vein Thrombosis prevention devices	Parvatipuram, Anakapalli, Tenali, Madanapalle, Chittoor and Proddatur

Source: Hospital records

ICUs in three test checked DHs

- ICU was not established in DH Tekkali and non-functional in DH Hindupur due to non-availability of trained Manpower.
- Equipment worth ₹21.61 lakh was received in DH Atmakur for establishment of ICU. However, the same was non-functional due to lack of trained manpower and incomplete civil works.

Government replied (August 2023) that four bedded ICU was established, with equipment and trained staff at DH Tekkali. Government reply was however, not supported by documentary evidence.

ICU facility in test checked AHs

- AH Kadiri was donated equipment for a 10 bed ICU by Nirmaan Organisation on 31 October 2021. However, ICU was not functional due to non-availability of trained human resources and non-functioning of Pressure swing adsorption (PSA) plant. The details of equipment in ICU at AH Kadiri is shown in **Table 3.17**.

Table 3.17: Availability of equipment in ICU at AH Kadiri

SI No	Particulars	Units
1	ICU Flower Beds with mobility-2 Folded	10
2	Suction Apparatus	5
3	Multi-Channel Monitors	5
4	Infusion Pumps	2
5	ICU Bed-5 Folded	2
6	Stainless Steel Silver Crash Cart	3
7	Oxygen D-type Cylinders	25

Source: Hospital records

⁴⁷ Paderu, Tanuku, Tekkali, Atmakur, Hindupur

⁴⁸ Parvatipuram, Anakapalli, Tenali, Markapur, Madanapalle, Chittoor, Proddatur

Government replied (August 2023) that ICU equipments received in donation was in use at AH Kadiri and cases of poisoning, CVA head injury, terminally ill patients were being treated.

As the equipment received (October 2021) for ICU was kept idle till the date of functioning of ICU, patients during that period were deprived of the ICU services.

- (b) In AH Kavali, equipment for the establishment of ICU was donated by the Nirmaan organisation (October 2021). However, the ICU was not functional due to the non-availability of trained staff.

Government replied (August 2023) that at present two bedded ICU was functional with necessary equipment and promised future compliance.

Thus, the State had not met the norms of the IPHS, in terms of providing ICU services in all the DHs. In the absence of adequate ICU services in DHs, patients were referred to far away tertiary care hospitals, which eventually increased the patient load in the tertiary care hospitals as well as the OOPE to the patient.

3.3.4.3 Special Newborn Care Unit

As per IPHS 2012, Special Newborn Care Unit (SNCU) is meant primarily to reduce the case fatality among sick children born within the hospital or outside, including home deliveries within the first 28 days of life.

Mini SNCU with five beds was established and functional under PPP mode at DH Tekkali (September 2018) and AH Seethampeta (March 2018).

SNCUs at DH Atmakur (with 10 beds) and DH Hindupur were sanctioned during ROP⁴⁹ 2018-19. Administrative sanction was given by Government of Andhra Pradesh in 2019⁵⁰, and accordingly equipment was supplied to both SNCUs in 2020-2021.

We observed (August 2022) equipment worth ₹87.70 lakh supplied during the period from November 2020 to August 2021 was kept idle due to non-completion of the building construction in DH, Atmakur.

Government replied (August 2023) that construction of the Special Newborn Care Unit (SNCU) was completed and handed over and the unit was functioning with 10 beds since November 2022 and the equipment was being utilised.

Further, we observed (August 2022) that equipment worth ₹65.48 lakh was supplied during the period from December 2020 to December 2021 for the establishment of SNCU was being utilised for New Born Stabilisation Unit (NBSU) due to non-completion of the SNCU building construction in DH, Hindupur.

Government replied that 80 *per cent* of construction of SNCU building at Hindupur was completed as of August 2023.

⁴⁹ Record of Proceedings (RoP): the budgetary approvals under NHM for the financial year and a reference document for implementation.

⁵⁰ Letter Dated 12.09.2019 RC.No.178/CH&I/2019

3.3.4.4 Availability of beds in the district hospitals

IPHS 2012 prescribes that a 100 bedded DH should have a minimum of 8,000 sq.m. of plinth area (80 to 85 sq.m. per bed) and for 200 bedded DH, the plinth area should be 16,000 sq.m.

Government in June 2018⁵¹ accorded administrative sanction to upgrade the following AHs to DHs with 424 additional posts.

- 1) AH Tekkali, Srikakulam District into 200 bedded District Hospital
- 2) AH Hindupur Anantapur District into 200 bedded District Hospital
- 3) AH Markapur, Prakasam District into 150 bedded District Hospital
- 4) AH Madanapalle, Chittoor District into 150 bedded District Hospital
- 5) AH Atmakur, SPSR Nellore District into 150 bedded District Hospital.

We observed (June-August 2022) the following shortfall in availability of beds in DHs as shown in **Table 3.18**.

Table 3.18: Availability of beds in DHs

Sl. No.	District Hospital	Sanctioned beds	Available beds (Ward-wise)
1	Tekkali	200	112
2	Atmakur	150	134
3	Proddatur	350	283

Source: Hospital records

District Hospital, Tekkali

DH, Tekkali requires an additional space of 6,958 sq.m to become a fully functional 200 bedded DH in addition to the existing plinth area of 9,042 sq.m.

Government accepted (August 2023) the observation and promised future compliance.

District Hospital, Atmakur

DH, Atmakur requires an additional plinth area of 3183.35 sq.m. in addition to the existing 8186.65 sq.m. (12,000 sq.m⁵² plinth area for 150 bedded). However, building and infrastructure was not upgraded to 150 bedded hospital and Hospital was functioning in the building which was constructed for a capacity of 100 beds (as of August 2022).

Government accepted (August 2023) the observation and promised future compliance.

Thus, upgradation of AHs to DHs was taken up without enhancing the plinth area and bed capacity as per the requirement.

The availability of beds in existing 12 DHs, including the five upgraded AHs is given in **Appendix 3.4**.

⁵¹ G.O.Rt no 229 date 04.06.2018(HM&FW)

⁵² IPHS 2012 (80 sq meters * 150)

3.3.4.5 Obstetric High Dependency Unit

The concept of Obstetric High Dependency Units (HDU) in Public Health facilities was rolled out by the Government of India in 2016 to address the need for critical care units within the Obstetric Department. The Establishment of HDUs increases access to intensive care for mothers suffering from life-threatening obstetric complications through the coordinated efforts of obstetricians and intensive care specialists and to continue obstetric care during this period. Operational guidelines for Obstetric ICU and HDU (2017) stipulate that three Medical officers and six staff Nurses are required for four bedded HDU.

Out of nine⁵³ test checked secondary HCFs, HDUs were sanctioned for four⁵⁴ secondary HCFs only. For the Maternal health programme under NHM, four bedded obstetric HDUs were sanctioned for DH Tekkali, and DH Atmakur at a cost of total ₹58.92 lakh⁵⁵ each in 2020-21. Further, four bedded HDUs were sanctioned for AH Seethampeta and AH Kadiri in 2021-22. Accordingly, the Commissioner of Health and Family Welfare requested⁵⁶ APMSIDC to procure the equipment with a condition that all equipment being procured shall be with warranty and should have annual maintenance for at least three to five years.

The status of HDUs In the four sanctioned hospitals is commented below, and for which the Government also replied as in **Table 3.19**.

Table 3.19: Status of HDUs in four sanctioned hospitals

Sl. No.	DH/AH	Equipment received in	Equipment worth ₹ in lakh	Observation	Government reply
1	DH Atmakur	June 2021 to August 2022	32.14	Equipment remained idle as manpower was not recruited (2023).	HDU started functioning with the staff of DH from August 2022.
2	DH Tekkali	December 2021 to January 2022	23.83	HDU was non-functional as dedicated manpower was not provided.	Functioning with ten out of twenty essential equipment and with available staff in one room in the existing building
3	AH Seethampeta	December 2021 to February 2022	27.09	HDU was non-functional as dedicated manpower was not provided.	Government accepted (August 2023) the observation and added that construction of HDU was not yet completed

⁵³ CHC Sompeta, CHC Naidupeta, CHC Kothacheruvu, AH Seethampeta, AH Kavali, AH Kadiri, DH Tekkali, DH Atmakur and DH Hindupur

⁵⁴ DH Tekkali, DH Atmakur, AH Seethampeta and AH Kadiri

⁵⁵ ₹43.92 lakh for equipment and ₹15 lakh towards physical infrastructure

⁵⁶ Rc No. HMF04-12021 (31)/36/2021-MHN-CHFW dated 16 August 2021

Sl. No.	DH/AH	Equipment received in	Equipment worth ₹ in lakh	Observation	Government reply
4	AH Kadiri	December 2021 to May 2022	34.10	HDU was not established due to incomplete civil works and non-provision of manpower.	Government accepted (August 2023) the observation.
Total			117.16		

Source: Hospital records

Thus, NHM had released funds for the establishment of four bedded obstetric HDUs. However, due to the non-availability of manpower, incomplete civil works, and partial receipt of equipment, HDU in DH, Tekkali functioning with limited equipment and HDUs in two AHs, Seethampeta and Kadiri remain non-functional. Further, if the delay in civil works continues then the warranty period for the equipment received may also expire without its utilisation.

Thus, the objective of providing intensive care to mothers suffering from life-threatening obstetric complications was not achieved due to incomplete civil works and limited availability of equipment.

3.3.4.6 District Public Health Laboratory (DPHL)

Under Integrated Disease Surveillance Programme (IDSP), Strengthening public health labs is an important component with focus on developing lab capacity in the country so that states have the diagnostic facilities to conduct surveillance of epidemic prone diseases in a decentralised manner.

To decentralise and integrate the surveillance activities, District Public Health Laboratories (DPHL) were established at the district level. Laboratories at District hospitals are being strengthened for the diagnosis of epidemic prone diseases with respect to deficient equipment, manpower and funds for consumables. DPHL under IDSP are expected to Perform testing for lab confirmation of epidemic prone diseases for both outpatients and inpatients, attend the hospital to generate lab confirmed surveillance data, support outbreak investigations in the district and report weekly surveillance data.

DPHLs were established at DH, Hindupur (June 2021) and DH Tekkali (October 2021). DPHL unit was not sanctioned to DH Atmakur (July 2022).

We observed that:

- In DH Tekkali, out of 15 types of equipment required, only four types were received whereas one Microbiologist, one Lab Technician and one Lab Assistant were recruited. Due to insufficient/ partial equipment, DPHL at Tekkali was also non-functional.
- In DPHL Hindupur, out of 15 items of equipment required, only seven items were available. Though microbiologist and lab Assistant were recruited, equipment was not fully supplied.

Government replied (August 2023) that in DH Tekkali at present out of 15 items of equipment, 11 items were available and tests⁵⁷ were being conducted at District Public Health Laboratory (DPHL) under Integrated District Surveillance Programme (IDSP). Four items of equipment⁵⁸ were still not available in DH Tekkali.

Government replied (August 2023) that equipment⁵⁹ available in DH Hindupur, culture media, reagents and antibiotic *etc.* were available at present and Culture and Sensitivity tests were being done at DPHL. Six items of equipment⁶⁰ were still not available in DH Hindupur.

Reply is not tenable as insufficient/partial equipment would impact the quality of service delivery for effective functioning of DPHLs.

3.3.4.7 Dietary services to in-patients

GoAP (November 2011) stipulated⁶¹ that the District Diet Management Committee (DDMC) will be responsible for calling tenders and selecting the most competent diet contractor and monitoring the quality of food supplied to the inpatients/ duty doctors. The Superintendent of Community Health Centres was responsible for administering the Diet contract without deviation from the conditions.

A State level committee⁶² was entrusted to standardise the bid documents, contract documents, contract conditions, *etc.* and oversee the funds flow to the Hospitals/Institutions. This committee would also monitor the implementation of diet supplied to all hospitals across the State and take appropriate remedial measures. Diet is being provided to inpatients in all 12 DHs.

There are 16, 14 and 13 CHCs and four, two, four AHs available in test checked districts of Anantapur, SPSR Nellore and Srikakulam districts respectively.

We observed the following shortfalls in providing dietary services in CHCs and AHs of test checked districts:

Anantapur district

- Out of 16 CHCs (including Chest disease hospital⁶³) CHC Penukonda only was providing diet to inpatients during 2017-2022.
- Out of four AHs, only in two AHs *i.e.* Madakasira and Kadiri, diet was being provided to inpatients.

⁵⁷ Dengue Rapid, Dengue (Igm ELISA), Dengue (NS1 ELISA), Chikungunya (ELISA IGM), WIDAL, Malaria (Slide method), Malaria (Rapid) being HbsAg (Rapid), HCV (Rapid), VDRL, HbsAg (Viral load), HCV (Viral load), ASO Titre, CRP, R A Factor, MTB-RTPCR

⁵⁸ Bio-safety cabinet Class I, Deep Freezer (-20°C), Centrifuge, Micro pipette set (0.2 - 10 n1, 20 -200 w1, 100-1000p 1)

⁵⁹ VITEK and BACT alert 3D machine, Elisa Reader, washer, Binocular Microscopes, Bio-safety Cabinet, Incubators and Hot air oven, Measuring scales.

⁶⁰ Autoclave sterilisation, Autoclave (Decontamination) Vertical, Hot air oven, Refrigerator (285 liters), Weigh scale & mixer, Computer scanner & Printer

⁶¹ vide GO MS No. 325 dated 01 November 2011

⁶² under the Chairmanship of the Commissioner of Health and Family Welfare with the Director of Medical Education, Commissioner, A.P. Vaidya Vidhana Parishad, Commissioner of AYUSH, and Director of Public Health & Family Welfare, as members and Director of Medical Education as the Member-Secretary

⁶³ In Chest Disease Hospital, Anantapur, diet had not been provided to inpatients since 2011.

SPSR Nellore district

- In all 14 CHCs, diet was not provided during 2017 to 2022.
- The diet contract expired for AH Kavali in March 2021 and for AH Gudur in December 2021.

Srikakulam district

- Out of 13 CHCs, diet was not provided in nine⁶⁴ CHCs during 2017-2022. The validity of diet contract for four⁶⁵ CHCs expired during the period from August 2020 to April 2022.
- Out of four AHs⁶⁶ available in the district, diet was not being provided in AH Seethampeta. The validity of the diet contract expired for AH Narasannapeta in August 2021.

Test checked Healthcare Facilities (HCFs)

- Diet was not being provided in three⁶⁷ out of nine test checked HCFs⁶⁸ under APVVP.
- Diet/food supplied to the inpatients was not patient-specific such as diabetic, semi-solid and liquid in six⁶⁹ Secondary HCFs.
- In DH Tekkali, the validity of the diet contract expired in November 2021.

Certification of Food Safety and Standards Authority of India (FSSAI)

Food Safety and Standards Act, 2006, Section 31 stipulates that no person shall commence or carry on any food business⁷⁰ except under a licence.

The food supply contractors in six⁷¹ test checked HCFs did not obtain Food Safety and Standards Authority of India (FSSAI) registration certificate or license under Food Safety and Standard Act, 2006.

Government replied (August 2023) that Government issued orders⁷² for enhancement of diet charges from ₹40 to ₹80 to provide the quality diet to the various categories of patients. Government also stated that directions were issued to all District Co-ordinator of Hospital Services (DCHSs) to select the diet suppliers from local available voluntary groups/ Zilla Samkyas, NGOs and other local bodies duly passing the resolutions in their Hospital Development Societies (HDSs) and to ratify the same by the concerned Chairman of District Management Committee.

⁶⁴ CHCs Kotabommali, Ranasthalam, Kotturu, Kaviti, Amadalavalasa, Palasa, Haripuram, Icchapuram and Baruva

⁶⁵ CHCs Sompeta, Ponduru, Budithi and Pathapatnam

⁶⁶ AHs Rajam, Palakonda, Narasannapeta and Seethampeta

⁶⁷ AH Seethampeta, CHC Naidupeta and CHC Kotha Cheruvu

⁶⁸ CHC (Sompeta, Naidupeta, Kothacheruvu), AH (Kadiri, Kavali, Seethampeta), DH (Atmakur, Hindupur, Tekkali)

⁶⁹ CHC Sompeta, AH Kadiri, AH Kavali, DH Atmakur, DH Hindupur, DH Tekkali

⁷⁰ Food safety and standards Act, 2006 (Act no. 34 of 2006) defines Food Business as any undertaking, whether for profit or not and whether public or private, carrying out any of the activities related to any stage of manufacture, processing, packaging, storage, transportation, distribution of food, import and includes food services, catering services, sale of food or food ingredients

⁷¹ CHC Sompeta, AH Kadiri, AH Kavali, DH Atmakur, DH Hindupur and DH Tekkali

⁷² G.O.Ms.No.325, HM&FW(M1) Dept., Dt: 02.12.2022.

3.3.4.8 Availability of linen in the District Hospitals

IPHS prescribes 21 types of linen⁷³ that are required for patient care services, for hospitals with 101 beds and above. An efficient and effective linen and laundry services can enhance patient experience and reduce the risk of cross contamination.

In 12 DHs, we compared all DHs with minimum requirement of different types of linen and observed shortages in bedspreads, doctor's overcoats, paediatric mattresses, hospital worker OT coats, mortuary sheets *etc.* There were shortages of linen ranged from 1 to 16 items as shown in *Appendix 3.5*. Further, one dhobi was engaged on out-sourcing basis for laundry services in each of the test checked DHs⁷⁴.

Thus, as all the DHs did not provide all prescribed types of linen for patients, doctors and staff in the hospitals as required by IPHS, and the risk of cross contamination cannot be avoided.

3.3.4.9 Blood bank/storage Units in secondary health care facilities

As per the Drugs and Cosmetics Rules, 1945, Under Section 122, a license from the Drug Control Administration is required for the operation of the Blood Bank in the State.

Application for the grant and/or renewal of license for the operation of a Blood Bank/processing of human blood for components/manufacture of blood products⁷⁵, shall be made to the Licensing Authority appointed under Part VII in 1 (Form 27- C) or 5 (Form 27-E or Form 27-F), as the case may be, and shall be accompanied by license fee and inspection fee.

We observed that CHC Kothacheruvu and AH Seethampeta did not have blood storage units. The validity of license for operating Blood Bank/Blood Storage Centre in the test checked HCFs is shown in *Table 3.20*.

Table 3.20: Validity of license for Blood Banks/ Blood Storage Centres in CHCs/AHs

Name of the facility	License valid up to	Category of the Unit	Remarks
AH, Kavali	03/07/2021	Blood Bank	Functioning without license
AH, Kadiri	Expired on 30/04/2022	Blood Bank	Functioning without license
CHC, Sompeta	Expired on 18/02/2022	Storage Unit	Not functioning

Source: Hospital records

⁷³ Abdominal sheets for OT; Bed sheets; Bedspreads; Blankets (Red and Blue); Doctor's overcoats; Draw sheets; Hospital workers' OT coats; Leggings; Mackintosh sheets; Mats (nylon); Mattresses (Foam) for adults; Mortuary sheets; Over-shoe pairs; Paediatric mattresses; Patient's coats (Female); Patient's Pyjamas and Shirts (Male); towels; Perennial sheets for OT; Pillows; Pillow covers; Apron for cook; Curtain cloth for windows and doors; Uniform/Apron and Table cloth.

⁷⁴ DH Tekkali, DH Atmakur and DH Hindupur

⁷⁵ Collection, processing, testing, storage, banking and release of umbilical cord blood stem cells

Status in DHs

Blood banks/blood storage units/blood centres were available in 12 DHs. Out of these, the validity of license was expired in six⁷⁶ DHs and they were functioning without authorisation of license for operation of Blood Bank/Blood Storage Centre in HCFs as shown in **Table 3.21**.

**Table 3.21: Validity of license expired for Blood Bank/
Blood Storage Centre in DHs**

SI No	Name of District Hospital (DH)	Category of the Unit	License valid up to
1	Tenali	Blood bank	05/06/2021
2	Markapur	Blood bank	30/04/2022
3	Chittoor	Blood bank	31/12/2022
4	Proddatur	Blood bank	31/12/2022
5	Hindupur	Blood Bank	30/04/2022
6	Tekkali	Blood Storage Centre	31/01/2022

Source: Information furnished by DHs

Further, we observed that:

- Blood bank Technician was available in all DHs except at Blood Storage Centre in DH Atmakur.
- In AH Seethampeta, though equipment worth ₹5.50 lakh was received during December 2021 to February 2022 for Blood Storage Unit, equipment was not installed due to non-completion of civil works as of June 2022.
- In CHC Kothacheruvu, equipment was not installed as of August 2022 though equipment worth ₹4.87 lakh was received in December 2021 and one Binocular Microscope worth ₹17,000 was received in April 2022.

Thus, BSUs in AH Seethampeta and CHC Kothacheruvu were non-functional as of June 2022 and August 2022 respectively though the equipment was available. Due to non-availability/ non-functioning of blood storage units in the above two CHCs⁷⁷ and one AH, patients requiring blood administration were either to be referred to higher facilities or arranged the blood units on their own.

Government accepted the observation and replied (August 2023) that license was renewed for DH Tekkali (up to January 2025), DH Tenali (up to June 2026) and DH Hindupur (December 2027) and the renewal process of DH Markapur and DH Proddatur is under process.

3.3.4.10 Ambulance Services in DHs

As per IPHS 2012, round the clock ambulance services with basic life support shall be available in the DHs.

⁷⁶ Tenali, Markapur, Chittoor, Proddatur, Hindupur, Tekkali

⁷⁷ CHCs Sompeta and Kothacheruvu, AH Seethampeta

Dedicated ambulance service was available only in five out of twelve DHs viz., Anakapalli, Chittoor, Paderu, Proddatur and Tanuku.

Medical Superintendents of DHs replied that Dial-108 linked services were available for transporting the patients. This is discussed in this Chapter at **Para 3.5 Ambulance Services**.

3.3.4.11 Post-mortem & Mortuary Services in DHs

As per IPHS 2012, Post-mortem room shall have stainless steel autopsy table with sink, a sink with running water for specimen washing and cleaning and cupboard for keeping instruments. A separate room for body storage shall be provided with at least two deep freezers for preserving the body. There shall be a waiting area for relatives and a space for religious rites.

As per IPHS 2012, Post-mortem equipment shall be available in DH. Mortuary facility was available in seven⁷⁸ DHs out of 12 DHs.

We observed that;

- Mortuary table was not available in Paderu, Parvatipuram, Tenali, Markapur, Madanapalle, Proddatur, Atmakur and Hindupur.
- Sink with running water facility was not available in DHs Hindupur and Tekkali.
- Spotlight was not available in DHs Paderu, Parvatipuram, Anakapalli, Tenali, Madanapalle, Proddatur, Tekkali, Atmakur and Hindupur.
- Weighing machine (organs) was not available in DHs Paderu, Parvatipuram, Anakapalli, Markapur, Madanapalle, Proddatur, Atmakur and Hindupur.
- Deep Freezers for preserving bodies were not available in DHs Markapur and Hindupur, while they were non-functional in DHs Parvatipuram, Madanapalle and Tekkali.
- Waiting area for relatives and a space for religious rites were not available in DHs Anakapalli, Madanapalle, Hindupur and Tekkali.

Thus, mortuary services in the test-checked DHs lacked minimum infrastructure.

Government accepted the audit observation (August 2023).

3.3.4.12 Firefighting Services

As per the National Building Code 2016, all the buildings shall obtain No Objection Certificate (NOC) from Fire safety department.

We observed during joint Physical verification:

⁷⁸ Tanuku, Chittoor, Anakapalle, Paderu, Atmakur, Tenali and Proddatur

- DH Tekkali and CHC Sompeta did not obtain NOC from the Fire Safety Department. Smoke detectors were also not available in eight HCFs⁷⁹.
- Fire hydrant was not available in CHC, Sompeta.
- Evacuation plans in the event of a fire were not displayed in five⁸⁰ HCFs.
- Fire extinguishers were not installed at power back up area (Diesel Generator Room) in four⁸¹ HCFs.

Government accepted the observation and replied (August 2023) that the process of HCFs seeking Fire NOC had commenced.

3.4 Availability of services in Tertiary Healthcare

Every Medical College & Teaching Hospital should have 23 departments *i.e.*, eight non-clinical and 15 Clinical Departments respectively, as detailed in **Table 3.22**.

Table 3.22: Details of Non-clinical & clinical Departments

Medical College Departments (Non-Clinical)	Teaching Hospital Departments (Clinical)
1. Human Anatomy	1. General Medicine
2. Human Physiology	2. Paediatrics
3. Biochemistry	3. Psychiatry
4. Pathology (including blood)	4. Dermatology, Venerology & Leprosy
5. Micro-Biology	5. TB&RD
6. Pharmacology	6. General Surgery
7. Forensic Medicine	7. Orthopaedics
8. Community Medicine	8. Radio-Diagnosis
	9. Radiotherapy (Optional)
	10. Oto-rhinolaryngology
	11. Ophthalmology
	12. Obstetrics & Gynaecology
	13. Anaesthesiology
	14. Physical Medicine & Rehabilitation (optional)
	15. Dentistry

Source: MSRR, 1999

In addition to the above departments, the Medical Colleges having Postgraduate degree/diploma courses in various specialties may have other departments to meet the teaching needs of the college and healthcare needs of the public, as per MSRR, 1999.

3.4.1 Laboratory Services in Tertiary Healthcare

The MSRR, 1999 prescribed the availability of 20 laboratory services in eight departments at a Medical College. The laboratory services available in the test-checked Government Medical Colleges are given in **Table 3.23**.

⁷⁹ CHC Sompeta, CHC Naidupeta, CHC Kothacheruvu, AH Seethampeta, AH Kavali, AH Kadiri, DH Atmakur and DH Hindupur

⁸⁰ CHC Sompeta, AH Kavali, CHC Naidupeta and CHC Kothacheruvu, DH Tekkali

⁸¹ CHC Sompeta, AH Kavali, CHC Naidupeta and CHC Kothacheruvu

Table 3.23: Shortfall in Laboratory Services in Non-clinical Departments of test checked GMCs

S.No	Name of Dept	Name of the Lab services	Nellore	Anantapur	Srikakulam
1	Human Anatomy	Research Lab	Yes	Yes	Not furnished
2	Microbiology	Tuberculosis Lab	Yes	No	Yes
3	Pharmacology	Research Lab	Yes	Yes	Not furnished
4	Forensic Medicine	Histopathology Lab	No	Not furnished	Yes
		Serology Lab	No	Not furnished	Yes
		Anthropology Lab	No	Not furnished	Yes
		Toxicology lab	No	Not furnished	Yes

Source: Medical College records

We observed that: -

- Lab services such as Histopathology, Serology, Anthropology and Toxicology were not available in Forensic Medicine Department at GMC, Nellore.
- Tuberculosis Lab was not available in Microbiology Department at GMC, Anantapur.

Government accepted (August 2023) the audit observation and promised future compliance.

3.4.2 Special Services in Tertiary Healthcare

Special services include services provided for burns injuries, trauma care and all the services provided by the Super Specialty hospital.

3.4.2.1 Burns & Injuries Ward

The main purpose of Burns unit in a hospital is to provide comprehensive burn care and minimise the incidence of infections among burn patients.

National Programme for Prevention and Management of Burn Injuries is an initiative by Director General of Health Services, Ministry of Health and Family Welfare, Government of India, to strengthen preventive, curative and rehabilitative services for burn injuries under Central Sponsored Scheme at 60:40 ratio between Centre and State Governments.

The Government of Andhra Pradesh accorded⁸² administrative sanction (May 2018) for ₹39.47 crore for burn units in six medical colleges,⁸³ with ₹6.58 crore, for each unit. Out of ₹6.58 crore provided, ₹2.18 crore was for construction purpose and ₹1.29 crore for equipment *inter-alia*. As a part of the first installment, Central Government released an amount of ₹2.08 crore as its 60 *per cent* share and GoAP released an amount of ₹0.83 crore as 40 *per cent* share. The work was awarded (18 February 2019) by APMSIDC and the site was handed over to the contractor⁸⁴ on 28 June 2019.

APMSIDC stated that the construction of Burns ward was incomplete, and the contractor initiated the work and stopped the work (February 2022) after receiving payment of ₹45.07 lakh on 21 February 2022. The building was incomplete as shown in **Figure 3.3** above and the balance funds provided for this were available at APMSIDC.



Figure 3.3: Abandoned work of burns ward at GGH, Anantapur (September 2022)

Government accepted the observation and replied (August 2023) that action would be taken to complete the Burns and Injuries ward in coordination with APMSIDC.

3.4.2.2 Trauma care Centre

Keeping in view the increasing number of road accidents and to provide immediate medical treatment to affected/injured people, Government of India decided to upgrade and strengthen existing hospitals and provide rapid mode of transportation of trauma victim under supervision to reach the hospital early supported by state of the art communication, rather than simply focusing on creation of new infrastructure for trauma care in a piece meal manner and bring down the death rate from road accidents to 10 *per cent* by developing a Pan-India trauma care network in which no trauma victim has to be transported more than 50 kilometres and a designated Trauma Care Centre would be available at every 100 Km.

We observed that GoI released⁸⁵ ₹80 lakh to GGH, Anantapur for establishment of a Trauma Care Centre, out of which ₹60 lakh was spent for construction of Trauma Care Centre. After construction of the Trauma Care Centre, the building was allotted (August 2019) to the Ophthalmology Department. The specific purpose to establish Trauma

⁸² Vide G O R T No. 158 dated 03/05/2018

⁸³ KMC Kurnool, GMC Guntur, SVMC tirupathi, ACSR GMC Nellore, GMC Anantapur, AMC Visakhapatnam

⁸⁴ on tender basis with a tender premium of 0.45 *per cent* less over the ECV of ₹. 1,69,94,220 (SSR 2081-19). The agreement No. 97(B)/APMSIDC/2018-19 was concluded on 18.02.2019 with a stipulated period of 12 months for its completion

⁸⁵ vide Rc No.2-28016/110/2008-H dated 03/02/2010

Care Centre at GGH was defeated as the same was given to Ophthalmology Department.

GoI had sanctioned ₹5 crore to GGH, Anantapur and ₹2 crore to GMC Srikakulam (March 2018) for procurement of equipment. GMC Srikakulam did not utilise the ₹2 crore sanctioned in March 2018.

3.4.2.3 Nutrition Rehabilitation Centre

Nutrition Rehabilitation Centre (NRC)⁸⁶ is a health facility where children with Severe Acute Malnutrition (SAM) are admitted and managed. NRC at a medical college hospital should have 20 beds. The unit should be a distinct area within the health facility and should be in proximity to the paediatric ward/inpatient facility. The approximate covered area of the NRC should be about 150 square feet per bed, plus 30 *per cent* for ancillary area. A 20 bedded NRC should have a covered area of about 3,900 square feet, which will include the patient area, play and counselling area, nursing station, kitchen, storage space, two bathrooms and two toilets.

The plinth area of NRC facility with 20 beds in all three test-checked Government General Hospitals was less as indicated in *Table 3.24*.

Table 3.24: Statement showing plinth area requirements and availability at NRCs of test checked Government General Hospitals

Name of the Teaching Hospital	Plinth area required for 20 beds in Sq.ft	Plinth area available for 20 beds in Sq.ft	Shortfall in Sq.ft.
GGH, Anantapur	3900 (150x20 + 3000x30%)	1012.5	2887.5
GGH, Nellore	3900	2068	1832
GGH, Srikakulam	3900	1527.4	2372.6

Source: Hospital records

We observed that

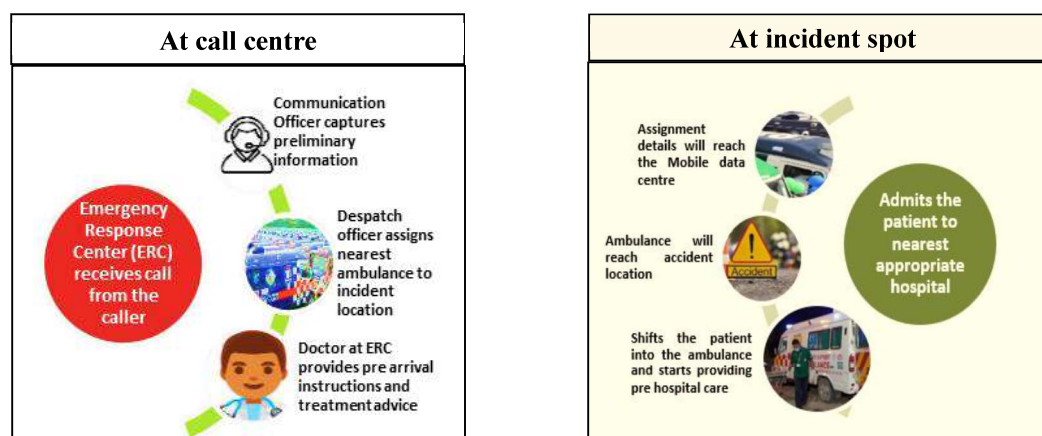
- **Play & Counselling area** with toys, audio-visual equipment like TV, DVD player and –EC material - Counselling area was not available in GGHs Anantapur and Srikakulam. Play area was not available in all three test checked GGHs.
- **Kitchen and food storage** area attached to ward, or partitioned in the ward, with enough space for cooking, feeding and demonstration were not available at GGH, Anantapur. Kitchen area was not adequately ventilated at GGH, Anantapur.
- **Attached toilet and bathroom facility** for mothers and children along with two separate hand washing areas were not available in all three test checked GGHs.
- **Mosquito and fly screen:** Windows were not covered with mosquito and covers.

3.5 Ambulance Services

Dial 108 is a 24X7 emergency response system, primarily designed to attend to patients of critical care, trauma and accident victims *etc*. It is a free service for any emergency involving people. Toll free helpline numbers are accessible to both landline and mobile

⁸⁶ Operational Guidelines on Facility Based Management of Children with Severe Acute Malnutrition (2011)

phones. Implementation of National Ambulance Service (NAS) guidelines has been made mandatory for all the ambulances whose operational cost is supported under NHM.



District wise number of vehicles mounted is given in *Table 3.25*.

Table 3.25: District wise number of Ambulances available in Andhra Pradesh

S. No.	Name of the district	Basic Life Support (BLS) Ambulances available	Advanced Life support (ALS) Ambulances available	Neonatal ambulances available	Total availability
1	Srikakulam	22	10	1	33
2	Vizianagaram	35	9	3	47
3	Visakhapatnam	46	15	3	64
4	East Godavari	49	16	2	67
5	West Godavari	36	14	2	52
6	Krishna	39	16	1	56
7	Guntur	58	22	2	82
8	Prakasam	33	11	1	45
9	SPSR Nellore	31	10	2	43
10	Chittoor	60	17	2	79
11	YSR	51	18	3	72
12	Anantapur	52	16	2	70
13	Kurnool	43	13	2	58
Total		555	187	26	768

Source: Information furnished by the 108 cell

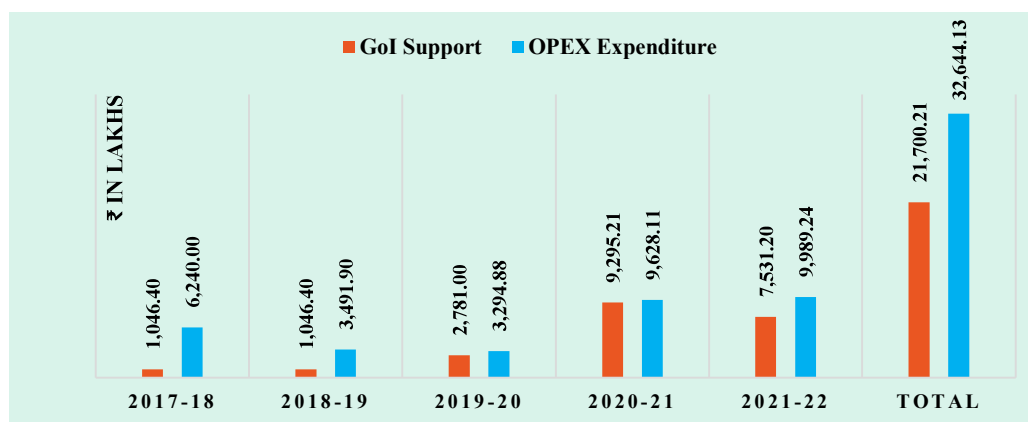
3.5.1 Funds for operation of Ambulances

GoI is supporting under NHM for 105 ALS ambulances at ₹1.40 lakh and 523 BLS ambulances at ₹1.20 lakh per month per ambulance towards operational cost along with maintenance cost of ₹64,980/- per feeder ambulance per month.

As per budget figures of the GoAP, ₹326.44 crore were spent towards operational expenditure (OPEX) on Dial-108 service during the years 2017-22. GoI provided an amount of ₹217 crore towards OPEX support through NHM, which is 66.47 per cent

of the expenditure incurred by GoAP. Expenditure on operation of Ambulances is depicted in **Chart 3.3**.

Chart 3.3: Operational expenditure on 108 services



Further, we observed that dedicated ambulance was not available in any of the HCFs in plain areas. However, the service of 108 was being utilised by these HCFs.

3.5.2 Coverage in hilly or tribal areas

There are 159 PHCs (RHS 2021-22) in tribal areas of Andhra Pradesh. However, there are 84 ambulances available and operated by ITDAs, along with 122 feeder ambulances (two-wheeler).

During physical verification of Area Hospital, Seethampeta, a tribal area, we noticed that three BLS ambulances supplied by the ITDA, Seethampeta were available and the ambulances were without air flow meters to provide oxygen to patients though equipped with oxygen cylinders.

3.5.3 Response time

Minimum response time of ambulance for urban, rural and tribal areas as per request for proposal (RFP) while inviting tenders for engagement of Ambulance operator is 15 min, 20 min and 30 min respectively. We observed that the average response time of ambulance in urban areas is 3.23 minutes more than stipulated.

Though penalties are being imposed for not maintaining the response time as per RFP, longer response time that may lead to loss of lives is a matter of concern.

3.5.4 Free referral transport for pregnant women

Under NHM, it is expected that each and every pregnant woman gets timely access to health care system for the required quality of antenatal, intra-natal, post-natal care and immunisation services free of cost.

For reducing out of pocket expenses, follow up and constant supervision over pregnant woman by ANMs/ASHA is required to maintain adequacy of services.

Reduction of Maternal Mortality Ratio and Infant Mortality Rates is a high priority area for the Government. Providing referral transport to pregnant women is one of the

interventions for reduction of MMR. To ensure provision of drop back service to every pregnant woman from hospital to home, a dedicated fleet of 279 vehicles were positioned by GoAP.

Talli-Bidda Express is a scheme that provides transportation service (from hospital to home through dedicated vehicles) to new mothers who deliver at Government Hospitals. This service is coordinated by 102 call centre which operates round the clock.

GoI is providing funds for this free referral transport for pregnant women at ₹250 from home to health facility and ₹250 for drop back facility. Total institutional deliveries and the number of pregnant women who availed this facility along with the approvals made by GoI are detailed in **Table 3.26**.

Table 3.26: Statement showing Institutional deliveries and drop back services availed by pregnant women

Year	Total Institutional deliveries	Pregnant Woman who availed the free transport facility			GoI provision (No. of PWs)	Less availed over provision	Excess claimed at ₹500 (in ₹ lakh)
		Home to facility	Dropback facility	Total availed			
2017-18	7,37,140	86,874	1,17,758	2,04,632	5,41,900	3,37,268	16,86.34
2018-19	7,42,638	91,485	2,16,853	3,08,338	5,41,900	2,33,562	11,67.81
2019-20	7,32,248	1,74,709	2,26,528	4,01,237	5,41,900	1,40,663	7,03.32
2020-21	7,09,539	1,37,363	2,23,432	3,60,795	5,41,900	1,81,105	9,05.53
2021-22	7,51,447	2,12,990	2,32,691	4,45,681	5,41,900	96,219	4,81.10
Total	36,73,012	7,03,421	10,17,262	17,20,683	27,09,500	9,88,817	49,44.09

Source: Information furnished by CFW and RoP data

From the above table, it can be seen that the proposals made under this head in the PIPs were not based on the actual trends of previous years. Further, the utilisation of these services by the pregnant women is partial. Against 36.73 lakh institutional deliveries, drop back service was provided to only 10.17 lakh women. Thus, the drop back service was not extended in 26.56 lakh delivery cases.

Ambulance services were available in three test checked Hospitals as detailed in **Table 3.27**.

Table 3.27: Details of Ambulances in test checked GGHs

S.No.	Ambulances details	Anantapur	Srikakulam	SPSR Nellore
1	No. of ambulances available	8	6	8
2	Working condition	2	3	7
3	Not in working condition	6	3	1

Source: Hospital Records



Figure 3.4: Equipment not available in ambulance in GGH, Nellore (July 2022)



Figure 3.5: Equipment not available in ambulance in GGH, Anantapur (Sept 2022)

Physical verification of the Ambulances revealed that:

- NABH prescribes certain essential life support equipment such as stretcher, portable oxygen, suction devices, first aid kit, AMBU bags, transport ventilators, suction unit, Infusion Syringe Pumps, Nebuliser and Oxygen Supply Units. These were not available in the ambulances in GGHs, Anantapur and Nellore.



Figure 3.6: Ambulance without essential equipment, GGH, Anantapur (inside pic) (September 2022)



Figure 3.7: Ambulance without essential equipment, GGH, Anantapur (outside pic) (September 2022)

- Call Received Register containing details of calls received and attended to were not available in the test checked hospitals.

The DME replied that the requirement of life saving equipment would be intimated to Government for budget provision and would be procured through APMSIDC.

Government replied (August 2023) that 108 ambulance services were being used for the purpose of interfacility transfers.

Reply is not tenable as 108 services are not dedicated to Government General Hospitals. GGHs require specialised and continuous services to be provided to the patients in transits of interfacility. Due to lack of equipment in 108 ambulances, emergency medical care and life support system to sustain the stability of the patient in transit to and from the hospital cannot be ensured.

3.6 Miscellaneous services

Joint inspections of three GGHs revealed shortfalls in various other services, as listed below.

3.6.1 Firefighting Services

As per the National Building Code 2016, all the buildings shall obtain fire NOC from Fire safety department.

We observed during joint Physical verification.

- All three-test checked GGHs did not obtain No objection certificate (NOC) from fire safety department.
- Smoke detectors were not in place and fire extinguishers were not refilled on timely basis in GGH, Anantapur.
- Underground backup water for fire was not available in GGH, Anantapur.

Fire extinguishers were not installed at power back (DG room) up area in GGH, Anantapur.

Government accepted (August 2023) the audit observation and stated that NOC was obtained for GGH Srikakulam and applied for NOC in the remaining two Hospitals.

3.6.2 Diet Services

Food Safety and Standards Act, 2006, Section 31 stipulates that no person shall commence or carry on any food business⁸⁷ except under a licence.

The food supply contractors in all three-test checked GGHs did not obtain Food Safety and Standards Authority of India (FSSAI) registration certificate or license under Food Safety and Standard Act, 2006.

Government accepted (August 2023) the audit observation and stated that instructions would be issued to all the Hospitals for obtaining FSSAI registration certificate.

3.7 Recommendations

- ***Government should provide amenities, equipment, and manpower to the Health Care Facilities as per Indian Public Health Standards (IPHS) for delivery of quality services for curative care.***
- ***Government should provide full range of tests/investigations in the laboratories along with adequate equipment as per Indian Public Health Standards in all Secondary Healthcare Facilities.***

⁸⁷ Food safety and standards Act, 2006 (Act no. 34 of 2006) defines Food Business as any undertaking, whether for profit or not and whether public or private, carrying out any of the activities related to any stage of manufacture, processing, packaging, storage, transportation, distribution of food, import and includes food services, catering services, sale of food or food ingredients.