

HEALTH AND FAMILY WELFARE DEPARTMENT

2.2 Subject Specific Compliance Audit on “Public Health Infrastructure and Management of Primary Health Services”

2.2.1 Introduction

The Health and Family Welfare Department (Department) is responsible for maintaining and developing the healthcare system in the State and guiding and supervising the Health and Family Welfare programmes in the State. The services offered by the Department are preventive and promotive healthcare services, routine curative and rehabilitation services, *etc.* The vast network of Health Sub-Centres (HSC⁹s), Primary Health Centres (PHC¹⁰s) and Urban Primary Health Centres (UPHCs), and Community Health Centres (CHC¹¹s) form the primary tier of public healthcare delivery system for rural and urban population respectively. District Hospitals (DH¹²s) serve as the secondary tier for rural and urban population while tertiary¹³ healthcare involves providing advanced and super-speciality services to be provided by medical institutions in urban areas.

A Performance Audit (PA) was conducted to cover the areas of basic health infrastructure facilities in the State focused on selected District Hospitals which mainly caters to secondary health care services. The findings were reported in the Comptroller and Auditor General’s Performance Audit Report on “Select District Hospitals in Tripura” for the year ended 31 March 2019.

The present Subject Specific Compliance Audit (SSCA) covers the primary health care services which provide health facilities at village and block levels. The SSCA also provide a holistic view of improvement of necessary infrastructure, created for meeting emergencies related issues and service delivery by the sampled health institutions for the period 2016-17 to 2021-22.

2.2.2 Overview of public healthcare facilities in Tripura

Tripura is the third smallest State in India which has a population of approximately 41.85 lakh during 2021-22. To cater to the healthcare services of its citizens at different levels, the State has six¹⁴ tertiary level health care facilities in the State capital, six District Hospitals, 14 Sub Divisional Hospitals (SDHs), 21 Community Health Centres (CHCs), eight Urban Primary Health Centres¹⁵ (UPHCs), 110 Primary

⁹ HSCs are peripheral healthcare centres which serve a population of 5,000 in plain areas and 3,000 in hilly areas.

¹⁰ PHCs form the cornerstone of healthcare in rural areas which serve a population of 30,000 in plain areas and 20,000 in hilly areas.

¹¹ CHCs are referral centres and serve a population of 1,20,000 in plain areas and 80,000 in hilly areas.

¹² DHs are equipped with advanced equipment and diagnostic services and intensive care facilities.

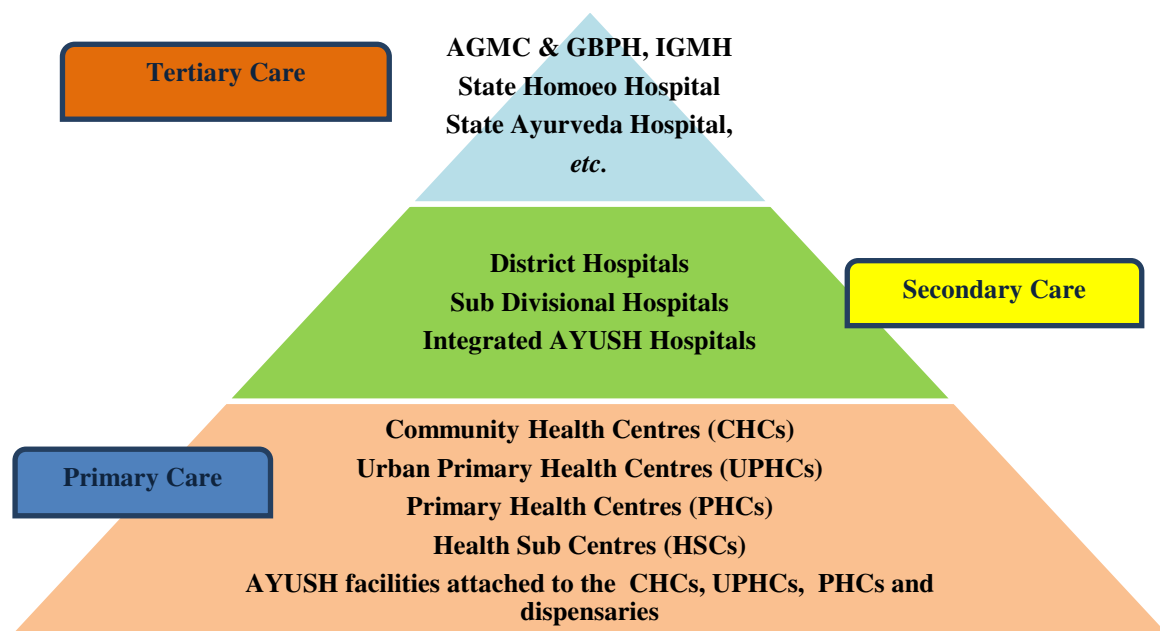
¹³ Tertiary healthcare is provided by medical colleges and advanced medical research institutes.

¹⁴ Agartala Government Medical College and Govinda Ballabh Pant Hospital (AGMC & GBPH), Indira Gandhi Memorial Hospital (IGMH), Atal Behari Vajpayee Regional Cancer Centre, Netaji Subhas State Homoeopath Hospital, State Ayurvedic Hospital and Modern Psychiatric Hospital.

¹⁵ All UPHCs are non-bedded PHC.

Health Centres¹⁶ (PHCs) and 999 Health Sub-Centres (HSCs). In addition, there are 39 Ayurvedic Dispensaries and 73 Homoeopathic Dispensaries for providing AYUSH¹⁷ facilities to the people of the State. The structure of public healthcare facilities in the State is shown in **Chart 2.2.1**.

Chart 2.2.1: Details of Health Facilities in the State



Source: Health and Family Welfare Department, Government of Tripura

The health facilities are under the administrative control of the Health and Family Welfare Department, Government of Tripura (GoT).

The Principal Secretary, Health and Family Welfare Department (H&FWD) is the Administrative Head of the Department who is assisted by the four Directors at the Directorate of Health Service, Directorate of Family Welfare and Preventive Medicines, National Health Mission Directorate and the Directorate of Medical Education. The State Hospitals (SHs), the District Hospitals (DHs) and the Sub Divisional Hospitals (SDHs) function directly under the Directorate of Health Services. The Community Health Centres (CHCs), the Primary Health Centres (PHCs) and the Health Sub Centres (HSCs) function under the Directorate of Family Welfare and Preventive Medicines under the control of the Chief Medical Officers (CMOs) who are responsible for supervision of medical services provided by these health facilities in the eight districts of the State. The State Health and Family Welfare Society (SHFWS) and the District Health and Family Welfare Society work under the National Health Mission Directorate to promote health services in the State too.

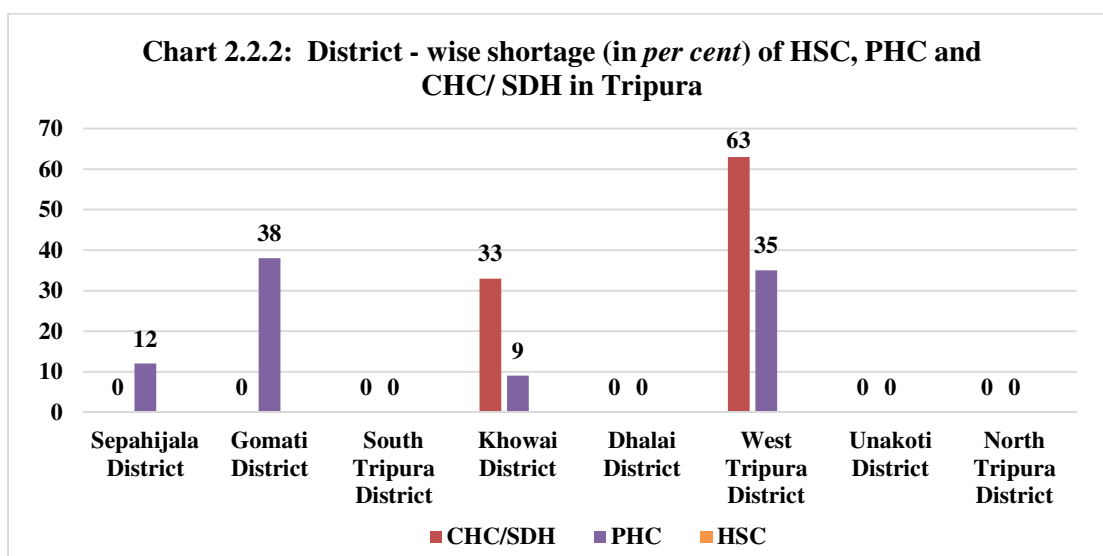
¹⁶ Ninety-two PHCs are bedded PHC and 18 PHCs are non-bedded.

¹⁷ AYUSH is an acronym for Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy and are the Indian systems of medical treatment.

2.2.2.1 Public Health Care facilities at the District and Primary level

The State has six out of eight districts with DHs and two districts, viz. the West Tripura and Sepahijala Districts, had no DHs. The requirement of DH in West Tripura was compensated by availability of two State level hospitals in the District. However, Sepahijala District lacked the secondary health care facilities.

As regards availability of CHCs, PHCs and the HSCs in the Districts, significant shortages of CHCs were noticed in West Tripura (63 *per cent*) and Khowai (33 *per cent*). Further, shortage of PHCs was also noticed in Gomati, West Tripura and Sepahijala Districts (38, 35 and 12 *per cent* respectively). No shortage of HSCs was noticed in the State. Detailed position of CHC, PHC and HSC is given in the **Appendix 2.2.1** and the status of overall district wise shortage is depicted in **Chart 2.2.2**.



2.2.2.2 Service availability in the DH, CHCs and the PHCs in the State

Service availability in the DHs, CHCs and PHCs were grouped into essential services and desirable services as per the IPHS norms. All the DHs in the State lacked essential services like (i) accident and other emergencies, (ii) Critical care/ ICU¹⁸, (iii) Geriatric Service (10 bedded ward), (iv) Endoscopy and (v) Physiotherapy. Further, desirable services¹⁹ and support service²⁰ were not available in any of the DHs in the State.

Speciality services in General Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Ophthalmology and Emergency Services were essential services for Community Health Centres (CHC) as per the IPHS norms. However, except the CHC, Kherengbar which provided Obstetrics and Gynaecology services twice in a week, no other CHCs in the State had the above speciality services as per the norms.

¹⁸ Available only in the DH, Gomati.

¹⁹ Cardiology, gastro enterology, nephrology, urology, neurology, oncology, dermatology, and venerology, radiotherapy and diagnostic services like Magnetic Resonance Imaging (MRI), Electroencephalogram (EEG), Angiography, Echocardiography.

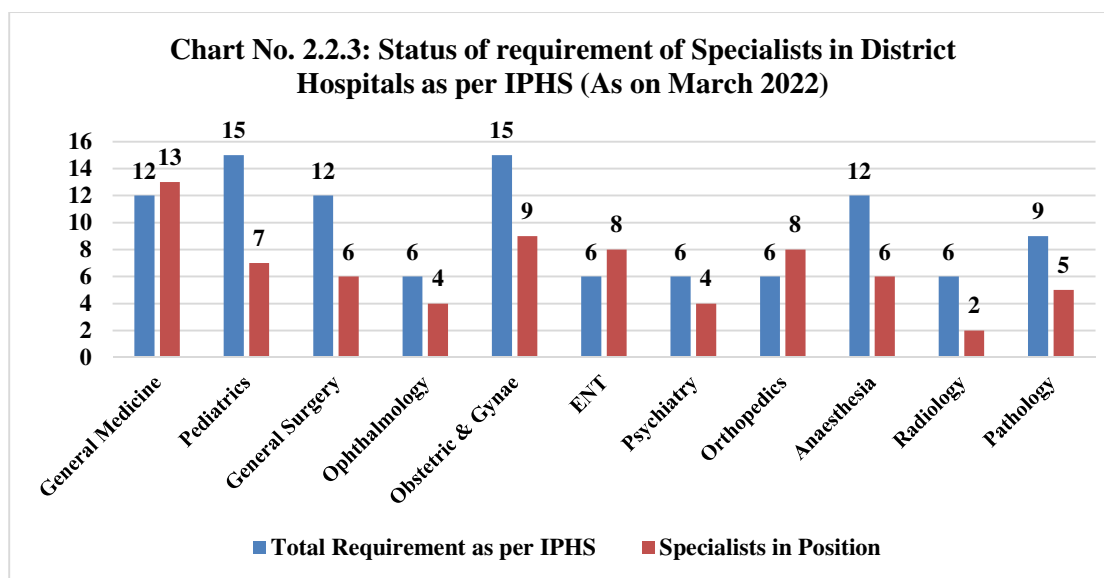
²⁰ 24x7 ambulance with advance life support system.

The PHCs in the State were providing services as per the IPHS norms but lacked the facilities for Essential New-born Care (ENBC).

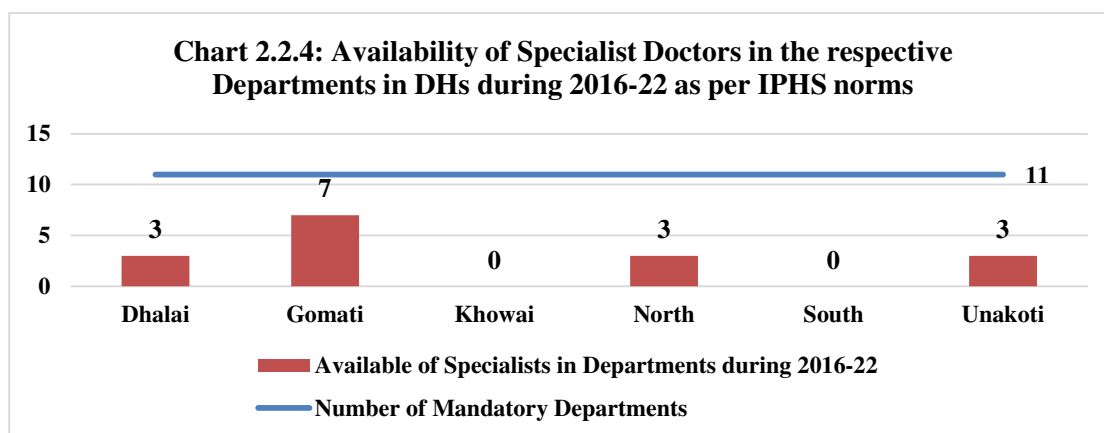
2.2.2.3 Availability of Doctors, Nurses and Paramedics in the DHs, CHCs and PHCs in the State

The IPHS provides the manpower requirement for the DHs, CHCs and PHCs as per the prescribed service delivery norms for each health facilities.

In case of DHs, major shortages existed in the cadre of Specialist Doctors which ranged from 29 to 54 *per cent*, General Duty Medical Officers (shortage ranged 44 to 60 *per cent*), Staff Nurses, (shortage ranged from 27 to 31 *per cent*) during 2016-17 to 2021-22. The overall status of requirements and availability in the District Hospitals is depicted **Chart 2.2.3** with detailed manpower position is given in the **Appendix 2.2.2**.

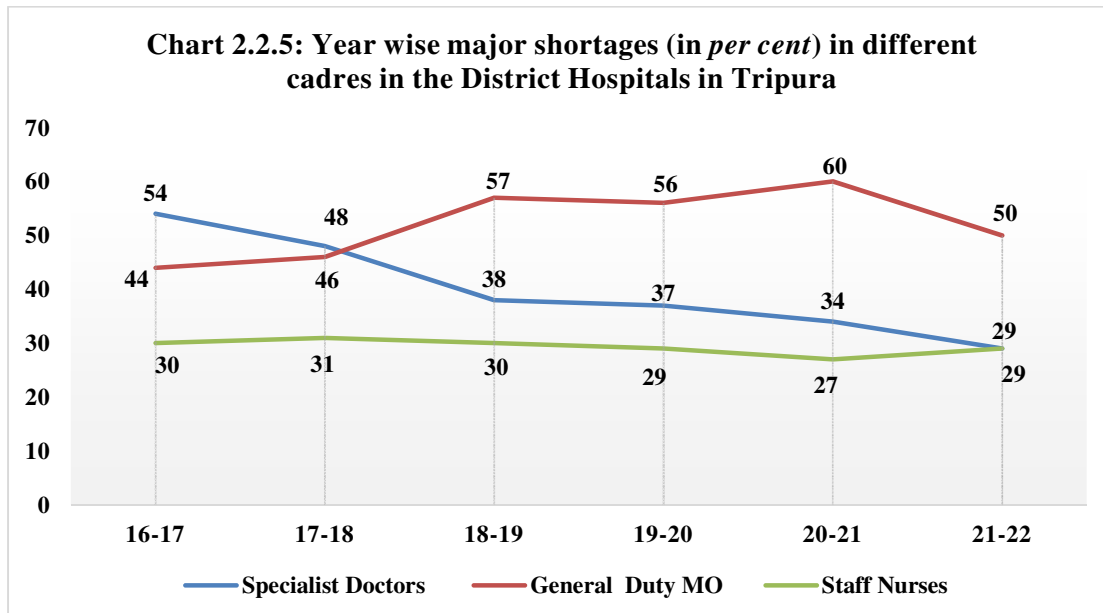


As regards availability of Specialist Doctors, only few departments had the Specialist Doctors available as per the norms during 2016-17 to 2021-22. The overall status of Specialist Doctors is given in the **Chart 2.2.4**.



It may be seen from the **Chart 2.2.4** that only in the DH, Gomati adequate number of Specialist Doctors were available in seven out of 11 Departments throughout the audit

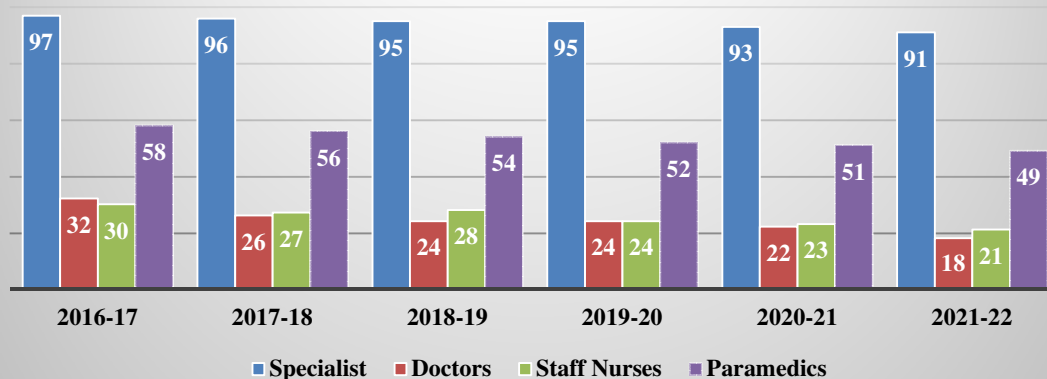
period of 2016-22 as per the norms. Further in the DHs, Khowai and South Tripura, adequate number of Specialist Doctors were not available in any department throughout the audit period. The detailed status is provided in the **Appendix 2.2.3**. The overall year wise status of the shortages in different cadres in District Hospitals is depicted in **Chart 2.2.5**.



Though the service of Specialist Doctors falls under the category of essential services in respect of SDHs and CHCs as per the IPHS, the shortage ranged between 91 to 97 *per cent* during 2016-22 as shown in **Appendix 2.2.4**. No specialist doctor was posted in the CHCs in the State while seven out of 14 SDHs were provided specialist doctors partially. The SDHs where specialist doctors were found posted were mainly for Obstetrics & Gynaecology, Medicine and Pediatrics Departments. (**Appendix 2.2.5**). The CHC, Kherengbar was the only CHC under the administrative control of the Tripura Tribal Areas Autonomous District Council (TTAADC) which had bi-weekly specialist service in Obstetrics & Gynaecology.

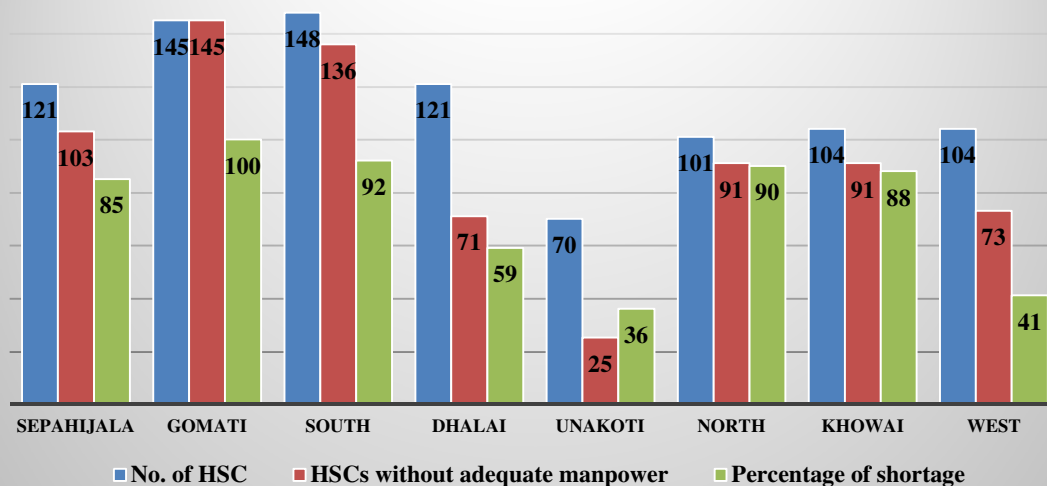
Similar shortages existed in the cadre of General Duty Medical Officers (GDMOs), Nurses and Paramedics which ranged from 18 to 32 *per cent*, 21 to 30 *per cent* and 49 to 58 *per cent*, respectively (**Appendices 2.2.6 to 2.2.8**). The overall status of shortages of MOs in SDHs and CHCs is depicted in **Chart 2.2.6**.

Chart 2.2.6: Percentage of shortage of Medical Staff in the SDHs and CHCs in the State



PHCs in the State had no shortfall in manpower and functioned with adequate manpower during 2016-22 as per the IPHS. However, Health Sub-Centers (HSCs) under the PHCs witnessed shortages of manpower as 74 *per cent* HSCs in the State witnessed shortage of manpower during 2016-22. District-wise position is given in **Appendix 2.2.9**. Availability of HSCs in the District and the number of the HSCs which witnessed shortages of manpower *vis-à-vis* the norms ranged from 36 to 100 *per cent* during 2016-22. Highest shortage was noticed in respect of Gomati District where all 145 HSCs witnessed shortage of manpower during 2016-22. The overall status of HSCs is provided in **Chart 2.2.7**.

Chart 2.2.7: Shortage of Man Power position in HSCs in the State



No separate manpower has been sanctioned for Line Services and Support Services for Paramedics and other staff in the health facilities in the State. Services were maintained with the available Paramedical Staff as shown in the **Appendix 2.2.8**.

2.2.2.4 OPD Services in the District Hospitals

According to the IPHS, the District Hospitals are supposed to provide the Out Patient Department (OPD) services in General Medicine, General Surgery, Obstetrics & Gynaecology, Paediatrics, Ophthalmology, Otorhinolaryngology (ENT), Orthopedics, Psychiatry, Dental Care, *etc.*

All the District Hospitals in the State were providing the OPD Services according to the availability of the Specialist Doctors with the Hospital. Detail position is given in the **Table 2.2.1** for the year 2021-22.

Table 2.2.1: OPD Services in the DHs in the State during 2021-22

Sl. No.	Name of the Department	Number of patients visited the Department during 2021-22					
		DH, Dhalai	DH, Gomati	DH, Khowai	DH, North	DH, South	DH, Unakoti ²¹
1.	Dental	313	2651	1460	1067	691	504
2.	Emergency	12868	27872	3687	8154	4	0
3.	ENT	1063	2728	1661	317	667	231
4.	Eye	1917	2266	4376	2828	1665	1516
5.	Medicine	2449	37735	11130	6977	34272	14670
6.	Obs & Gynae	3763	7607	9311	4155	2005	15
7.	Ortho	1656	8280	2592	1793	3583	557
8.	Paediatric	1737	9240	1767	1056	1899	3
9.	Psychiatric	320	390	0	0	597	76
10.	Surgery	677	4266	0	71	0	13
11.	Dermatology & Venerology	0	0		343	0	0
12.	PMR		0			623	

OPD Services in PMR and Dermatology & Venereology is a desirable service in the DH level hospital as per the IPHS which was being provided by the DH, North Tripura only in the State, among six DHs in the State.

2.2.2.5 Availability of beds in the District Hospitals in the State

According to the IPHS, the DHs are classified into five²² grades from Grade-I to Grade -V District Hospital according to the bed strength of the respective hospitals. In Tripura there were six²³ District Hospitals, where three DHs having the bed capacity of 150 beds each and the rest three DHs had the bed capacity of 100 beds each. Hospital beds were distributed among the different wards *viz.*, Medicine ward, Surgical Ward, Orthopaedic Ward, Paediatric Ward, Obstetrics and Gynaecology, Ophthalmology ward, *etc.* The detail position of beds is given in the **Appendix 2.2.10**. Separate ward for Maternal care and Childcare were available in each DH. Though Sick and New-born Care Unit (SNCU) was available in the DH, Khowai for new-born care, no paediatric ward was available in the hospital.

²¹ In respect of DH, Unakoti from 1 April 2021 to 30 June 2021, 7,843 patients visited OPD but Department-wise details were not available. The data in the **Table 2.2.1** pertains to 1 July 2021 to 31 March 2022.

²² Grade -I DH with 100 beds, Grade-II with 200 beds, Grade-III with 300 beds, Grade-IV with 400 beds and Grade-V with 500 beds District Hospital.

²³ DHs at Unakoti, Dhalai and Gomati Districts had the bed capacity of 150 beds, DHs at Khowai, North and South Tripura had the bed capacity

Despite specific recommendations available in the IPHS for bed allocation for the DHs having bed capacity of 100 beds and above, three DHs²⁴ fulfilling the above bed criteria, did not follow the IPHS norms for bed allocation. The Isolation Ward, Accident and Trauma Ward, Anti Natal Ward and Postpartum Ward were not available to any of the DHs in the State despite specific recommendation in the IPHS. However, Accident and Trauma service was made available to three²⁵ DHs in the State during September -December 2022.

2.2.2.6 IPD Services in the District Hospitals

According to the IPHS norms, the District Hospitals are supposed to provide the IPD Services in Medicine, Surgery, Maternity, Paediatrics, Nursery, Isolation related cases, Burn cases, Orthopaedics, Ophthalmology, Malaria and Infectious Disease related cases.

However, the DHs at Dhalai, Gomati and Unakoti Districts had the bed capacity of 150 each while the DHs at the Khowai, South Tripura and North Tripura Districts had the bed capacity of 100 each. All the DHs were providing the IPD Services according to the availability of the Specialist Doctors with the Hospital. Detail position is given in the **Table 2.2.2** for the year 2021-22.

Table 2.2.2: IPD Services in the DHs in the State during 2021-22

Sl. No.	Name of the Department	Number of patients visited the Department during 2021-22					
		DH, Dhalai	DH, Gomati	DH, Khowai	DH, North	DH, South	DH, Unakoti
1.	Medicine	8205	7860	10236	6542	3002	4691
2.	Paediatrics	2797	3390		1239	860	1442
3.	Surgical	3759	3080		1885		2123
4.	Orthopaedic	456	1064		0	35	0
5.	ENT	167	563		0	0	0
6.	OBS.& Gynae	5090	6006	2745	4093	1333	3554
7.	Eye	741	49		103	0	0
8.	SNCU	1031	962	146	NA	NA	NA
9.	ICU		527			0	
10.	Emergency				835		

No Paediatric Ward was available in the DH, Khowai and Surgical, Orthopaedic and ENT patients were kept in the General Medicine Ward. ICU Service was only available with the DH, Gomati. Data regarding patients admitted in the SNCU Ward in the DHs, North Tripura and South Tripura and Unakoti districts were not furnished to audit while SNCU ward was not available in DH, South Tripura.

2.2.2.7 Availability of Diagnostic Service in the District Hospitals

According to the IPHS, the District Hospital laboratory and other diagnostic services shall serve the purpose of public health and be able to perform all tests required to diagnose epidemics or important diseases from public health point of view. The recommended services which are supposed to be available in a District Hospital are

²⁴ District Hospitals at Dhalai, Gomati and Unakoti Districts.

²⁵ District Hospitals at Dhalai, Gomati and South Tripura.

(i) Clinical Pathology, (ii) Pathology, (iii) Microbiology, (iv) Serology, (v) Biochemistry, (vi) Cardiac investigation, (vii) Ophthalmology, (viii) ENT, (ix) Radiology, (x) Endoscopy and (xi) Respiratory function tests.

In all the DHs in the State, the recommended services, viz. (i) Clinical Pathology, (ii) Pathology, (iii) Microbiology, (iv) Serology and (v) Biochemistry tests were available. However, tests like Stress Test, Echocardiography under Cardiac Investigation, Endoscopy for ENT and Audiometry test, all kinds of Endoscopy viz. endoscopy of Oesophagus, Stomach, Colonoscopy, Bronchoscopy, Hysteroscopy, etc. and Pulmonary function tests under Respiratory investigation were not available in any of the DHs in the State.

In respect of Radiology investigations, Hysterosalpingography or HSG which is an essential test for determining female fertility was not available in any of the DHs in the State. Further, CT Scan Service was not available in the DH, Khowai.

2.2.2.8 Blood bank facilities in the District Hospitals of the State

According to the IPHS, every DH shall have Blood Bank which shall be in close proximity to Pathology Department and at an accessible distance to Operation Theatre Department, Intensive Care units and Emergency and Accident Department. Blood Bank should follow all existing guidelines and fulfil all requirements as per the various Acts pertaining to setting up of the Blood Bank.

All the DHs in the State had Blood Banks as per the norms. However, in the DH, North Tripura, four out of five Blood Storage units were found running without a power backup. Moreover, in the DH, Khowai, no power back up was available with the Blood Bank and arrangement was made to take back up from the Generator used for Oxygen Plant of the Hospital.

2.2.2.9 Dietary Service in the District Hospitals in the State

According to the IPHS, the dietary service of a hospital is an important therapeutic tool. Apart from normal diet, diabetic, semi solid diets and liquid diets shall also be available. Food shall be distributed in covered container.

The Department had prescribed six diets for different category of patients viz., milk diet, milk and bread diet, vegetarian diet for adult and children diet for severe acute malnutrition for adult and children. However, only vegetarian diet for adult and children, were provided to the patients. Diet was not provided in covered container and FSSAI certificate, assuring serving of quality diets to the patients, were not available to any of the DHs. Diet Chart displaying the name of the item and quantity provided for each patient was also not displayed in the hospital wards for awareness of the patients.

2.2.2.10 Hospital Linen Service in the District Hospitals in the State

IPHS prescribe the number of different types of linen²⁶ that are required for patient care services for DHs with different bed capacities in the category of 101 to 200, 201 to 300 and 301 to 500.

In the State, no prescribed norm was available with the hospitals for changing linen for the patients. The records for changing of soiled linens and providing of fresh linens were also not maintained by any of the DHs in the State. Washing of soiled linens were outsourced to the private firms.

2.2.2.11 Management of Bio Medical Waste by District Hospitals in the State

The Biomedical waste management is an integral part of infection control activities of the hospital. According to the Bio-Medical Waste Management Rules, 2016 (BMW Rules), hazardous, toxic and bio-medical waste has to be separated into 10 categories for the purpose of its safe transportation to specific site for specific treatment. Further, the BMW Rules *inter alia* stipulate the procedures for collection, handling, transportation, disposal and monitoring of the bio-medical waste with clear roles for waste generators.

All the DHs in the State were segregating the waste in different categories in separate coloured bins, available at the point of generation of waste, particularly in the ward areas, OTs, *etc.* as per the BMW rules. However, all the wastes were subsequently mixed at the time of disposal and hospital wastes were dumped in the Deep Burial pits.

2.2.2.12 Mortuary Service in the District Hospitals

IPHS provides that every District Hospital should have the facilities for keeping of dead bodies and conducting autopsy.

All the DHs in the State had the mortuary service for keeping the dead bodies and conducting of autopsy as per norms.

2.2.2.13 Ambulance Service

According to the IPHS norms, the District Hospital shall have well equipped Basic Life support (BLS) and desirably one Advanced Life Support (ALS) ambulance. Serviceability and availability of equipment and drugs in ambulance shall be checked on daily basis.

The hospitals in the State were providing free ambulance service to emergency cases or referral transport to the higher health facility centre. Ambulances in the hospitals in the State lacked basic life support facility *viz.* Oxygen Cylinder, First Aid Box, trained paramedics, *etc.* though required under the IPHS norms. The ambulances were basically being used merely as a transport vehicle.

²⁶ Abdominal sheets for OT, Bed sheets, Bedspreads, Blankets (Red and Blue), Doctor's overcoats, Draw sheets, Hospital worker OT coats, Leggings, Mackintosh sheets, Mats (Nylon), Mattresses (Foam) for adults, Mortuary sheets, Over-shoe pairs, Paediatric mattresses, Patient's coats (Female), Patient's pyjamas, Shirts (Male), Patna towels, Perennial sheets for OT, Pillows, Pillow cover and table cloth.

General ambulance services viz., '102 National Ambulance Service (NAS)' for catering to pregnant women, sick infants and sterilisation cases was available in the State while '108 Emergency Transport System' for all other medical emergencies were not available in the State.

2.2.2.14 Status of implementation of AB-PMJAY in the State of Tripura

Ayushman Bharat is a flagship health scheme of the Government of India, launched (23 September 2018) to achieve Universal Health Coverage (UHC) as recommended in the National Health Policy, 2017. PM-JAY aims to provide health insurance cover of ₹ five lakh per family per year for secondary and tertiary care hospitalisation.

State Empanelment Committee (SEC) was formed in July 2018 and out of eight districts in the State, District Implementation Units (DIUs) were set up in six districts²⁷ (i.e. Gomati, Khowai, Sepaijala, Unakoti, West and North Tripura). Further, 146 contact points were established in district, sub-division and block levels for registration of beneficiaries. All the empanelled hospitals also have beneficiary registration facilities. The scheme was finally rolled out in the State on 23 September 2018

The State had empanelled 146 hospitals (128 public hospitals, 15 Government of India hospitals and three private hospitals) as of March 2022. Out of 146 empanelled hospitals, only ILS Hospital, Agartala was accredited with NABH entry level at the time of empanelment. No other hospitals which were empanelled under the AB-PMJAY had such accreditation.

Registration of households and beneficiary data revealed that in Tripura, 20.57 lakh members of 4.91 lakh distinct households were eligible for getting benefit under this scheme. However, as of 31 March 2022, only 12.74 lakh (62 per cent) members of 4.66 lakh (95 per cent) households had been registered.

The trends of beneficiary admissions in public hospitals and private hospitals and claims paid to hospitals during 2018-19 to 2021-22 are shown in **Table 2.2.3** and **Table 2.2.4**.

Table 2.2.3: Number of beneficiaries admitted in public and private hospitals under PMJAY during 2018-19 to 2021-22

Portability/ Non- Portability	Private/ Public Hospital	Number of beneficiaries admitted in public and private hospitals during the financial year(s):				Grand Total
		2018-19	2019-20	2020-21	2021-22	
Portability	Public	26	233	144	181	584
	Private	16	310	362	155	843
Non- Portability	Public	8,191	51,261	30,371	40,843	1,30,666
	Private	17	660	950	921	2,548
Total:		8,250	52,464	31,827	42,100	1,34,641

²⁷ Except Dhalai and South Tripura Districts as on 31 March 2022.

Table 2.2.4: Amounts of claim paid to public and private hospitals under PMJAY during 2018-19 to 2021-22

Nature of Hospital	Claims paid during the years (₹ in crore):				
	2018-19	2019-20	2020-21	2021-22	Total
Public	2.57	20.32	14.87	30.25	68.01
Private	0.11	1.41	2.66	3.45	7.63
Total:	2.68	21.73	17.53	33.70	75.64

2.2.2.15 Operationalisation of Health and Wellness Centres (HWCs)

In February 2018, the Government of India announced the creation of 1,50,000 Health and Wellness Centres (HWCs) by transforming existing Sub Centres and Primary Health Centres as the base pillar of Ayushman Bharat. These centres would deliver Comprehensive Primary Health Care (CPHC) bringing healthcare closer to the homes of people covering both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.

In the State, all the 116 Primary Health Centres (PHCs) and 999 Health Sub-Centres (HSCs) have been transformed²⁸ (May 2023) into Health and Wellness Centres (HWCs) as envisaged by the Government of India.

Patients served by the HWCs in the State as of May 2023 are given in **Table 2.2.5**.

Table 2.2.5: Patients served by the HWCs in the State

Name of the District	Number of patients in the:			Total number of patients
	SHC	PHC	UPHC	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 = (2+3+4)</i>
Dhalai	6,11,876	15,768	71,904	6,99,548
Gomati	21,648	82,938	7,524	1,12,110
Khowai	41,624	2,681	17,947	62,252
North Tripura	18,622	44,422	2,598	65,642
Sepahijala	85,366	65,956	10,846	1,62,168
South Tripura	7,17,709	54,150	74,662	8,46,521
Unakoti	1,77,048	80,673	48,731	3,06,452
West Tripura	3,10,725	2,56,605	3,63,333	9,30,663
Total	19,84,618	6,03,193	5,97,545	31,85,356

2.2.2.16 Medical College in the State

During the period of audit from 2016-17 to 2021-22, no new medical college was set up in the State. The existing medical college, the Agartala Government Medical College at Agartala, Tripura was set up in year 2005. This is the only medical college in the Government Sector in the State. The intake capacity of students in the undergraduate course was 125 seats while it was 40 for the post graduate course.

2.2.3 Budget allocation and expenditure

Budget allotment and expenditure of the State Government and the H&FWD during 2016-22 is shown in **Table 2.2.6**.

²⁸ Up-to-date data is available with the Department. Data as on 31 March 2022 is not available.

Table 2.2.6: Budget allocation and expenditure during the period 2016-22*(₹ in crore)*

Year	State		Health Sector			GSDP	Health Sector Expenditure (percentage of GSDP)
	Budget allocation	Expenditure	Budget allocation (percentage of State budget)	Expenditure (percentage of State expenditure)	Savings (percentage of health Sector Budget allocation)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2016-17	17,909.66	12,860.79	750.72 (4.19)	681.93 (5.30)	68.79 (9.16)	39,479	1.73
2017-18	17,390.11	12,532.41	797.25 (4.58)	784.65 (6.26)	12.60 (1.58)	43,716	1.79
2018-19	17,983.47	13,956.84	1,079.82 (6.00)	929.81 (6.66)	150.01 (13.89)	49,823	1.87
2019-20	20,493.57	15,447.97	1,062.44 (5.18)	899.74 (5.82)	162.70 (15.31)	54,050	1.66
2020-21	21,681.07	16,187.77	1,089.54 (5.03)	899.63 (5.56)	189.91 (17.43)	54,405	1.65
2021-22	26,251.93	18,345.20	1,800.46 (6.86)	1171.37 (6.39)	629.09 (34.94)	64,778	1.81
Total	1,21,709.81	89,330.98	6580.23 (5.41)	5367.13 (6.01)	-	-	1.75

Source: Finance Accounts and Appropriation Accounts

National Health Policy, 2017 (NHP) states that the state health sector spending to be more than eight *per cent* of their budget by 2020. However, health sector budgetary commitment did not reach eight *per cent* of the total state budget during 2016-22. Further, as against the NHP stipulation to increase State Health Sector expenditure to 2.50 *per cent* of the Gross State Domestic Product (GSDP) by 2025, the State's expenditure on Health Sector ranged between 1.65 *per cent* and 1.87 *per cent* of the GSDP during the period.

2.2.4 Audit objectives

The compliance audit was conducted to ascertain that:

- primary healthcare infrastructure and services are available and properly managed,
- support services in the primary health care facilities are available and adequate,
- efficient utilisation of assets created for medical emergencies in the State, and
- the health and wellbeing conditions of people has been improved as per SDG 3.

2.2.5 Audit scope and methodology

The scope of audit involved assessing functioning of the sampled PHCs and CHCs (**Appendix 2.2.11**) during 2016-22 and evaluating the outcomes of the selected indicators. Out of six CHCs and 32 PHCs in the three Districts²⁹, three CHCs and six PHCs were selected by adopting Simple Random Sampling without Replacement Method for detailed scrutiny. The districts selected were the same as those selected in the sample for the Performance Audit of Select District Hospitals in Tripura (*Report No. 2 of 2021*) in order to maintain the holistic view.

²⁹ West District-three CHCs and 13 PHCs, Dhalai District- two CHCs and 14 PHCs and Unakoti District-one CHC and five PHCs.

Audit was conducted during June 2022 to January 2023. The audit examination included records maintained at the Directorate of Health Services (DHS), Directorate of Family Welfare and Preventive Medicine (DFWPM), office of the Mission Director (MD), National Health Mission (NHM), Tripura, offices of the Chief Medical Officers (CMOs), Central and District Medicine Stores, and sampled CHCs and PHCs covering two geographical regions viz. hill districts and plain districts. Further, all 66 HSCs under the sampled PHCs were also checked.

Audit methodology involved scrutiny and analysis of records/ data as per the audit objectives, scope and criteria, evidence gathering by scanning of records, joint physical inspection of various facilities of the sampled health care facilities and by taking photographs, issuing questionnaires/ audit observations and obtaining replies, etc. The audit observations are suitably incorporated in this Report.

Audit findings

Audit objective 1: Whether primary healthcare infrastructure and services are available and properly managed.

2.2.6 Physical infrastructure

2.2.6.1 Shortage of CHCs, PHCs and SCs

The required number of health facilities as per Indian Public Health Standards (IPHS), their availability and shortfall thereof, against the three categories of healthcare infrastructure as of March 2022 is given in **Table 2.2.7**.

Table 2.2.7: Shortage of health facilities in the State

Health facility	Norms taken into consideration	Required as per norms	Available	Percentage of Excess (+)/Shortfall (-)
Health Sub-Centre (HSC)	One HSC for 5,000 population	837	999	(+) 19
Primary Health Centre (PHC)	One PHC for every 30,000 population	140	118	(-) 16
Community Health Centre (CHC)	One CHC for every 1,20,000 population	35	21	(-) 40

Source: Departmental records

While HSC availability was higher than norms, the shortage of PHCs in the State was 16 and 40 *per cent* for the CHCs.

2.2.6.2 Non-availability of Operation Theatre and Blood Storage facilities

As per IPHS, Blood Storage Units should be in close proximity to the Pathology Department and at an accessible distance to OT and Emergency and Accident Departments in a CHC.

Audit noticed that out of three CHCs covered, two CHCs viz., Manu and Kumarghat did not have the OT facility and the Blood Storage unit as required under the IPHS.

2.2.7 Availability of services, manpower in the sampled health facilities

Health Sub-Centre (HSC): As per the IPHS norms, one Auxiliary Nurse and Midwife (ANM) along with one Health Worker are required to be posted at each Sub-centre, whereas requirement of one additional ANM is desirable.

Assessment of manpower availability at the sample HSCs revealed that only 15 HSCs, representing 23 *per cent* of the sample, had adequate staff as per the IPHS norms while 43 HSCs, 65 *per cent* were operating with the essential staff and eight HSCs had only one Multipurpose Workers (MPW) each as detailed in **Table 2.2.8**. Out of the eight HSCs which were operating with only one MPW, six³⁰ fall under the PHC, Chachubazar. Audit noticed that out of 66 HSCs, Community Health Officers (CHOs) with higher qualification over and above the IPHS norms, were posted in 49 HSCs which is a positive sign.

Table 2.2.8: Service Delivery at the Health Sub-Centre level

Manpower requirement as per IPHS norms				No. of Health Sub-centers test checked	Availability ³¹	
Essential		Desirable				
ANM	1	ANM ³²	1	66	15 HSCs	Three Persons (one CHO and two MPWs)
					43 HSCs	Two Persons (one CHO and one MPW or two MPWs)
Heath Worker	1				8 HSCs	One Person (one MPW)

Source: Departmental records

Detailed status of the manpower in HSCs is provided in **Appendix 2.2.12**.

Primary Health Centre: A PHC provides In-Patient Department (IPD), Out-Patient Department (OPD), Maternal and Child Health care, 24-hour emergency services. The status of availability of manpower in the sampled PHCs (10 bedded health facility) is provided in **Table 2.2.9**.

³⁰ The PHC, Chachubazar has total nine HSCs.

³¹ The MPWs are equivalent to ANM while qualification of the CHO is GNM/ B. Sc (Nursing) M. Sc (Nursing) BAMS from a recognised board, CHOs are recruited on contractual basis under NHM from 2019-20.

³² Qualification of the post ANM is 10+2 with English having 40 *per cent* marks in vocational ANM course from the school recognised by Indian Nursing Council.

Table 2.2.9: Service delivery at the PHC level, 10 bedded health facility

Required service delivery	Manpower requirement as per norms		Availability of manpower in the sampled PHCs					
			Chachu-bazar	Kanika Memorial	Dhuma-cherra	Ganga-nagar	Kanchan-bari	Champak-nagar
OPD services, 24 hours emergency services, In-patient services, Maternal and Child Health Care, Immunisation	Essential							
	Medical Officer- MBBS	1	2	2	2	2	2	2
	Staff-Nurse	3	6	5	5	6	7	5
	Desirable							
	Medical Officer – AYUSH	1	3 ³³	1	0	0	2 ³⁴	3 ³⁵
	Staff-Nurse	1	0	0	0	0	0	0

Source: Information furnished by sampled PHCs

Audit noticed that for essential services in PHCs additional Medical Officers and Staff Nurses beyond the IPHS norms were provided in the sampled PHCs which indicated a positive trend. At the same time, Medical Officers in the AYUSH category were not evenly distributed. In addition, no IPD services under AYUSH and Dental disciplines were available in the sampled PHCs.

Community Health Centres: CHCs are to provide routine and emergency care which included specialist services in Surgery, Medicine, Obstetrics and Gynaecology and Paediatrics. Besides, Dental and AYUSH services were also to be delivered.

Audit noticed that none of the sampled CHCs were provided the specialist medical officers to deliver the required services at the CHC level. Only CHC, Kherengbar had a specialist service in Maternal care. Non-availability of specialist doctors in the CHCs reduced them to merely a PHC with additional beds and some additional diagnostic facilities.

The status of manpower availability in the sampled CHCs is provided in **Table 2.2.10**.

Table 2.2.10: Service Delivery at the Community Health Centre level, 30 bedded health facility

Required service delivery	Manpower requirement as per norms		Availability of manpower in the sampled CHCs		
			Kherengbar	Kumarghat	Manu
Routine and emergency care in Surgery, Medicine, Obstetrics & Gynaecology, Paediatrics, Dental and AYUSH in addition to all the National Health Programmes	Medical Superintendent	1	0	0	0
	Public Health Specialist	1	0	0	0
	Public Health Nurse	1	0	0	0
	Specialist Doctors	5	2 ³⁶	0	0
	Medical Officer- MBBS	2	6	5	3
	Medical Officer- Dental	1	2	1	1
	Medical Officer- AYUSH	1	3	1	1
	Staff-Nurse	10	10	9	16

Source: Information furnished by sampled CHCs

³³ includes one Dental Medical Officer

³⁴ includes one Dental Medical Officer

³⁵ includes one Dental Medical Officer

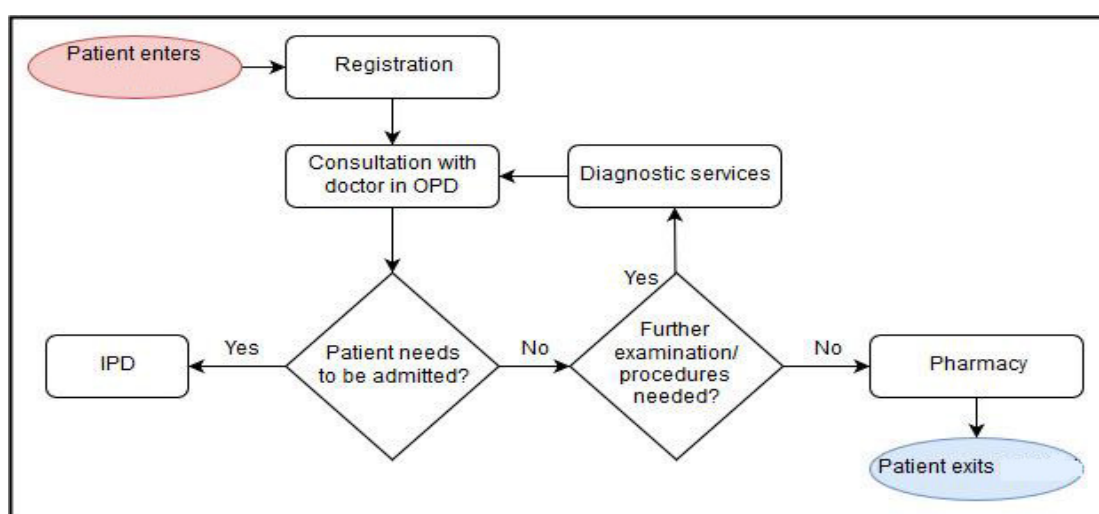
³⁶ Specialisation in Gynecology and Anaesthesia

In absence of specialists, the sampled PHCs referred the patients to the District Hospitals in Unakoti and Dhalai Districts and to the State Hospital³⁷ in the West Tripura District.

2.2.8 Out-Patient Department Services in PHCs and CHCs

Out-Patient Department (OPD) normally remains integrated with the in-patient services and staffed by physicians and surgeons who also attend inpatients in the wards. Many patients are examined and given treatment as outpatients before being admitted to the hospital at a later date as in-patients. The treatment procedure followed in the Public Health Institutions in the State are narrated below through a **Flow Chart 2.2.8**.

Chart 2.2.8: Flow of OPD services in PHCs and CHCs



Audit findings pertaining to OPD services like registration, consultation, waiting time and other basic OPD facilities/ services are discussed in subsequent paragraphs.

2.2.8.1 Registration facility for OPD

Registration counter is the entry 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-I) estimates the average time required for registration can be three to five minutes per patient, which roughly works out to about 20 patients/ hour per counter.

The average daily patient load on a registration counter in the sampled health centres during 2021-22, is shown in **Table 2.2.11**.

³⁷ Agartala Government Medical College and Govind Ballabh Pant Hospital

Table 2.2.11: Patient Load in the Registration Counter during 2021-22

Name of the Health Facilities	Number of counters	Total Number of OPD Patients	Average number of patients per counter per month	Average number of patients per counter per hour ³⁸
CHC, Manu	1	10,882	907	6
CHC, Kherengbar	2	20,287	845	5
CHC, Kumarghat	1	7,212	601	4
PHC, Chachubazar	1	3,502	292	2
PHC, Dhumacherra	1	5,736	478	3
PHC, Ganganagar	1	1,347	112	1
PHC, Kanchanbari	1	5,466	456	3
Kanika Memorial PHC	1	9,523	794	5
PHC, Champaknagar	1	8,290	691	4

Source: Hospital records

All the sampled health facilities followed the manual system for registration of the OPD patients. Adequate seating arrangement, drinking water facility, provision of electrical fans and separate toilets for ladies and gents are basic facilities to be made available in the Registration Counter area. The PHC, Kanchanbari had no adequate facilities while the PHC, Dhumacherra had all the facilities as required. Rest of the sampled health institutions had moderate facilities (**Appendix 2.2.13**). Absence of basic facilities put the patients at discomfort and hardship.

2.2.8.2 Patient load in OPD

The number of out-patients who attended the OPDs in the sampled CHCs and the PHCs during the period 2016-2022, is shown in **Table 2.2.12**.

Table 2.2.12: Number of out-patients in the sampled CHCs and PHCs

(in numbers)

Year	CHCs			PHCs					
	Kherengbar	Kumarghat	Manu	Dhumacherra	Chachubazar	Kanchanbari	Ganganagar	Kanika Memorial	Champaknagar
	Number of Outpatients								
	Percentage increase (+)/ decrease (-)								
2016-17	19093	13164	10731	5856	4801	7395	2948	13900	14517
2017-18	10581	14211	17167	7840	9315	6009	2837	16291	12480
	(-) 44.58	(+) 7.95	(+) 59.98	(+) 33.88	(+) 94.02	(-) 18.74	(-) 3.77	7.20	(-) 14.03
2018-19	15186	26425	22033	11008	3229	9753	3077	13057	14303
	(+) 43.52	(+) 85.95	(+) 28.35	(+) 40.41	(-) 65.33	(+) 62.31	(+) 8.46	(-) 19.85	(+) 14.60
2019-20	18372	24284	18081	10873	6026	11196	2562	14211	14647
	(+) 20.98	(-) 8.10	(-) 17.94	(-) 1.23	(+) 86.62	(+) 14.80	(-) 16.74	8.84	(+) 2.41
2020-21	15188	9270	8741	4923	5184	4767	1242	8063	9077
	(-) 17.33	(-) 61.83	(-) 51.66	(-) 54.72	(-) 13.97	(-) 57.42	(-) 51.52	(-) 43.26	(-) 38.03
2021-22	20287	7212	10882	5736	3502	5466	1347	9523	8290
	(+) 33.57	(-) 22.20	(+) 24.49	(+) 16.51	(-) 32.44	(+) 14.66	(+) 8.45	(+) 18.11	(-) 8.67

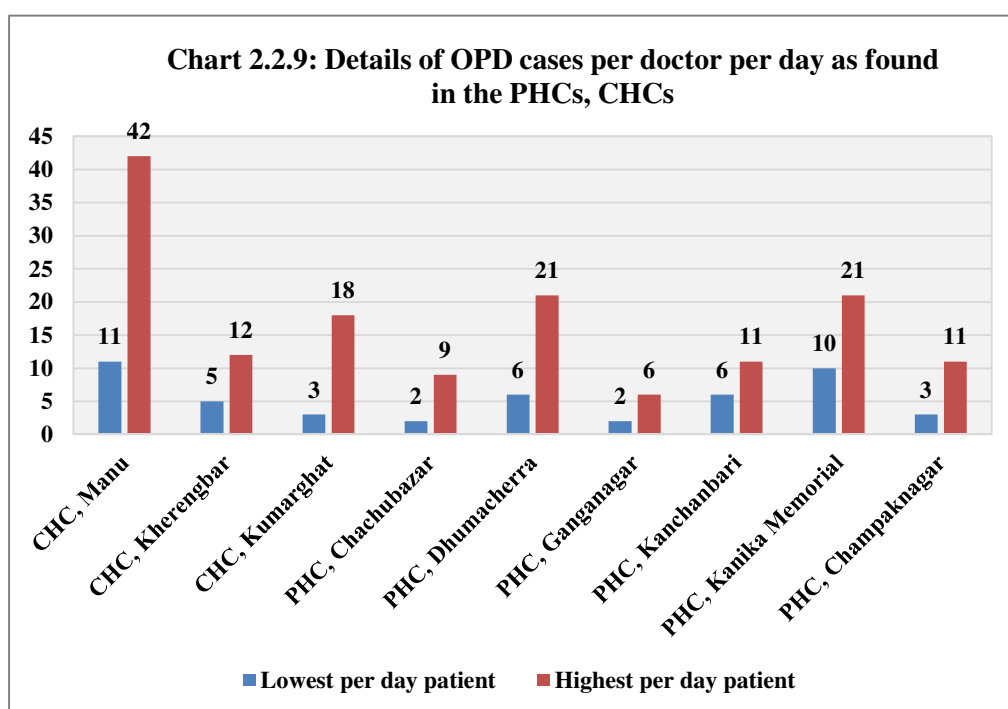
Source: Data collected from the OPD Register

- The OPDs in the CHCs were supposed to be run by the specialist doctors as per the IPHS norms. Except in the CHC, Kherengbar where a specialist doctor in **Obstetrics and Gynecology** was available, all the other OPDs in the

³⁸ OPD hours in Tripura is 9.00 AM to 4.30 PM i.e. 7.5 hours and 22 OPD days are available in one month.

CHC and PHC were managed by the Medical Officers. Thus, people were deprived of the benefit of higher medical facilities in the CHCs and were forced to move to the higher health facilities without visiting the CHCs. This fact is clearly evident from **Table 2.2.11** that the patient load per counter ranged from four to six per hour instead of 20 patients as desired. The patient load showed an erratic trend during 2016-17 to 2019-20 but showed a negative trend during 2020-21 due to the pandemic situation in the State. The negative trend in OPD patients got reversed in all the sampled PHCs and CHCs during 2021-22 except in the CHCs, Kumarghat, Champaknagar and Chachubazar PHCs.

- OPD cases per doctor is an indicator for measuring efficiency of OPD services in a hospital. Audit observed that due to substantial increase in the number of out-patients during 2016-17 to 2021-22, OPD cases per doctor in the sampled CHCs and PHCs increased significantly during 2016-22 as detailed in the **Appendix 2.2.14**. The overall status in the test checked CHCs and PHCs are depicted in **Chart 2.2.9**.



It was also noticed that the sampled CHCs were experiencing higher patient load in comparison to the sampled PHCs and highest patient load was seen in case of CHC, Manu during 2018-19 and the load per doctor was 42 patients per day and moderate patient load was seen in the CHCs, Kumarghat and Kherengbar which varied between three patients and 18 patients per doctor.

Except the Kanika Memorial and Dhumacherra PHC, all other PHCs were having the patient load from two patients to 11 patients while above two PHCs had the patient load of six patients to 21 patients per doctor during 2016-22.

- AYUSH is a desirable service at the PHC level health facility as per the IPHS and the facility was available in four³⁹ PHCs out of the sampled six PHCs while dental facility was available only in three⁴⁰ PHCs. The State Government had no norms and policies for posting of doctors in the CHCs and PHCs. As such reasons for non-availability of specialist doctors in the CHCs and partial coverage of PHCs with AYUSH and Dental facility could not be evaluated in audit.

2.2.8.3 Availability of diagnostic services

Diagnostic tests play a crucial role at every step of disease management. The diagnostic tests which are required to be done in the sampled health facilities and their availability are shown in the **Table 2.2.13**.

Table 2.2.13: Availability of diagnostic tests in the sampled health facilities

Name of the health institution	X-Ray for chest, skull, spine, bones, abdomen and dental X-Ray		No. of clinical pathology services and other tests		ECG tests		Ophthalmology services	
	Required as per IPHS	Available	No. of tests as per IPHS	Tests available (percent)	Required as per IPHS	Tests available	No. of tests as per IPHS	Tests available
CHC, Kherengbar	Yes	No	29	13 (45)	Yes	No	3	0
CHC, Kumarghat ⁴¹ (SDH)	Yes	No	29	7 (24)	Yes	No	3	0
CHC, Manu	Yes	Yes	29	22 (76)	Yes	Yes	3	0
PHC, Dhumacherra		No	18	10 (56)	Desirable	No	0	0
PHC, Kanchanbari		No	18	8 (44)	Desirable	No	0	0
PHC, Ganganagar		No	18	11 (61)	Desirable	No	0	0
Kanika Memorial PHC		No	18	15 (83)	Desirable	No	0	0
PHC, Chachubazar		No	18	14 (78)	Desirable	No	0	0
PHC, Champaknagar		No	18	12 (67)	Desirable	No	0	0

Source: Reply furnished by the health facilities

Audit noticed that except in the CHC, Manu, Radiological investigation and Electrocardiogram (ECG) service were not available in the other two sampled CHCs. Moreover, Ophthalmology service was not available in any of the sampled CHCs though these were the part of essential service delivery as per the IPHS guidelines. As regards the availability of Clinical Pathology services and other tests, the availability ranged between 24 and 83 *per cent* in the sampled PHCs and the CHCs. Non-availability of equipment and the qualified technician were the main reasons for absence of the desired level of services.

2.2.8.4 Quality assurance of laboratory services

Quality testing of in-house pathological services through the Internal Quality Assessment scheme as well as through External Quality Assessment scheme were the part of the quality assurance mechanism for laboratory services under the IPHS for the CHCs. The periodic validation of laboratory reports should be done with external

³⁹ PHCs, Chachubazar, Kanchanbari, Kanika Memorial and Champaknagar.

⁴⁰ PHCs, Chachubazar, Kanchanbari and Champaknagar.

⁴¹ upgraded to SDH since 26 March 2022.

agencies like District PHC/ Medical college for quality assurance of laboratory services. Further, periodic calibration of laboratory equipment is also required.

Audit noticed that the Internal Quality Assessment scheme and the External Quality Assessment scheme were not designed for the CHCs in the State for quality testing of in-house pathological services. No records regarding validation of laboratory reports by the District Health Authority for quality control of laboratory services, periodic calibration of laboratory equipment were made available to audit. Thus, quality assurance of the Pathological and other laboratory services could not be evaluated.

2.2.9 In-Patient Department Services in the PHCs and CHCs

Availability of doctors, nurses, essential drugs/equipment, dietary services and patient safety along with performance evaluation of IPD services are discussed in the succeeding **Paragraphs 2.2.9.1 to 2.2.9.5.**

2.2.9.1 Availability of in-patient services in the Primary and Community Health Centres

The PHCs in the State were managed by the Medical Officers, and specialist services, which are desirable services in the PHCs, were not available in the facilities. General medicine service, Normal Vaginal Deliveries (NVD) with Anti and Post Natal Care and Immunisation services were found delivered by the sampled PHCs as envisaged in the IPHS.

As per the IPHS guidelines, CHCs should provide in Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics, Dental, AYUSH and emergency services while Eye Specialist services should be available at one in every five CHCs. Specialist in-patient service pertaining to General Medicine, General Surgery, Obstetrics & Gynaecology and Paediatrics should be available.

Audit observed that the required services were almost not available in the sampled CHCs. The CHC, Kherengbar was providing the specialist service only in the Obstetrics & Gynaecology while no other specialist services were available in any of the sampled CHCs.

Absence of specialist services for Surgery, Obstetrics & Gynaecology and Paediatrics in CHCs compels the patients seeking the services to travel long distances for routine or complicated cases relating to these services to the nearest District Hospitals, which are available only in six out of eight districts in the State.

Bed Capacity of the PHCs and CHCs: According to the IPHS, a Primary Health Centre covers a population of 20,000 in hilly, tribal, or difficult areas and 30,000 populations in plain areas with six indoor/ observation beds. It acts as a referral unit for Sub-Centres and refer out cases to CHC, the 30 bedded health facilities and higher order public hospitals located at sub-district and district level.

PHCs, in the State as well as in the sampled districts, were designed as a 10 bedded primary level hospital with five bedded wards each for males and females over and above the IPH norms for six bed indoor/ observation beds. Similarly, the CHCs

followed norms of 30 bedded health facilities in the State, including CHCs in the sampled districts. Since the CHCs in the State lacked specialist services, as such speciality-wise indoor services were not available in the CHCs which had availability of only Male ward and Female ward. The Kherengbar CHC, the only CHC with specialist services for Obstetrics and Gynaecology on bi-weekly basis, too lacked post-operative wards for females and thus had only Male ward and Female ward.

2.2.9.2 Operation Theatre services

IPHS guidelines prescribe OTs for elective major surgery, emergency services, Obstetrics and Gynaecology and Orthopaedics for the CHCs.

Audit observed that only the CHC, Kherengbar had the OT facility out of the sampled CHCs during 2016-17 to 2021-22 and mostly offered Obstetrics & Gynaecological service to the patients. Details of surgery done by the CHC, Kherengbar is shown in **Table 2.2.14**.

Table 2.2.14: Surgical procedure done by the Kherengbar CHC

Period	Health Centre(s)	Nature and number of surgeries performed		
2016-17 to 2021-22	CHC, Kherengbar	Lower Section Caesarean Section (LSCS)	Gynaecological Surgery	General Surgery
		364	47	15

Source: Hospital data

Audit noticed that most of the surgeries were done in the discipline of Obstetrics & Gynaecology while few general surgeries were also performed in 2021-22 during a special surgical camp utilising the OT facility. Further, the number of surgeries performed by the doctors ranged from 35 to 117 during 2017-2022 and if converted into daily loads per doctor it comes into 0.46 to 1.54 surgeries per doctor per day. This indicated that the facility was not being utilised fully for the benefit of the patients due to non-availability of the specialist doctors in General Surgery and Paediatrics as envisaged in the IPHS.

2.2.9.3 Referrals of patients to higher facilities for better treatment

Audit noticed that out of 32,594 admitted patients, 3,251 patients were referred from all the sampled health facilities, during 2016-17 to 2021-22 to the District and State Hospitals. The detail position is shown in the **Table 2.2.15**.

Table 2.2.15: Admission of patients and referrals by the health institutions (2016-22)

Name of the Health Centre (s)	Number of OPD patients (2016-22)	Number of patients admitted (IPD) (2016-22)	Number of patients referred out	Percentage of referral vis-à-vis admitted	Number of patients referred for maternal cases	Percentage of maternal cases referred to total referral
CHC, Kherengbar	98,707	16,084	1,103	6.86	769	69.72
CHC, Kumarghat	68,166	13,998	2,072	14.80	3	0.14
CHC, Manu	87,635	18,435	1,539	8.34	24	1.56
PHC, Dhumacherra	46,236	4,690	621	13.24	7	1.13
PHC, Kanchanbari	44,586	11,209	934	8.33	7	0.75
PHC, Ganganagar	14,013	5,949	810	13.62	280	34.57
Kanika Memorial PHC	75,045	4,292	354	8.25	69	19.49
PHC, Chachubazar	32,057	4,641	369	7.95	106	28.73
PHC, Champaknagar	73,314	18,13 ⁴²	163	8.93	17	10.43
Total	5,39,759	81,111	7,965	9.82	1,282	16.10

Source: Hospital data

Audit noticed that maximum number of referrals were from CHC, Kumarghat which was 14.80 *per cent* of the total admissions during 2016-17 to 2021-22. This indicated that the CHC, Kumarghat was not capable of handling the cases and referred out the patients to the higher institutions. The referrals at the CHC, Kumarghat and other CHCs could have been avoided had they been provided with the specialist services as per the IPHS. The least number of referral occurred in CHC, Kherengbar and PHC, Chachubazar which were 6.86 and 7.95 *per cent* respectively of the total admitted patients during the same period indicating better health management.

Analysis of data further revealed that despite having specialist service in Obstetrics & Gynaecology in CHC, Kherengbar, 69.72 *per cent* of the referred patients were admitted for maternal health issues. This was due to the fact that the specialist service was available in the hospital only for two days in a week. The next major referrals in the maternal health were noticed in case of PHCs, Ganganagar and Chachubazar. The patients were referred to the District and State Hospitals, resulting in additional pocket expenses for them due to absence of affordable services near homes.

2.2.9.4 Documentation of OT procedures

NHM Assessor's Guidebook prescribes that the surgical safety checklist, pre-surgery evaluation records and post-operative evaluation records for OTs should be prepared for each case. Out of the sampled health facilities only the CHC, Kherengbar had OT and it did not maintain the OT procedure and OT safety checklist against the patients who had undergone surgical procedure during the audit period.

2.2.9.5 Emergency and Trauma Care service

As per IPHS norms, a CHC should have the facility to attend emergency cases of surgery, medicine, emergency obstetric care, emergency care of sick children including facility based Integrated Management of Neonatal and Childhood Illness (IMNCI) strategy, emergency oral health, etc. A separate earmarked emergency area to be located near the entrance of hospital preferably having four rooms (one for

⁴² IPD Facility in the PHC was started from December 2018.

doctor, one for minor OT, one for plaster/ dressing and one for patient observation (at least four beds). The PHC should be capable of providing appropriate management of injuries and accident, first aid, stitching of wounds, incision and drainage of abscess, stabilisation of the condition of the patient before referral, dog bite/ snake bite/ scorpion bite cases, and other emergency conditions. The PHC should have separate Minor OT/ Dressing Room/ Injection Room, *etc.*

Availability of emergency services in the sampled health facilities are enumerated in **Table 2.2.16**.

Table 2.2.16: Status of availability of Emergency Services in the sampled Health Centres

Nature of the facility required to be available	Status of availability
Whether signage display for emergency on entrance available?	Not available in CHCs, Kherengbar and Kumargahat and PHCs, Kanchanbari and Champaknagar.
Whether emergency ward has dedicated triage?	Available only in the PHC, Chachubazar.
Whether emergency ward has resuscitation and observation area?	Available only in the PHC, Chachubazar.
Whether emergency ward has separate provision for examination of rape/sexual assault victim?	Labour room is used in the PHCs, Ganganagar, Kanika Memorial, Chachubazar and Champaknagar while not done in other two PHCs and three CHCs.
Whether emergency ward has Separate emergency beds. Duty rooms for doctors/ nurses/ paramedical staff and medico legal cases?	Only beds for burn patients were maintained by the CHC, Kumarghat and no facility was available to other sampled CHCs and PHCs.
Whether emergency ward has Emergency block to have ECG, Pulse Oximeter, Cardiac Monitor with Defibrillator, Multiparameter Monitor, Ventilator also?	ECG and Pulse Oximeter were available in the Emergency Room at PHC, Dhumacherra while not available in other sampled CHCs and PHCs.
Whether emergency ward has procedure for Receiving and triage of patients?	Two beds were available for observation in the PHC, Chachubazar and not available in other sampled CHCs and PHCs.
Whether emergency ward has emergency protocols are defined and implemented?	Not available to any of the sampled CHCs and the PHCs.

Source: Joint Physical verification data

It may be seen from **Table 2.2.16** that most of the emergency services were virtually absent in the sampled health centres. Thus, due to non-availability of emergency services and other specialist services, emergency patients and patients with cardiovascular diseases, *etc.* were referred to the District and State Hospitals for better treatment putting the patients at distress involving higher out of pocket expenses.

2.2.10 Maternal and Child Care

2.2.10.1 MMR and IMR

Maternal Mortality Rate (MMR) refers the number of maternal deaths per 100,000 live births due to causes related to pregnancy or within 42 days of termination of

pregnancy, regardless of the site or duration of pregnancy. Infant Mortality Rate (IMR) indicates the number of deaths of infants (under one year) per 1,000 live births.

The All India MMR during 2014-16 stood at 130 per 100,000 live birth which declined to 113 in 2016-18. The All India IMR which stood at 34 per 1000 live births in 2016 came down to 28 in 2020.

Trend of MMR and IMR in Tripura during 2016-22 is shown in **Table 2.2.17**.

Table 2.2.17: Trend of MMR and IMR of Tripura during 2016-22

Year	Number(s) reported			Presumptive MMR in Tripura (of one lakh live births)	IMR in India	IMR in Tripura (of 1,000 live births)
	Livebirths	Maternal deaths	Infant deaths			
2016-17	48,804	Data not available	572	Could not be calculated due to non-availability of data	34	24
2017-18	51,166	68	999	133	33	29
2018-19	50,035	37	828	74	32	27
2019-20	51,339	47	982	91	30	21
2020-21	49,442	45	940	91	29	18
2021-22	49,585	50	790	101	28	16

Source: Health Management Information System (HMIS) data, Tripura

The MMR for State was not calculated as the live birth figure was below one lakh during 2016-17 to 2021-22. However, presumptive⁴³ MMR and IMR in the State were lower than all India figures. The IMR after rising in 2017-18 had shown a continuous downward trend. In all the years during 2016-17 to 2021-22, the IMR was well below the All-India average figure, which is a positive sign.

In the sampled CHCs, IMR during 2016-22 was well below the State average and declined. CHCs, Manu and Kumarghat had reported maximum IMR of 13 and 15 during 2016 and 2017-18 respectively, which declined to seven and zero during 2021-22. No sampled CHCs recorded maternal death during the period. Similar declining trend in IMR was also noticed in case of the sampled PHCs. The trend of MMR and IMR in the sampled health centres during 2016-22 is given in **Appendix 2.2.15**.

2.2.10.2 Antenatal Care

According to the IPHS, HSC are mainly responsible for providing Ante Natal Care (ANC) service to the pregnant woman which includes early registration of pregnant woman and providing of minimum four ANC services, name based tracking of all pregnant women for assured service delivery and identification of high-risk pregnancy cases. Role of the ANM is to provide the outreach services to the people under the respective Sub Centre.

The total number of Pregnant Women (PW) in the State registered for ANC, registered within the first trimester (within 12 weeks), number of PW who received up to three-four ANC check-up⁴⁴, number of PW given TT2/ Booster, *etc.* during 2016-22 is shown in **Table 2.2.18**.

⁴³ Proportionate figure was calculated as if the Live Birth was one lakh.

⁴⁴ Up to 2016-17 there was a provision for three ANC check-ups and from 2017-18 provision for four ANC check-up was made.

Table 2.2.18: Pregnant women registered and received ANC services

Year	Number of PW registered for ANC		No. of PWs received up to three to four ANC check-ups (per cent)	TT2 or Booster given to PWs (per cent)	IFA tablets given to PWs (per cent)
	Total	Within first trimester (per cent)			
2016-17	76,813	48,465 (63.1)	48,736 (63.4)	50,326 (65.5)	58,807 (76.6)
2017-18	75,540	46,022 (60.9)	39,861 (52.8)	53,133 (70.3)	29,345 (38.8)
2018-19	72,307	46,766 (64.7)	40,717 (56.3)	52,447 (72.5)	40,849 (56.5)
2019-20	67,065	47,227 (70.4)	46,588 (69.4)	51,405 (76.6)	31,354 (46.8)
2020-21	63,843	46,029 (72.1)	41,555 (65.1)	49,304 (77.2)	27,028 (42.3)
2021-22	60,110	45,234 (75.3)	47,765 (79.5)	51,138 (85.1)	41,607 (69.2)
Total	4,15,678	2,79,743 (67.3)	2,65,219 (63.8)	3,07,753 (74.0)	2,28,990 (55.1)

Source: HMIS data

It can be seen from the **Table 2.2.18** that though the registration of PW within first trimester are gradually improvised during 2016-22 but overall, 32 *per cent* PW did not register within first trimester during this period. Similarly, number of PW for three to four ANC check-ups and TT2 or Booster, IFA doses were 64, 74 and 55 *per cent* respectively.

Thus, the HSCs which were assigned to provide the ANC services to the PW had failed to perform in the key areas of activities though services were gradually being improved.

2.2.10.3 Stillbirths

As per the National Family Health Survey -5⁴⁵ (NFHS-5), the rate of stillbirth in India is 0.90 *per cent* of live births. The trend of stillbirths in Tripura is given in **Table 2.2.19**.

Table 2.2.19: Number and rate of stillbirths in the State

Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total number of deliveries	49,477	51,833	50,343	52,158	49,993	50,133
Number of stillbirths	891	958	862	850	915	868
Percentage of stillbirth with reference to deliveries	1.80	1.85	1.71	1.63	1.83	1.73

Source: HMIS data

It can be seen from **Table 2.2.19** that the rate of stillbirths during 2016-22 in the State ranged between 1.63 and 1.85 which was much higher than the national average of 0.9 *per cent*.

Audit also observed that stillbirth rate varied between 0.25 and 3.03 *per cent* in the sampled PHCs and the CHCs during 2016-22 as shown in **Table 2.2.20**. It was noticed that the PHC, Champaknagar registered highest stillbirth rate of 3.03 *per cent*. However, the delivery service in the PHC commenced in December 2019 only and 33 normal deliveries were done during the audit period.

⁴⁵ National Family Health Survey-5 data.

Table 2.2.20: Stillbirth rate in the sampled PHCs and CHCs

Name of the Health Facility	Number of deliveries during 2016-17 to 2021-22	Number of still birth	Percentage of still birth to deliveries
CHCs			
Manu	2842	34	1.20
Kherengbar	3704	37	1.00
Kumarghat	940	9	0.96
PHCs			
Dhumacherra	1010	6	0.59
Kanchanbari	640	6	0.94
Ganganagar	1156	13	1.12
Chachubazar	395 ⁴⁶	1	0.25
Kanika Memorial	125	2	1.60
Champaknagar	33 ⁴⁷	1	3.03

Source: Hospital records

High stillbirth rates indicated lack of adequate antenatal care in the sampled health centres and HSCs in particular as the HSCs were responsible mainly for delivering ANC services.

2.2.11 Management of drugs

2.2.11.1 Drug storage

The issues noticed in the storage of drugs and vaccines in the sampled health facilities are as under:

- At PHC, Kanchanbari, no permanent medicine storage room was available, and medicines were stored in a semi-permanent room with GCI sheet roofing making the storage room hot during daytime as shown in **Photograph 2.2.1**.



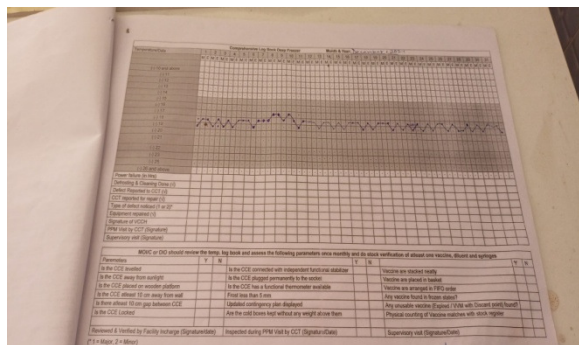
Photograph 2.2.1: Photo of medicine storage room at PHC, Kanchanbari

- Labelled shelves/ racks were not available in the CHC, Kumarghat and PHC, Kanchanbari.
- Temperature recording of the stored vaccines was taken twice a day by all the sampled PHCs and CHCs but due to non-availability of records, the time at which the health facilities were taking temperature could not be ascertained.

⁴⁶ Data for only 2019-20 to 2021-22 was available with the PHC.

⁴⁷ Service commenced from December 2019.

- Vaccine storage data sheet had provision for filling important information viz., duration of power failure, use of independent stabiliser, vaccine found in frozen condition, *etc.* But these were never filled in and there was no monitoring by the in-charge of the health facilities.



Photograph 2.2.2: Important information in the vaccine storage datasheet not filled

- No power back up was available for the Vaccine Storage facility at PHCs, Kanchanbari and Ganganagar.
- Instructions for storage of vaccine were not available in CHC, Kumarghat and the PHC, Kanchanbari.

2.2.11.2 Stock out of drugs in the health facilities

Directorate of Health Services, Government of Tripura prepares Essential Drug List (EDL) for allopathic medicines for use by the all the health facilities in the State. As regards the Ayurvedic and Homoeopathic medicines, no EDL was prepared but list of medicines required to be utilised by the AYUSH facilities in the State were prepared and medicines were procured centrally.

Stock out position of AYUSH and Allopathic medicines was evaluated at the health facility level which is summarised below:

AYUSH medicines: Audit scrutiny revealed that stock position of AYUSH medicines was not maintained in the sampled health centres due to non-availability of AYUSH pharmacist. Thus, non-availability and stock out position of AYUSH medicines could not be evaluated at the facility level. Out of 543 essential Homoeopathy medicines, 339 medicines remained out of stock for a period of one month to 72 months. Regarding Ayurveda medicines, no medicines were continuously available in the health facilities in the State where services were available throughout the audit period (2016-22) and stock out of medicines varied from nine months to 71 months out of the audit period of 72 months (**Appendix 2.2.16**).

Allopathic medicines: It was noticed in the sampled health centres that though requisitioned during 2016-22, 50 to 130 essential medicines were not supplied and their stock out position ranged between four to 15 medicines. Similarly, 44 to 110 medicines were not supplied while the stock out position ranged between one to 31 medicines in the sampled PHCs. Thus, patients were deprived of the required medicines (**Appendix 2.2.16**).

2.2.12 Conclusion

Though services of specialist doctors were to be made available in the CHCs as per the IPHS, no specialist service was available in the CHCs in the State except in CHC,

Kherengbar where Obstetrics & Gynaecology service was available only for twice a week. CHCs were serving like higher bedded PHCs only. Diagnostic services like Radiology, ECG, Ophthalmology, *etc.* which were required to be available in the CHCs as per the IPHS were missing. Quality assurance in the Laboratory Services as mandated under the IPHS was not done. Emergency and Trauma Care service was virtually absent in the sampled health centres. A large number of essential drugs were not supplied to the health institutions and stock out rate of the available medicines was high. HSCs are responsible for providing ANC service to the pregnant woman including the outreach services to the people under them, failed to provide the desired service. As a result, more than 20 *per cent* of the registered PWs did not receive four ANC check-ups during 2021-22.

2.2.13 Recommendations

- i. The sampled HSCs and PHCs were provided adequate manpower over and above the IPHS norms, these may be replicated in all the HSCs and PHCs in the State.*
- ii. State should consider adopting IPHS norms and to post specialist doctors at the CHC level Health facilities.*
- iii. Necessary diagnostic services may be provided in the CHCs to reduce the pressure at the District and State Level Hospitals and also to mitigate the problems of travelling longer distances and incurring out of pocket expenses and;*
- iv Services by the HSCs to be monitored properly to ensure required service delivery as assigned to them.*

Audit objective 2: Whether support services in the health care facilities are available and adequate

2.2.14 Other Support Services

The operational activities of a health facility comprise of a wide variety of support services *viz.* management of linens, dietary management, ambulance service, sweeping and cleaning service, hospital security service, *etc.*

Management of support services in the sampled health institutions are discussed in the succeeding **Paragraphs 2.2.14.1 to 2.2.14.5.**

2.2.14.1 Dietary services

Health and Family Welfare Department had recommended six types⁴⁸ of diets depending upon the types of in-patients. However, sampled PHCs and CHCs did not provide six types of diets as per the instructions of the Government. PHC, Champaknagar started diet service from September 2022 though IPD service commence in December 2019. Records for verification on quality testing of the diet

⁴⁸ Diet No. 1-Milk Diet, Diet No. 2- Milk and Bread Diet, Diet No. 3. – Vegetarian Diet for Adult, Diet No. 4 Vegetarian Diet for Children, Diet No. 5 Diet for Children (Severe Acute Malnutrition) and Diet No. 6 Diet for Malnourished Adult.

served was not available to any of the sampled PHCs and CHCs except the PHC, Chachubazar which also stopped diet testing from April 2021. Diet Chart with the approved quantity was displayed in the hospital wards except in the PHCs, Ganganagar and Champaknagar. FSSAI certificate was not obtained by any of the sampled health centres.

2.2.14.2 Hospital linen services

Health and Family Welfare Department, Government of Tripura did not have any policy for the health facilities in the State for providing clean and hygienic linen to patients and schedule of change of soiled bedsheets, blankets, *etc.* and providing fresh linens which is required as per norms.

The schedule of changing the bedsheets could not be ascertained as no records were maintained by the sampled health facilities. Besides, collection of soiled linens from the wards and returning them back by the service provider were also not maintained. In absence of proper records, standards and procedure followed by the health facilities for sluicing of soiled, infected and fouled linen could not be ascertained in audit. Records relating to monitoring the type and quantity of the cleaning agent or the detergent used for cleaning the soiled linens were not available.

2.2.14.3 Infection control

Hospital Infection Control Committee (HICC) was found to have been formed in five out of the nine sampled health centres which were required as per norms. It was noticed in audit that infection control programme was not prepared by any of the sampled health centres. Verification of the minutes of the HICC at PHC, Dhumacherra, which held maximum HICC meetings⁴⁹ amongst the sampled PHCs, revealed that the HICC failed to deliver any specific road map and plan for hospital infection control mechanism. Thus, it was observed that the HICC failed to address the core issues of infection control despite holding regular meetings and thus, effectiveness of constitution of HICC could not be evaluated.

2.2.14.4 Staff immunisation and medical check-up of health care workers

Periodic medical check-up and immunisation of staff is a part of the hospital infection control programme and to be followed by the CHCs and the PHCs as per norms. Audit noticed that except the CHC, Kumarghat and the PHC, Kanchanbari all the sampled health centres provided Hepatitis B and Tetanus injections to all its health care workers. The Kanika Memorial PHC though held the health check-up did not provide Tetanus vaccine. No records regarding staff immunisation could be produced by any of the sampled health centres.

2.2.14.5 Disinfection and sterilisation

According to the NHM Assessor's Guidebook for Quality Assurance in the health facilities, the facility should have standard procedures for processing for disinfection and sterilisation of equipment and instruments.

⁴⁹ Thirty-one meetings held during 2017-18 to 2021-22.

Audit noticed that all the sampled health centres, except the CHC, Kumarghat and the PHC, Kanchanbari adopted boiling, autoclaving and chemical sterilisation process for disinfection and sterilisation of hospital equipment and instruments. The CHC, Kumarghat and PHC, Kanchanbari were using only boiling process for sterilisation of equipment and instruments. Thus, both the health facilities were not in line with the Hospital Infection Control Guidelines.

2.2.15 Patient safety

2.2.15.1 Disaster management capability of hospitals

NHM Assessor's Guidebook envisages that a Disaster Management Plan (DMP) be prepared for each health facilities. Besides, disaster management training for hospital staff and conduct of periodic mock drills in the hospitals is necessary. Standard Operating Procedures (SOPs) should be available, and a disaster management committee should be constituted.

Audit noticed that the sampled health centres did not have any disaster management plan or any SOP on disaster management. No records regarding conducting mock drill on disaster management was maintained by any of the sampled health centres. No Objection Certificate (NOC) was not obtained from the Tripura Fire Services⁵⁰ under Home Department, Government of Tripura. Fire prevention plan was not found formulated and fire detection alarm was not available in any of the sampled health centres which was required as per norms.

2.2.15.2 Power back-up and water supply

It was noticed that availability of 24x7 power supply including the back-up arrangement was available in all the health centres. However, in the PHCs, Kanchanbari and Ganaganagar, Vaccine Storage Units were running on electrical power source only and without any adequate backup arrangements. No records of power failure were maintained by any of the sampled health facilities.

2.2.16 Bio-Medical Waste management

During the period covered in audit, all the sampled health centres were segregating the waste into different categories in separate-coloured bins, available at the point of generation of waste, particularly in the ward areas, OTs, *etc.*, as per the Bio- Medical Waste Management (BMW) rules, 2016. However, all the wastes were subsequently mixed at the time of dumping except in the CHCs, Manu and Kherengbar and Kanika Memorial PHC and PHC, Dhumacherra, which made the segregation process entirely futile. No facility maintained or updated the BMW register on day-to-day basis nor displayed the monthly records on its website.

⁵⁰ Renamed as Tripura Fire and Emergency Services from December 2020.

All the sampled PHCs and CHCs were using deep burial pit for disposal of hospital wastes. In PHCs, Kanchanbari and Champaknagar the hospital wastes were found thrown open in the hospital backyard. **Photograph 2.2.3** shows the disposal of hospital waste in open space by the PHC, Kanchanbari which poses a serious threat to the environment and the people who live in the surrounding areas.



Photograph 2.2.3: Disposal of hospital waste in open space by the PHC, Kanchanbari

Except PHC, Dhumacherra and CHCs, Manu and Kherengbar, no sampled PHCs and CHCs conducted any training on BMW for the Staff as per norms.

2.2.17 Ambulance Service

Audit noticed except in the PHC, Ganganagar, all other sampled health facilities were having ordinary ambulances. Health centres were providing ambulance service to the emergent cases as a referral transport to the higher health facility centre as a means of free transport.

Except the Basic Life Support (BLS) Ambulance at PHC, Ganganagar, all other ambulances were running without technicians. Because of this, despite the availability of oxygen cylinders in the ambulances, it had no utility at the hour of need. Since no technician travelled with the ambulance provided to the sampled health facilities, the system of regular checking of serviceability and availability of equipment and drugs remained absent.

2.2.18 Evaluation of In-patient Services through Outcome Indicators

This paragraph presents an assessment of overall Health Indicators of the State and the IPD services provided during 2016-22 in the sampled health facilities. The Outcome Indicators (OIs) prescribed in IPHS guidelines are Bed Occupancy Rate (BOR), Leave Against Medical Advice (LAMA) Rate, Absconding Rate and Referred Out Rate (ROR). **Table 2.2.21** gives the categorisation and methodology of evaluating these standards.

Table 2.2.21: Calculation of quality indicators

Type	Quality Indicator	Numerator	Denominator
Productivity of hospital	BOR (in per cent)	Total patient bed days X 100	Total No. of functional beds X No. of days in a month
Service quality of hospital	LAMA (Rate/1000)	Total No. of LAMA X 1000	Total No. of admissions
	Absconding (Rate/1000)	Total No. of Absconding cases X 1000	Total No. of admissions
Efficiency	ROR (in per cent)	Total No. of cases referred to higher facility X 100	Total No. of admissions

Source: IPHS

Relative performance of the sampled health facilities on various OIs as worked out by audit is shown in **Table 2.2.22**.

Table 2.2.22: Outcomes vis-à-vis availability of resources in the sampled health facilities

Sl. No.	Name of the Health Facilities	Outcome Indicators			
		BOR (per cent)	ROR per 1,000	LAMA per 1,000	Abs. Rate per 1,000
CHCs					
1.	Manu	50	97	27	0.95
2.	Kherengbar	17	68	37	0.13
3.	Kumarghat	41	194	13	0.27
PHCs					
4.	Dhumacherra	47	142	26	0.64
5.	Kanchanbari	86	84	21	0.38
6.	Ganganagar	NA	142	56	14.48
7.	Chachubazar	25	88	37	0.68
8.	Kanika Memorial	34	86	5	0.16
9.	Champaknagar	NA	72	42	1.83
Benchmark ⁵¹		80-100%	95	28	1.45

Source: Records of sampled health facilities

- Audit noticed that amongst the sampled CHCs, CHC, Kherengbar with the lowest BOR of 17 which indicated that the CHC, Kherengbar did not have the required IPD facility in terms of doctors and ancillary avenues.
- Audit noticed that the CHC, Kumarghat with ROR of 194 out of 1,000 patients was the highest amongst the sampled health centres, indicating that health care facilities were not at par with other sampled health centres.
- Audit noticed that LAMA and Absconding rates were abnormally high in the PHC, Ganganagar which indicated poor service availability in the health facility.

The CHC, Kumarghat had low bed occupancy and an alarmingly high referred out rate of 194 per 1,000 indicating that this hospital had struggled to provide quality services. Similarly, PHCs, Ganganagar and Champaknagar were also struggling to provide good services to the patients as reflected with the high Referral Out, LAMA and Absconding rate.

2.2.19 Patient rights and grievance redressal

The grievance redressal mechanism is a part of the Citizen Charter as per the IPHS. The Government of Tripura also instituted an on-line Public Grievance Redressal Mechanism System where the Health and Family Welfare Department is also a part but none of the sampled health facilities mentioned the grievance redressal mechanism in the Citizen Charter displayed in the facility.

PHC, Dhumacherra constituted Grievance Redressal Committee in 2017-18 and disposed of 13 complaints which were received during 2017-18 to 2021-22 but no other sampled CHCs and PHCs constituted any such committee and no records relating to complaints were maintained.

⁵¹ Benchmarks: BOR – as per IPHS, weighted average for rest of the outcome indicators.

2.2.20 Conclusion

Hospital support services, viz. dietary service, laundry, and linen service, etc. were in operational in the sampled health facilities without any standard operating guidelines from the Government. FSSAI license was not obtained by any of the sampled health facilities. Health care facilities were running without any safety clearance from the Fire Department and posing a major fire threat to the patients. Hospital Infection Control Committee (HICC) was found to have been formed in five out of the nine sampled health centres and failed to deliver any specific road map and plan to control hospital infection. Sampled Health Facilities were found in not adhering to the Bio Medical Waste Management Rules. The CHC, Kumarghat had low bed occupancy and an alarmingly high referred out rate of 194 per 1,000 indicating that this hospital had struggled to provide quality services. Similarly, PHCs, Ganganagar and Champaknagar were also struggling to provide good services to the patients as reflected with the high Referral Out, LAMA and Absconding rate. Grievance redressal mechanism was not available.

2.2.21 Recommendations

- i. *Standard operational guidelines to be prepared for hospital support services like, linen, laundry, diet service, etc.*
- ii. *Formation of HICC to be ensured in each health facilities and their activities are to be monitored.*
- iii. *Performance of the CHC, Kumarghat and PHCs, Ganganagar and Champaknagar are to be closely monitored.*

Audit objective 3: Whether assets created for Emergency related services were utilised efficiently

2.2.22 Utilisation of Assets for Emergency Related Services

Total pandemic affected cases in the State was 1,07,094 and there were 940 deaths (as on March 2023).

2.2.22.1 Funds and utilisation

The status of receipts of funds and expenditure to deal with the pandemic situation in the State during 2020-22 are given in **Table 2.2.23**.

Table 2.2.23: Receipts and Expenditure of Covid Funds

(₹ in crore)

Financial Year	Name of the Component	Central Share	State Share	Total Funds	Expenditure	Balance
2020-21	SDRF ⁵² -DHS	0.00	38.29	38.29	30.50	7.79
	SDRF-DFWPM	0.00	3.97	3.97	2.79	1.18
	ECRP-I ⁵³	31.42	0.00	31.42	21.24	10.18
	NEC ⁵⁴ Funds	3.00	0.00	3.00	3.00	0.00
	MPLAD ⁵⁵ & BEUP ⁵⁶	0.00	1.20	1.20	1.15	0.05
Sub-Total		34.42	43.46	77.88	58.68	19.20
2021-22	SDRFDHS	0.00	4.00	4.00	0.00	4.00
	SDRF-AGMC	0.00	9.00	9.00	7.79	1.21
	ECRP-II	83.72	9.30	93.02	27.83	65.19
	NESIDS ⁵⁷	4.10	0.00	4.10	0.96	3.14
	Covid Vaccination Fund	0.00	4.85	4.85	4.85	0.00
	State Fund for Oxygen Plant CC Base	0.00	3.16	3.16	3.03	0.13
Sub-Total		87.82	30.31	118.13	44.46	73.67
Grand Total		122.24	73.77	196.01	103.14	92.87

Source: Departmental records, bills and vouchers

During 2020-22, ₹ 196 crore was available with the State for Covid management. Out of which, ₹ 103 crore was utilised and ₹ 93 crore was balance (November 2022) with the State Government.

The funds were mainly utilised for medicines, surgical masks, AC machines for setting up of Covid Care Centre, aprons, body bags, face shield covers, N-95 masks, oxygen face masks for adult and paediatric, PPE Kits, pulse oximeters, oxygen concentrators, ventilators, diet for the patients, patients' transportation, *etc.* Detailed position is given in the **Appendix 2.2.17**.

Of the balance amount, ₹ 8.97 crore pertains to the two⁵⁸ Health Directorates which were meant for medicines and comprehensive maintenance contract (CMC) for Medical Gas Pipeline Systems (MGPS) installed by the DHS in the health facilities in the State. Further, it was noticed during audit of DHS that though there was no immediate requirement of funds for any Covid related activities, unutilised funds were not surrendered. ₹ 10.23 crore remained unspent with the NHM, Tripura which pertained to outstanding advances with the different government implementing authorities and the committed bills pending with the NHM. This indicated poor monitoring by the NHM, Tripura as there was lack of accountability on the part of the

⁵² SDRF- State Disaster Response Fund

⁵³ ECRP-Emergency Covid Response Funds

⁵⁴ NEC-North East Council

⁵⁵ MPLAD- Member of Parliament Local Area Development Fund

⁵⁶ BEUP- Bidhayak Elaka Unnayan Prokolpo (MLA Local Area Development Fund)

⁵⁷ NESIDS-North East Special Infrastructure Development Scheme

⁵⁸ Directorate of Health Services (DHS) and the Directorate of Family Welfare and Preventive Medicine

implementing authorities in submission of adjustments and delay in settlement of bills by the NHM, Tripura.

The ECRP II funds, which constituted the major funds components during 2021-22 were mainly sanctioned for ramping up health infrastructure with the focus on Paediatric care units. Out of total sanction of ₹ 93.02 crore under ECRP-II, ₹ 78.01 crore was allotted for improvement of health infrastructure and ₹ 65.19 crore⁵⁹ remained unspent. Despite availability of funds, progress of works was slow which resulted in slow pace of expenditure. Besides, ₹ 5.21 crore under SDRF sanctioned in 2021-22, mainly intended for medicines and consumables remained unspent (December 2022).

Apart from the above, the State received 14 Oxygen Plants from the PM-CARE funds and eight Oxygen Plants from the UNDP Programme as assistance in kind to deal with the Covid situation in the State.

2.2.22.2 Verification of assets created

The issues related to post Covid utilisation/ usage of the infrastructure created and the equipment/ kits provisioned during the pandemic require a thorough administrative planning, assessment of gaps in the hospital infrastructure and equipment and dedicated effort to bridge the gap with the additional infrastructure and equipment like ICU beds, ICU machines, Oxygen Concentrators, *etc.* created to deal with the situation in the State. Utilisation of assets purchased was examined by audit to ascertain the status of utilisation of infrastructure created and equipment (ventilators, ICU beds and ICU machines/ monitors, Oxygen Plants, Oxygen Concentrators, *etc.*) procured, installed during the pandemic for meeting emergencies in future. Status of verification of major equipment and other hospital items in the three major hospitals in the State are shown in **Appendix 2.2.18**.

Audit noticed that BIPAP Machine, Multipara Monitor, Nasal Oxygen Canula, Oxygen Concentrator, Ventilator, ICU beds, AC machines, *etc.* were lying idle in the hospital store as well as in the Dedicated Covid Hospitals and wards. Assessment was not done to identify the gaps in the hospital infrastructure and planning for utilisation of available additional infrastructure and equipment like ICU beds, ICU machines, Oxygen Concentrators due to which the available infrastructure was lying idle without being utilised in the health care facilities which were in need of the same. The major items which were lying idle as noticed in audit are given in the **Table 2.2.24**.

⁵⁹ ECRP I and ECRP-II funds were lying in the bank account of NHM.

Table 2.2.24: Idle lying of Covid equipment and assets

Sl. No.	Name of the Item	Total Quantity received	Quantity lying idle	Where lying idle
1.	BIPAP Machine	38	28	ABVRCC ⁶⁰ , AGMC ⁶¹ & IGM ⁶²
2.	Defibrillator Machine	4	4	ABVRCC, IGM
3.	ECG Machine	13	7	ABVRCC, AGMC & IGM
4.	ICU Beds	42	27	ABVRCC, IGM
5.	Multipara Monitor (Low End)	65	32	AGMC & IGM
6.	Oxygen Concentrator	484	284	ABVRCC, AGMC & IGM
7.	Ventilator	53	30	AGMC & IGM

The IGM hospital stated (October 2022) that the items which had been procured were kept in the hospital store and the Dedicated Covid Hospital (DCH) as the DCH was yet to be de-notified by the Health and Family Welfare Department, Government of Tripura.

2.2.22.3 Verification of Oxygen Plants and concentrators

Government of Tripura received 22 Pressure Swing Adsorption (PSA) plants from the PM-CARE Funds (14), UNDP (two) and UNICEF (six) during 2021-22. PSA plants were installed in the AGMC & GBPH (two), Tripura Medical College (one), IGM Hospital (one), AVB Regional Cancer Hospital (one), six DHs⁶³, 10 SDHs⁶⁴ and CHC at Khumlung. Audit verification⁶⁵ revealed (October-November 2022) the status of Oxygen Plants in the respective health facilities as given in **Table 2.2.25**.

Table 2.2.25: Status of verification of Oxygen plants in the health facilities in the State

Sl. No.	Health facility	Audit findings
1.	AVB Regional Cancer Hospital	The PSA System remained non-functional from the date of installation (July 2021) to the date of verification (October 2022) except a brief period of one month (August 2022).
2.	IGM Hospital	Medical Gas Pipeline system was created for 100 bedded Dedicated Covid Care Centre (DCCC) in July 2021 and also to supply bottled Oxygen to regular patients of other wards of IPD. The DCCC was not operational as no patient was admitted. The plant remained non-functional from September 2022 as patients in other wards were provided with the purchased bottled Oxygen Cylinders.
3.	SDH, Longtharai Valley (LTV) at Chailengta	The Oxygen plant was installed and commissioned in February 2022. The plant remained non-functional for most of the period (October 2022) due to the absence of proper electrical transformer of suitable capacity (200 KVA capacity instead of available 100 KVA capacity), lack of stabiliser, leakage of the oxygen chamber of

⁶⁰ ABVRC-Atal Bihari Vajpayee Regional Cancer Centre

⁶¹ AGMC- Agartala Government Medical College and Govind Ballav Pant Hospital

⁶² IGM-Indira Gandhi Memorial Hospital

⁶³ DHs at-Khowai, Gomati, South Tripura, Dhalai, Unakoti and North Tripura

⁶⁴ SDHs at- Kamalpur, Chailengta, Amarapur, Udaipur, Teliamura, Kanchanpur, Bisalgarh, Sabroom, Kailashahar and Melagarh

⁶⁵ Nine units (AGMC-2, AVB RCC-1, TMC-1, IGM-1, DH, Dhalai, SDHs-Chailengta, Kamalpur and CHC-Kherengbar) were physically verified in audit. Information were called for from the rest thirteen units.

Sl. No.	Health facility	Audit findings
		the plant, damage of valve, <i>etc.</i> The plant remained completely non-functional since June 2022.
4.	SDH, Sabroom	Log book for running of the PSA plant was not maintained by the Hospital.
5.	SDH, Udaipur SDH, Teliamura SDH, Amarpur SDH, Kailashahar (RGMH) DH, Unakoti and Khowai.	Data regarding consumption of oxygen cylinders for 12 months prior to the installation of PSA plant and consumption in 12 months after installation of the PSA plant were not furnished. Therefore, actual utilisation of the PSA plant could not be ascertained in audit.

Source: Joint Physical verification data and reply furnished by the health facilities

In all the cases, the patients were provided Oxygen Cylinders after refilling and no reduction in the payment made for refilling of Oxygen Cylinders were noticed indicating that the PSAs were non-functional.

It was also noticed that the HSCs under the CHCs, Manu and Kumarghat and PHCs, Dhumacherra and Kanchanbari were provided 28 Oxygen Concentrators with one unit at each sub-centre. Out of these, six HSCs did not have any electrical connection. Thus, these Oxygen Concentrators remained unutilised (August 2022) even after their allotment.

2.2.22.4 Use of expired Viral Transport Medium in the CHC, Kumarghat

In order to detect the presence of COVID-19 Corona virus in the patient, Reverse Transcription Polymerase Chain Reaction (RTPCR) test is conducted using Viral Transport Medium (VTM) kits.

Joint Physical verification (4 August 2022) of the CHC, Kumarghat Laboratory revealed that 157 expired VTMs were lying with the Laboratory. Their expiry dates were between 22 May 2022 and 18 July 2022. The Hospital conducted 136 RTPCR tests during 20 July 2022 to 2 August 2022. Thus, 136 tests were conducted with expired test kits which pointed to absence of a system for monitoring of shelf life of the test kits. Issue and receipt of VTM kits without Indent and Supply Note as noticed in audit was also irregular.

The Sub Divisional Medical Officer, SDH, Kumarghat accepted (September 2022) the facts and stated that expiry dates of VTMs and other items would be checked minutely before use and the concerned Laboratory Technician had been cautioned for using expired VTMs.

2.2.23 Conclusion

Large funds earmarked for dealing with the pandemic situation in the State remained unutilised. Two Directorates did not surrender funds of ₹ 8.97 crore despite no immediate requirement. Progress on ramping up of health infrastructure with the focus on Paediatric care units was slow despite availability of funds. There was no

reduction in the expenditure on oxygen cylinders despite the installation of PSA plants, as these plants largely remained unutilised. Assets created during pandemic, were found idle and are to be re-distributed on the need basis while expired VTMs were found in use for conducting of RTPCR test to detect the presence of virus.

2.2.24 Recommendations

It is recommended that the Department should undertake:

- i. assessment of utilisation of unutilised funds immediately and excess funds be surrendered.*
- ii. monitor regularly progress of health infrastructure works for early completion and speedy utilisation of earmarked funds.*
- iii. utilisation of the assets and equipment created and procured during pandemic may be considered to be redistributed based on the requirement of the health facilities after proper assessment of requirement and a thorough planning. The deficiencies and requirement of such equipment have been pointed in the Performance Audit of Select District Hospitals (Report No. 2 of 2021).*

Audit objective 4: Whether the State spending on health has improved the Health and Well-being conditions of people as per SDG 3

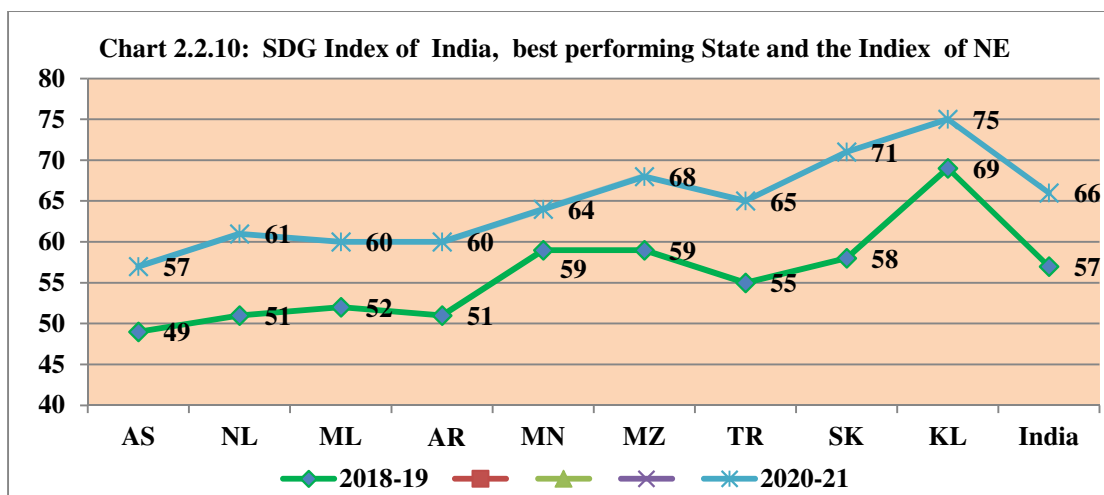
2.2.25 Introduction

The global indicator framework for Sustainable Development Goals (SDGs) were adopted by the General Assembly of the United Nations in July 2017 and is contained in the Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development.

NITI Aayog, the nodal body mandated to oversee the progress, developed the framework of the SDG India Index and Dashboard back in 2018, to capture the progress made by our States and Union Territories to monitor the progress and achievements towards realising the 2030 Agenda.

2.2.25.1 Status of SDGs in the India and the North Eastern States

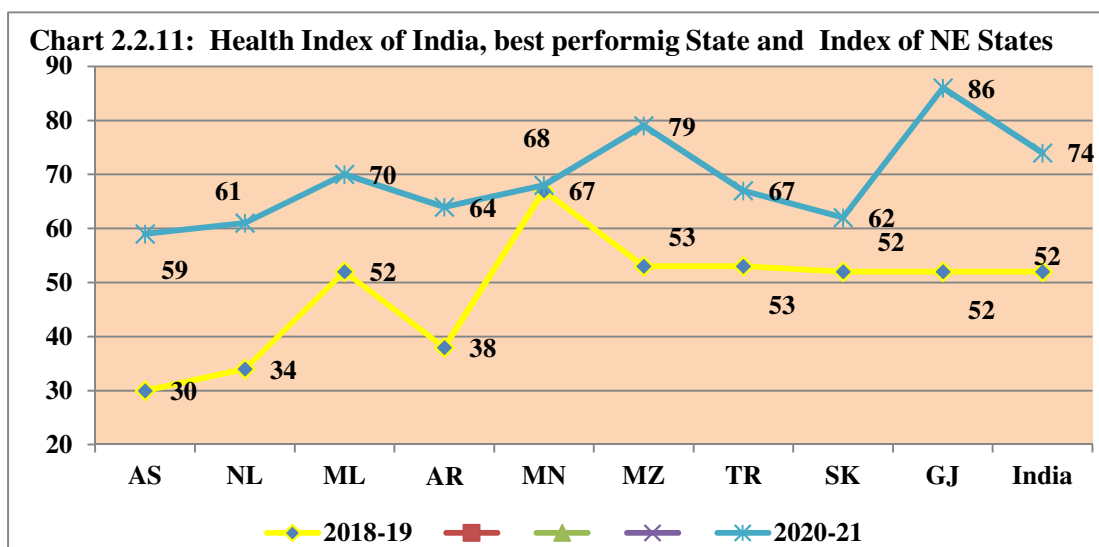
As per the NITI Aayog report on ‘SDG Index India and Dashboard of 2021’, the progress made by the States and the country as a whole of the SDGs are depicted in **Chart 2.2.10**.



Description of Legends: AS-Assam, NL-Nagaland, ML-Meghalaya, AR-Arunachal Pradesh, MN-Manipur, TR-Tripura, SK-Sikkim, KL-Kerala

It can be seen from **Chart 2.2.10** that all the States and India, the country as a whole are gradually moving towards achieving the SDG Goals since all the States have improved their Index positions over the years from 2018 to 2021. Tripura is in the third position with the score of 65 among the NE States and achieved the 15th rank in all India level. Assam is the least performing State in the NE region.

The position with respect to SDG Goal 3 on the Health and Well Being conditions of people has been depicted in the **Chart 2.2.11**.



Description of Legends: AS-Assam, NL-Nagaland, ML-Meghalaya, AR-Arunachal Pradesh, MN-Manipur, TR-Tripura, SK-Sikkim, KL-Kerala

All the States and the Country as a whole are gradually moving towards achieving the goal of health and well being conditions of people. Gujarat recorded best performance at pan India level with score of 86. Tripura is in fourth position with the score of 67 following the states of Meghalaya (score-70) and Manipur (score-68). Though Tripura has moved from 53 to 67 during 2018-19 to 2020-21, indicating a substantial improvement, it still has scope for further improvement.

2.2.25.2 Performance of the State on health specific Indicators

The indicators and the target under the SDG-3 on the Health and Well-being conditions of the people and their achievement at the National level and by the State of Tripura are shown in the **Table 2.2.26**.

Table 2.2.26: Status of achievement of SDG-3 in the State *vis-à-vis* all India achievement

Sl. No.	SDG indicators	Targets	Achievement at		Remarks, if any.
			All India	State	
1.	Maternal Mortality Ratio (per 1,00,000 live births)	70	113	NA	Maternal mortality is not calculated in the state since annual live birth figure is below 100,000.
2.	Under 5 mortality rate (per 1,000 live births)	25	36	38	Current data was not available, 38 pertains to 2019.
3.	Percentage of children in the age group 9-11 months fully immunised	100	91	95	-
4.	Total case notification rate of Tuberculosis per 1,00,000 population	242	177	70	The State is in much better condition compared to the Government of India.
5.	HIV incidence per 1,000 uninfected population	0	0.05	0.11	More than double of all India average, substantially high and needs to be checked.
6.	Suicide rate (per 1,00,000 population)	3.5	10.4	18.2	Much higher and needs to be checked from other than health angles.
7.	Death rate due to road traffic accidents (per 1,00,000 population)	5.81	11.56	5.97	Half of the average all India rate.
8.	Percentage of institutional deliveries out of the total deliveries reported	100	94.40	93.50	-
9.	Monthly per capita out-of-pocket expenditure on health as a share of Monthly Per capita Consumption Expenditure (MPCE)	7.83	13	14.20	This can be linked with the absence of specialists at CHC, which results into visiting State Hospitals.
10.	Total physicians, nurses and midwives per 10,000 population	45	37	22	Government needs to speed up recruitment process.

It can be seen from the **Table 2.2.26** that out of the 10 SDG-3 Health Indicators, the State is lagging behind all India average, in six indicators while maternal mortality is not calculated in the State since annual live birth figure in the State is below 1,00,000. The obvious reason is that the State spending on the health sector was low and ranged a meagre 5.30 *per cent* to 6.66 *per cent* of the State budget during 2016-22 as against the eight *per cent* of the total budget of the State as envisaged in the National Health Policy (NHP), 2017. Also, the primary and secondary health care facilities in the State were running with the acute shortage of manpower in the cadre of doctors, nurses and paramedics during 2016-22.

The State had formed (October 2016) a high level monitoring Committee under the Chairmanship of the Chief Secretary of the State to monitor the progress and achievement of SDG Goals but no regular meetings of the Committee was held. Audit noticed that only two meetings of the Committee were held during 2016-17 to 2021-22. Thus, all these underlying factors contributed to low achievement of the targeted indicators.

2.2.26 Conclusion

State is lagging behind in achieving the SDG -3 indicators in six out of the ten targeted areas in comparison to the national achievements against those indicators. Spending on the health sector was not at the desired level as envisaged in the National Health Policy, 2017. Though monitoring mechanism was designed and developed, regular monitoring was not done, due to which the impact assessment could not be done.

2.2.27 Recommendations

It is recommended that the Government should take appropriate actions including providing for adequate funding, filling up of medical and paramedical vacant posts, regular monitoring for impact assessment and achieving targets specifically for SDG indicators.

FOOD, CIVIL SUPPLIES AND CONSUMER AFFAIRS DEPARTMENT

2.3 Undue benefit to millers

Due to formulation of defective contract clause in milling of paddy in contravention of Government of India's (GoI)'s norms, accepting higher milling cost of paddy above the GoI's approved rates and acceptance of lower out turn ratio, the Department extended undue benefit to millers of ₹ 8.73 crore at the cost of exchequer.

Ministry of Consumer Affairs (Ministry), Food & Public Distribution, Department of Food and Public Distribution, Government of India (GoI) agreed (November 2018) with the proposal of commencing procurement of paddy from farmers in the State subject to formal commitment by the State Government to bear all additional expenditure over and above the norms laid down by the GoI. State Government decided to start procurement operation from December 2018 in collaboration with Food Corporation of India (FCI) during Kharif Marketing Season (KMS)⁶⁶ 2018-19. As per Joint Action Plan approved by the GoI, FCI managed the procurement at the field level (including payment of MSP to the farmers) and down-stream activities, viz. transportation of paddy/ Custom Milled Rice (CMR), milling, etc. were managed by the State Government.

⁶⁶ Procurement calendar of the GoI is based on two definite marketing seasons namely Kharif Marketing Season (KMS) which starts from 1 November every year while Rabi Marketing Season (RMS) starts from 1 April every year.

Appendix 2.2.1

Statement showing district-wise detailed position/ shortage of HSC, PHC and CHC/ SDH in Tripura
(Reference: Paragraph 2.2.2.1)

Name of the District	Population	Requirement as per IPHS norms			Present position			Shortage, if any			Shortage (<i>in per cent</i>)		
		CHC/SDH	PHC	HSC	CHC/SDH	PHC	HSC	CHC/SDH	PHC	HSC	CHC/SDH	PHC	HSC
Sepahijala District	521555	4	17	104	6	15	121	-	2	-	-	12	
Gomati District	487730	4	16	98	6	10	145	-	6	-	-	38	
South Tripura District	461568	4	15	92	8	19	148	-	-	-	-	-	
Khowai District	324896	3	11	65	2	10	104	1	1	-	33	9	
Dhalai District	410443	3	14	82	5	16	121	-	-	-	-	-	
West Tripura District	926753	8	31	185	3	20	192	5	11	-	63	35	
Unakoti District	296718	2	10	59	2	12	70	-	-	-	-	-	
North Tripura District	468763	4	16	94	4	16	101	-	-	-	-	-	
Total	3898426	32	130	779	36	118	1002						

Appendix 2.2.2

Statement showing detailed position/ shortage of Specialists, GDMOs, Staff Nurses and Paramedics in the six District Hospitals in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Requirement of Specialists as per IPHS	Specialists in position						Shortage of Specialists						Shortage (in per cent)					
			16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22
1	North Tripura	17	9	10	11	14	16	15	8	7	6	3	1	2	47	41	35	18	6	12
2	South Tripura	17	2	3	4	5	7	9	15	14	13	12	10	8	88	82	76	71	59	47
3	Khowai	17	6	7	10	7	7	9	11	10	7	10	10	8	65	59	41	59	59	47
4	Dhalai	20	9	11	13	15	14	17	11	9	7	5	6	3	55	45	35	25	30	15
5	Unakoti	20	NA	11	13	11	11	11	NA	9	7	9	9	9	NA	45	35	45	45	45
6	Gomati	20	16	16	18	18	18	18	4	4	2	2	2	2	20	20	10	10	10	10
		111	42	58	69	70	73	79	49	53	42	41	38	32	54	48	38	37	34	29

Sl. No.	Name of the District	Requirement of GDMOs as per IPHS	GDMOs in position						Shortage of GDMOs						Shortage (in per cent)					
			16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22
1	North Tripura	11	8	8	8	8	8	8	3	3	3	3	3	3	27	27	27	27	27	27
2	South Tripura	11	2	2	2	2	2	2	9	9	9	9	9	9	82	82	82	82	82	82
3	Khowai	11	11	11	8	7	7	7	0	0	3	4	4	4	0	0	27	36	36	36
4	Dhalai	13	2	2	2	2	2	2	11	11	11	11	11	11	85	85	85	85	85	85
5	Unakoti	13	NA	4	4	4	4	4	NA	9	9	9	9	9	NA	69	69	69	69	69
6	Gomati	13	10	12	7	9	6	13	3	1	6	4	7	0	23	8	46	31	54	0
		72	33	39	31	32	29	36	26	33	41	40	43	36	44	46	57	56	60	50

Appendix 2.2.2 (concl.)

Statement showing detailed position/shortage of Specialists, GDMOs, Staff Nurses and Paramedics in the six District Hospitals in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Requirement of Staff Nurses as per IPHS	Staff Nurses in position						Shortage of Staff Nurses						Shortage (in per cent)					
			16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22
1	North Tripura	45	31	34	38	39	40	41	14	11	7	6	5	4	31	24	16	13	11	9
2	South Tripura	45	24	26	30	32	36	35	21	19	15	13	9	10	47	42	33	29	20	22
3	Khowai	45	42	45	44	39	43	43	3	0	1	6	2	2	7	0	2	13	4	4
4	Dhalai	90	46	46	46	47	47	47	44	44	44	43	43	43	49	49	49	48	48	48
5	Unakoti	90	NA	47	46	47	47	44	NA	43	44	43	43	46	NA	48	49	48	48	51
6	Gomati	90	78	81	80	82	83	76	12	9	10	8	7	14	13	10	11	9	8	16
		405	221	279	284	286	296	286	94	126	121	119	109	119	30	31	30	29	27	29

Sl. No.	Name of the District	Requirement of Paramedics as per IPHS	Paramedics in position						Shortage of Paramedics						Shortage (in per cent)					
			16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22	16-17	17-18	18-19	19-20	20-21	21-22
1	North Tripura	30	22	29	32	32	30	30	8	1	-2	-2	0	0	27	3	-7	-7	0	0
2	South Tripura	30	9	20	20	22	23	23	21	10	10	8	7	7	70	33	33	27	23	23
3	Khowai	30	50	60	60	24	25	27	-20	-30	-30	6	5	3	-67	-100	-100	20	17	10
4	Dhalai	41	32	32	39	38	38	39	9	9	2	3	3	2	22	22	5	7	7	5
5	Unakoti	41	NA	17	28	29	34	31	NA	24	13	12	7	10	NA	59	32	29	17	24
6	Gomati	41	59	62	66	70	72	72	-18	-21	-25	-29	-31	-31	-44	-51	-61	-71	-76	-76
		213	172	220	245	215	222	222	0	-7	-32	-2	-9	-9	0	-3	-15	-1	-4	-4

Appendix 2.2.3

Statement showing the availability of Specialist Doctors in the District Hospitals in the State during 2016-17 to 2021-22

(Reference: Paragraph 2.2.2.3)

Sl. No.	Mandatory requirement as per IPHS	Requirement as per IPHS	Khowai DH (100 Beds)						South Tripura DH (100 Beds)						North DH (100 Beds)					
			2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	Specialists in	SS	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP
1	General Medicine	2	1	1	1	1	1	3	0	1	1	0	1	2	2	2	2	3	3	3
2	Pediatrics	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	General Surgery	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1
4	Ophthalmology	1	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	1	1	1
5	Dental	1	1	1	2	2	2	2	0	0	0	0	0	0	1	1	1	1	1	1
6	Obstetric & Gynae	2	1	1	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
7	ENT	1	0	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1
8	Psychiatry	1	0	0	1	0	0	0	0	0	1	1	1	1	0	0	1	1	1	1
9	Orthopaedics	1	0	0	0	1	1	1	0	0	0	1	1	1	0	0	0	2	2	2
10	Anaesthesia	2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
11	Radiology	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Pathology	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1

Appendix 2.2.3 (concl.d.)

Statement showing the availability of Specialist Doctors in the District Hospitals in the State during 2016-17 to 2021-22

(Reference: Paragraph 2.2.2.3)

Sl No	Mandatory requirement as per IPHS	Requirement as per IPHS	Gomati DH (150 Beds)						Dhalai DH (150 Beds)						Unakoti DH (150 Beds)					
			2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	Specialists in	SS	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP	MIP
1	General Medicine	2	2	2	2	2	2	2	1	1	1	2	2	2		2	2	2	2	1
2	Pediatrics	3	2	2	2	2	2	2	1	1	1	2	1	1		1	1	1	1	1
3	General Surgery	2	2	2	2	2	2	2	0	0	1	1	1	2		1	1	1	1	1
4	Ophthalmology	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
5	Dental	1	1	1	2	2	2	2	2	2	2	2	2	2		0	0	0	0	0
6	Obstetric & Gynae	3	2	2	2	2	2	2	1	1	2	2	2	1		2	3	2	1	2
7	ENT	1	1	1	2	2	2	2	1	1	1	1	1	2		1	1	1	1	1
8	Psychiatry	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	0
9	Orthopedics	1	1	1	1	1	1	1	0	1	1	1	1	2		1	1	1	1	1
10	Anaesthesia	2	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	2	2
11	Radiology	1	1	1	1	1	1	1	0	0	0	0	0	1		0	0	0	0	0
12	Pathology	2	1	1	1	1	1	1	0	1	1	1	1	1		0	1	0	0	1

Appendix 2.2.4

Statement showing detailed position/shortfall of Specialist Doctors in the SDHs/ CHCs under eight Districts in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Specialists as per IPHS	Specialists in position						Shortage of Specialists					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	North Tripura	Panisagar SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		Kanchanpur SDH	9	1	1	1	2	2	3	8	8	8	7	7	6
		Ananda Bazar CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Kadamtala CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	30	1	1	1	2	2	3	29	29	29	28	28	27
2	South Tripura	Belonia, SDH	9	3	4	5	5	5	5	6	5	4	4	4	4
		Sabroom, SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		Jolaibari, CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Manubankul, CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Srinagar, CHC	6	NA	0	0	0	0	0	0	6	6	6	6	6
		Hrishyamukh, CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Manubazar, CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Rajnagar, CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	54	3	4	5	5	5	5	45	50	49	49	49	49
3	Khowai	Teliamura SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		Kalyanpur CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	15	0	0	0	0	0	0	15	15	15	15	15	15
4	Dhalai	Lt. Valley SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		BSM SDH	9	2	2	3	3	4	4	7	7	6	6	5	5
		Ganda Twisa SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		Chawmanu CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Manu CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	39	2	2	3	3	4	4	37	37	36	36	35	35
5	Unakoti	RGM SDH	9	1	1	2	1	2	0	8	8	7	8	7	9
		Kumarghat CHC/SDH	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	15	1	1	2	1	2	0	14	14	13	14	13	15

Appendix 2.2.4 (concl.)

Statement showing detailed position/shortfall of Specialist Doctors in the SDHs/ CHCs under eight Districts in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Specialists as per IPHS	Specialists in position						Shortage of Specialists					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
6	Gomati	Amarpur SDH	9	0	0	0	0	0	2	9	9	9	9	9	7
		Tripurasundari SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		RKN SDH	9	0	0	0	0	0	0	9	9	9	9	9	9
		Natunbazar CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Ompi CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Kakraban CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	45	0	0	0	0	0	2	45	45	45	45	45	43
7	Sepahijala	Melaghar SDH	9	0	0	0	0	0	4	9	9	9	9	9	5
		Bishalgarh SDH	9	0	0	0	0	3	3	9	9	9	9	6	6
		Kathalia CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Sonamura CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Boxanagar CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Takarjala CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	42	0	0	0	0	3	7	42	42	42	42	39	35
8	West Tripura	Jirania CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Kherengbar CHC	6	2	2	2	2	2	2	4	4	4	4	4	4
		Mohanpur CHC	6	0	0	0	0	0	0	6	6	6	6	6	6
		Total:	18	2	2	2	2	2	2	16	16	16	16	16	16
		Grand Total:	258	9	10	13	13	18	23						
		Shortage in %		97	96	95	95	93	91						

Appendix 2.2.5

Statement showing department wise availability of Specialist Doctor in the SDH and CHC in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the SDH/CHC	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Kanchanpur SDH	Microbiology-1	Microbiology-1	Microbiology-1	Microbiology-1 ENT-1	Microbiology-1 ENT-1	Microbiology-1 ENT-1 Medicine-1
2	Belonia SDH	Obs & Gynae-1 ENT-1 Sonologist-1	Obs & Gynae-1 ENT-1 Sonologist-1 Medicine-1	Obs & Gynae-1 Paediatrics-1 Sonologist-1 Medicine-1 Anaesthetist-1	Obs & Gynae-1 Paediatrics-1 Sonologist-1 Medicine-1 Anaesthetist-1	Obs & Gynae-1 Paediatrics-1 Sonologist-1 Medicine-1 Anaesthetist-1	Obs & Gynae-1 Paediatrics-1 Sonologist-1 Medicine-1 Anaesthetist-1
3	BSM, SDH	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1 Pathology-1
4	RGM SDH	Paediatrics-1	Paediatrics-1	Paediatrics-2	Paediatrics-1	Paediatrics-2	Nil
5	Amarpur SDH	Nil	Nil	Nil	Nil	Nil	Medicine-1 Paediatrics-1
6	Melaghar SDH	Nil	Nil	Nil	Nil	Nil	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1 Medicine-1
7	Bishalgarh SDH	Nil	Nil	Nil	Nil	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1	Obs & Gynae-1 Anaesthetist-1 Paediatrics-1
8	Kherengbar CHC	Obs & Gynae-1 Anaesthetist-1	Obs & Gynae-1 Anaesthetist-1	Obs & Gynae-1 Anaesthetist-1	Obs & Gynae-1 Anaesthetist-1	Obs & Gynae-1 Anaesthetist-1	Obs & Gynae-1 Anaesthetist-1

Appendix 2.2.6

Statement showing detailed position/ shortage of Doctors in the SDHs and CHCs under eight districts in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Doctor as per IPHS	Doctor in position						Shortage of Doctor					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	North Tripura	Panisagar SDH	10	5	5	5	5	5	5	5	5	5	5	5	5
		Kanchanpur SDH	10	7	7	8	7	7	8	3	3	2	3	3	2
		Ananda Bazar CHC	5	6	6	4	4	3	3	-1	-1	1	1	2	2
		Kadamtala CHC	5	6	6	7	6	6	5	-1	-1	-2	-1	-1	0
		Total:	30	24	24	24	22	21	21	6	6	6	8	9	9
2	South Tripura	Belonia, SDH	10	6	7	6	6	6	7	4	3	4	4	4	3
		Sabroom, SDH	10	6	9	7	7	8	9	4	1	3	3	2	1
		Jolaibari, CHC	5	3	2	2	2	2	2	2	3	3	3	3	3
		Manubankul, CHC	5	3	3	3	3	3	3	2	2	2	2	2	2
		Srinagar, CHC	5	NA	2	2	2	2	2	0	3	3	3	3	3
		Hrishyamukh, CHC	5	3	3	3	3	3	3	2	2	2	2	2	2
		Manubazar, CHC	5	4	3	4	4	4	4	1	2	1	1	1	1
		Rajnagar, CHC	5	2	2	2	2	2	2	3	3	3	3	3	3
		Total:	50	27	31	29	29	30	32	18	19	21	21	20	18
3	Khowai	Teliamura SDH	10	9	9	9	9	9	8	1	1	1	1	1	2
		Kalyanpur CHC	5	4	4	4	4	4	8	1	1	1	1	1	-3
		Total:	15	13	13	13	13	13	16	2	2	2	2	2	-1
4	Dhalai	Lt. Valley SDH	10	3	3	3	4	4	5	7	7	7	6	6	5
		BSM SDH	10	6	7	8	8	9	9	4	3	2	2	1	1
		Ganda Twisa SDH	10	4	4	5	5	5	6	6	6	5	5	5	4
		Chawmanu CHC	5	1	1	1	2	2	3	4	4	4	3	3	2
		Manu CHC	5	2	2	2	3	3	2	3	3	3	2	2	3
		Total:	40	16	17	19	22	23	25	24	23	21	18	17	15
5	Unakoti	RGM SDH	10	7	7	6	6	6	8	3	3	4	4	4	2
		Kumarghat CHC/SDH	5	8	7	8	5	7	8	-3	-2	-3	0	-2	-3
		Total:	15	15	14	14	11	13	16	0	1	1	4	2	-1

Appendix 2.2.6 (concl.)

Statement showing detailed position/ shortage of Doctors in the SDHs and CHCs under eight districts in Tripura

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Doctor as per IPHS	Doctor in position						Shortage of Doctor					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
6	Gomati	Amarpur SDH	10	6	8	7	8	6	7	4	2	3	2	4	3
		Tripurasundari SDH	10	10	9	11	12	15	10	0	1	-1	-2	-5	0
		RKN SDH	10	5	6	5	5	5	5	5	4	5	5	5	5
		Natunbazar CHC	5	4	4	6	5	4	5	1	1	-1	0	1	0
		Ompi CHC	5	5	5	4	5	5	4	0	0	1	0	0	1
		Kakraban CHC	5	5	5	5	5	5	6	0	0	0	0	0	-1
		Total:	45	35	37	38	40	40	37	10	8	7	5	5	8
7	Sepahijala	Melaghar SDH	10	4	4	4	4	5	5	6	6	6	6	5	5
		Bishalgarh SDH	10	6	6	6	6	8	8	4	4	4	4	2	2
		Kathalia CHC	5	2	3	4	4	3	4	3	2	1	1	2	1
		Sonamura CHC	5	2	3	4	4	3	5	3	2	1	1	2	0
		Boxanagar CHC	5	2	3	4	4	3	4	3	2	1	1	2	1
		Takarjala CHC	5	3	3	3	6	6	6	2	2	2	-1	-1	-1
		Total:	40	19	22	25	28	28	32	21	18	15	12	12	8
8	West Tripura	Jirania CHC	5	11	14	14	13	11	12	-6	-9	-9	-8	-6	-7
		Kherengbar CHC	5	6	7	7	8	12	12	-1	-2	-2	-3	-7	-7
		Mohanpur CHC	5	3	5	6	3	4	3	2	0	-1	2	1	2
		Total:	15	20	26	27	24	27	27	-5	-11	-12	-9	-12	-12
		Grand Total	250	169	184	189	189	195	206	76	66	61	61	55	44
		Shortage in %								30	26	24	24	22	18

Appendix 2.2.7

Statement showing detailed position/shortage of Staff Nurses in the SDHs and CHCs under eight districts in Tripura
(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Staff Nurse as per IPHS	Staff Nurse in position						Shortage of Staff Nurse					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	North Tripura	Panisagar SDH	18	7	7	7	8	8	10	11	11	11	10	10	8
		Kanchanpur SDH	18	19	19	17	17	17	15	-1	-1	1	1	1	3
		Ananda Bazar CHC	11	5	4	4	4	4	4	6	7	7	7	7	7
		Kadamtala CHC	11	8	7	8	8	7	8	3	4	3	3	4	3
		Total:	58	39	37	36	37	36	37	19	21	22	21	22	21
2	South Tripura	Belonia, SDH	18	26	25	25	29	31	30	-8	-7	-7	-11	-13	-12
		Sabroom, SDH	18	15	15	15	15	15	15	3	3	3	3	3	3
		Jolaibari, CHC	11	9	11	11	11	11	11	2	0	0	0	0	0
		Manubankul, CHC	11	5	5	5	5	5	5	6	6	6	6	6	6
		Srinagar, CHC	11	NA	5	5	5	5	5	0	6	6	6	6	6
		Hrishyamukh, CHC	11	5	4	4	4	4	4	6	7	7	7	7	7
		Manubazar, CHC	11	9	9	9	9	10	10	2	2	2	2	1	1
		Rajnagar, CHC	11	6	6	6	6	6	6	5	5	5	5	5	5
		Total:	102	75	80	80	84	87	86	16	22	22	18	15	16
3	Khowai	Teliamura SDH	18	23	23	23	23	23	23	-5	-5	-5	-5	-5	-5
		Kalyanpur CHC	11	9	9	9	9	9	9	2	2	2	2	2	2
		Total:	29	32	32	32	32	32	32	-3	-3	-3	-3	-3	-3
4	Dhalai	Lt. Valley SDH	18	7	7	7	8	10	11	11	11	11	10	8	7
		BSM SDH	18	21	22	24	24	25	25	-3	-4	-6	-6	-7	-7
		Ganda Twisa SDH	18	10	10	10	11	11	13	8	8	8	7	7	5
		Chawmanu CHC	11	2	2	2	3	4	6	9	9	9	8	7	5
		Manu CHC	11	5	6	6	7	7	8	6	5	5	4	4	3
		Total:	76	45	47	49	53	57	63	31	29	27	23	19	13
5	Unakoti	RGM SDH	18	0	0	0	0	0	0	18	18	18	18	18	18
		Kumarghat CHC/SDH	11	17	19	14	14	14	13	-6	-8	-3	-3	-3	-2
		Total:	29	17	19	14	14	14	13	12	10	15	15	15	16

Appendix 2.2.7 (concl.)

Statement showing detailed position/ shortage of Staff Nurses in the SDHs and CHCs under eight districts in Tripura
(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of Staff Nurse as per IPHS	Staff Nurse in position						Shortage of Staff Nurse					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
6	Gomati	Amarpur SDH	18	13	12	14	13	12	13	5	6	4	5	6	5
		Tripurasundari SDH	18	14	15	12	14	15	14	4	3	6	4	3	4
		RKN SDH	18	11	12	11	12	11	12	7	6	7	6	7	6
		Natunbazar CHC	11	11	10	11	11	10	10	0	1	0	0	1	1
		Ompi CHC	11	10	11	10	10	8	9	1	0	1	1	3	2
		Kakraban CHC	11	7	8	6	7	7	6	4	3	5	4	4	5
		Total:	87	66	68	64	67	63	64	21	19	23	20	24	23
7	Sepahijala	Melaghar SDH	18	8	8	9	11	11	16	10	10	9	7	7	2
		Bishalgarh SDH	18	20	20	20	20	20	20	-2	-2	-2	-2	-2	-2
		Kathalia CHC	11	5	6	5	6	8	9	6	5	6	5	3	2
		Sonamura CHC	11	5	6	5	6	7	8	6	5	6	5	4	3
		Boxanagar CHC	11	5	6	5	6	5	6	6	5	6	5	6	5
		Takarjala CHC	11	6	6	6	9	9	9	5	5	5	2	2	2
		Total:	80	49	52	50	58	60	68	31	28	30	22	20	12
8	West Tripura	Jirania CHC	11	6	8	8	9	8	8	5	3	3	2	3	3
		Kherengbar CHC	11	7	7	9	9	9	9	4	4	2	2	2	2
		Mohanpur CHC	11	11	11	12	12	12	12	0	0	-1	-1	-1	-1
		Total:	33	24	26	29	30	29	29	9	7	4	3	4	4
		Grand Total:	494	347	361	354	375	378	392	136	133	140	119	116	102
		Shortage (in per cent)								28	27	28	24	23	21

Appendix 2.2.8

Statement showing detailed position/ shortage of Paramedics in the SDHs and CHCs under eight districts in Tripura
(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of paramedics as per IPHS	Paramedics in position						Shortage of paramedics					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	North Tripura	Panisagar SDH	27	5	5	5	5	5	7	22	22	22	22	22	20
		Kanchanpur SDH	27	6	6	8	8	9	8	21	21	19	19	18	19
		Ananda Bazar CHC	11	4	4	5	5	5	4	7	7	6	6	6	7
		Kadamtala CHC	11	2	2	2	2	1	1	9	9	9	9	10	10
		Total:	76	17	17	20	20	20	20	59	59	56	56	56	56
2	South Tripura	Belonia, SDH	27	19	21	21	19	20	21	8	6	6	8	7	6
		Sabroom, SDH	27	9	9	9	11	9	9	18	18	18	16	18	18
		Jolaibari, CHC	11	6	6	6	6	6	6	5	5	5	5	5	5
		Manubankul, CHC	11	4	4	4	4	4	4	7	7	7	7	7	7
		Srinagar, CHC	11	NA	3	3	3	3	3	0	0	8	8	8	8
		Hrishyamukh, CHC	11	7	7	7	7	7	7	4	4	4	4	4	4
		Manubazar, CHC	11	5	6	6	6	6	6	6	5	5	5	5	5
		Rajnagar, CHC	11	6	6	6	6	6	6	5	5	5	5	5	5
		Total:	120	56	62	62	62	61	62	53	50	58	58	59	58
3	Khowai	Teliamura SDH	27	6	6	6	6	6	6	21	21	21	21	21	21
		Kalyanpur CHC	11	4	4	4	4	4	4	7	7	7	7	7	7
		Total:	38	10	10	10	10	10	10	28	28	28	28	28	28
4	Dhalai	Lt. Valley SDH	27	6	6	8	8	8	10	21	21	19	19	19	17
		BSM SDH	27	38	39	40	40	42	42	-11	-12	-13	-13	-15	-15
		Ganda Twisa SDH	27	15	17	17	22	22	22	12	10	10	5	5	5
		Chawmanu CHC	11	7	9	10	12	12	14	4	2	1	-1	-1	-3
		Manu CHC	11	8	8	8	10	10	13	3	3	3	1	1	-2
		Total:	103	74	79	83	92	94	101	29	24	20	11	9	2
5	Unakoti	RGM SDH	27	2	4	4	4	4	4	25	23	23	23	23	23
		Kumarghat CHC/SDH	11	7	5	6	6	6	6	4	6	5	5	5	5
		Total:	38	9	9	10	10	10	10	29	29	28	28	28	28

Appendix 2.2.8 (concl.)

Statement showing detailed position/ shortage of Paramedics in the SDHs and CHCs under eight districts in Tripura
(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	Name of the HCI	Requirement of paramedics as per IPHS	Paramedics in position						Shortage of paramedics					
				2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
6	Gomati	Amarpur SDH	27	5	7	5	6	6	7	22	20	22	21	21	20
		Tripurasundari SDH	27	8	10	9	10	10	10	19	17	18	17	17	17
		RKN SDH	27	2	2	2	2	2	2	25	25	25	25	25	25
		Natunbazar CHC	11	4	3	4	3	4	4	7	8	7	8	7	7
		Ompi CHC	11	5	4	5	3	5	4	6	7	6	8	6	7
		Kakraban CHC	11	2	2	2	2	2	2	9	9	9	9	9	9
		Total:	114	26	28	27	26	29	29	88	86	87	88	85	85
7	Sepahijala	Melaghar SDH	27	14	14	14	14	14	16	13	13	13	13	13	11
		Bishalgarh SDH	27	16	16	16	16	16	16	11	11	11	11	11	11
		Kathalia CHC	11	5	4	5	5	6	6	6	7	6	6	5	5
		Sonamura CHC	11	5	4	5	5	7	8	6	7	6	6	4	3
		Boxanagar CHC	11	5	4	5	5	5	5	6	7	6	6	6	6
		Takarjala CHC	11	8	10	10	15	15	15	3	1	1	-4	-4	-4
		Total:	98	53	52	55	60	63	66	45	46	43	38	35	32
8	West Tripura	Jirania CHC	11	15	15	15	14	16	15	-4	-4	-4	-3	-5	-4
		Kherengbar CHC	11	2	2	2	2	2	2	9	9	9	9	9	9
		Mohanpur CHC	11	1	1	1	0	0	0	10	10	10	11	11	11
		Total:	33	18	18	18	16	18	17	15	15	15	17	15	16
		Grand Total:	620	263	275	285	296	305	315	346	337	335	324	315	305
		Shortage (in per cent)								56	54	54	52	51	49

Appendix 2.2.9

Shortage of adequate manpower in the Health Sub-Centres in the State

(Reference: Paragraph 2.2.2.3)

Sl. No.	Name of the District	No. of Health Sub-Centers	No. where adequate manpower is not posted	Percentage of shortage
1.	Sepahijala	121	103	85
2.	Gomati	145	145	100
3.	South Tripura	148	136	92
4.	Dhalai	121	71	59
5.	Unakoti	70	25	36
6.	North Tripura	101	91	90
7.	Khowai	104	91	88
8.	West Tripura	189	73	41
Total		999	735	74

Appendix 2.2.10

Number of beds in the different wards during 2021-22

(Reference: Paragraph 2.2.2.5)

Sl. No.	Name of the Department	DH, Dhalai	DH, Gomati	DH, Khowai	DH, North	DH, South	DH, Unakoti
1	Medicine (Male & Female)	55	40	55	25	40	30
2	Surgical (Male & Female)	25	40		20	5	14
3	Orthopaedic	5				5	10
4	Paediatrics	25	16		15	20	27
5	OBS & Gynae	25	20	14	25	12	30
6	Ophthalmology	10	12		5		23
7	Psychiatric						
8	Post Caesarean		15			6	
9	Post Operative		5				
10	Cabin		2				
11	ENT	5					4
12	Emergency			25	10	12	
13	Isolation						12
	Total:-	150	150	94	100	100	150
	Additional beds						
1	SNCU	12	12	6	0	0	0
2	ICU	0	8	0	0	0	0
3	NRC	10	0	0	0	0	0
	Total:-	22	20	6	0	0	
	G. Total:-	172	170	100	100	100	150

Appendix 2.2.11

Statement showing the name of the sampled CHCs, PHCs covered by audit
(Reference: Paragraph 2.2.5)

Sl. No.	District	Name of CHC	Sl. No.	Name of PHC
1	Dhalai	Manu	1	Dhumacherra
			2	Ganganagar
2	Unakoti	Kumarghat ²⁰²	1	Dhanbilash (Kanika Memorial)
			2	Kanchanbari
3	West Tripura	Kherengbar	1	Chachubazar
			2	Champaknagar

²⁰² Kumarghat CHC has been upgraded to Sub Divisional Hospital w.e.f 1 April 2022. During the period covered in audit it was CHC.

Appendix 2.2.12

Statement showing the deployment of health care personnel in the Health Sub Centres under the sampled PHCs

(Reference: Paragraph 2.2.7)

Name of the PHC/CHC	Name of the HSCs	Manpower available in the SC			
		CHO	MPW (M)	ANM/ MPW (F)	Total
CHC, Manu	Jarulcherra	1	1	0	2
	Jamircherra	1	1	0	2
	S K Para	1	0	1	2
	Mainama	1	1	1	3
CHC, Kherengbar	Jiraniakhola	1	2	0	3
	West Jiraniakhola	1	1	0	2
	Janmejoynagar	1	1	0	2
	South Rajdharpur	1	1	1	3
	East Janmejoynagar	1	0	1	2
CHC, Kumarghat (now SDH)	Betcherra	1	1	1	3
	Dakshin Unakoti	1	1	1	3
	Darchai	0	1	1	2
	Deo Valley	1	1	1	3
	Dudhpur	1	0	1	2
	East Kanchanbari	1	1	1	3
	East Raitwisa	1	0	1	2
	Sukanta Nagar	0	1	1	2
	Sunaimuri	0	1	1	2
	Saidabari	0	1	1	2
	Ujan Dudhpur	1	1	0	2
PHC, Dhumacherra	North Dhumacherra	1	1	1	3
	Karati Cherra	1	2	0	3
	Battala	1	1	1	3
	Longtarai RF	1	1	1	3
PHC, Kanchanbari	Demdum	1	0	1	2
	East Masauli	0	0	2	2
	East Ratacherra	1	0	1	2
	Juricherra	1	1	0	2
	Laljuri	1	1	0	2
	West Masauli	1	0	1	2
	Saidarpar	1	1	1	3
	Tarani nagar	1	0	1	2
	West Ratacherra	1	1	0	2

Appendix 2.2.12 (concl.)

Statement showing the deployment of health care personnel in the Health Sub-Centres under the sampled PHCs

(Reference Paragraph No. 2.2.7)

Name of the PHC/CHC	Name of the Sub-Centre	Manpower available in the SC			
		CHO	MPW (M)	ANM/ MPW (F)	Total
Chachubazar PHC	Gaja Sub Centre	0	1	0	1
	Sonai	0	1	0	1
	Khamper	1	1	0	2
	Barakathal	1	1	0	2
	Twirajkami	1	1	0	2
	East Tamakari	0	1	0	1
	Weast Tamakari	0	0	1	1
	Domrakaridak	0	1	0	1
	Chachubazar	0	1	0	1
Ganganagar PHC	Malda Kumar Roaja Para	1	1	0	2
	Karnamanipara	1	1	0	2
	Nunacherra	1	1	0	2
	Kalabari	1	1	0	2
	Krishnajoy para	1	1	0	2
	Siddhapara	1	1	0	2
	Bharatchandra para	0	2	0	2
Kanika Memorial PHC (Dhanbilash)	Bilashpur	0	1	1	2
	Chaintail	1	0	1	2
	Dhanbilash	1	2	0	3
	Gournagar	1	1	1	3
	Howerbazar	1	0	1	2
	Jalai	1	2	0	3
	Kaulikura	0	1	1	2
	Milong	0	1	0	1
	Singirbil	0	1	2	3
Champaknagar PHC	West Debendranagar	1	1	1	3
	Madhya Debendranagar	1	1	0	2
	Champaknagar	0	0	2	2
	Champabari	1	1	0	2
	Kasidas	1	1	1	3
	Santinagar	1	1	0	2
	Belbari	1	1	0	2
	East Belbari	1	1	1	3

Appendix 2.2.13

Statement showing the availability of facilities at the Registration Counters in the sampled PHCs and CHCs

(Reference: Paragraph 2.2.8.1)

Name of the health facility	Adequate seating arrangement	Drinking water facility	Adequate fans	Separate toilet for ladies and gents
CHCs				
Manu	Yes	No	No	Yes
Kherengbar	Yes	Yes	Yes	No
Kumarghat	Yes	No	Yes	Yes
PHCs				
Dhumacherra	Yes	Yes	Yes	Yes
Kanchanbari	No	No	No	No
Ganganagar	No	No	Yes	No
Kanika Memorial	Yes	Yes	Yes	No
Chachubazar	Yes	Yes	Yes	No
Champaknagar	No	Yes	Yes	No

Appendix 2.2.14

OPD patients per doctor per annum (per day patient in the bracket) during 2016-2022

(Reference: Paragraph 2.2.8.2)

Name of the Health facilities	2016-17			2017-18			2018-19			2019-20			2020-21			2021-22		
	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)	No of OPD patient	No. of doctors	Patient per doctor per annum (per day)
CHC, Manu	10731	2	5366 (20)	17167	2	8584 (33)	22033	2	11017(42)	18081	3	6027 (23)	8741	3	2914 (11)	10882	2	5441 (21)
CHC, Kherengbar	19093	6	3182 (12)	10581	7	1512 (6)	15186	7	2169 (8)	18372	8	2297 (9)	15188	12	1266 (5)	20287	12	1691 (6)
CHC, Kumarghat	13164	8	1646 (6)	14211	7	2030 (8)	26425	8	3303 (13)	24284	5	4857 (18)	9270	7	1324 (5)	7212	8	902 (3)
PHC, Chachubazar	4801	4	1200 (5)	9315	4	2329 (9)	3229	5	646 (2)	6026	5	1205 (5)	5184	5	1037 (4)	3502	6	584 (2)
PHC, Dhumacherra	5856	2	2928 (11)	7840	2	3920 (15)	11008	2	5504 (21)	10873	2	5437 (21)	4923	3	1641(6)	5736	2	2868 (11)
PHC, Ganganagar	2948	2	1474 (6)	2837	2	1419 (5)	3077	3	1026 (4)	2562	3	854 (3)	1242	3	414 (2)	1347	2	674 (3)
PHC, Kanchanbari	7395	4	1849 (7)	6009	4	1502 (6)	9753	4	2439 (9)	11196	4	2799 (11)	4767	3	1589 (6)	5466	3	1822 (7)
PHC, Kanika Memorial	13900	3	4633 (18)	16291	3	5430 (21)	13057	3	4352 (16)	14211	3	4737 (18)	8063	3	2688 (10)	9523	3	3174 (12)
PHC, Champaknagar	14517	5	2903 (11)	12480	5	2496 (9)	14303	5	2861 (11)	14647	6	2441 (9)	9077	5	1815 (7)	8290	10	829 (3)
Notes: 22 working days in a month on an average have been considered which included Sundays and two Fridays and other occasional Holidays.																		

Appendix 2.2.15

Statement showing the trend of MMR and IMR in the sampled PHCs and CHCs
(Reference: Paragraph 2.2.10.1)

Trend of MMR and IMR in the sampled CHCs

Year	CHC, Manu			CHC, Kumarghat			CHC, Kherengbar		
	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)
2016-17	678	9 (13)	0	247	1 (4)	0	469	1 (2)	0
2017-18	507	2 (4)	0	261	4 (15)	0	512	0	0
2018-19	449	3 (7)	0	228	0	0	493	0	0
2019-20	403	4 (10)	0	127	1 (7)	0	551	0	0
2020-21	370	0	0	61	0	0	737	0	0
2021-22	414	3 (7)	0	11	0	0	915	0	0
Total	2821	21 (7)	0 (0)	935	6 (6)	0 (0)	3677	2 (1)	0 (0)

Source: Records of the health centres'

Trend of MMR and IMR in the sampled PHCs

Year	PHC, Dhumacherra			PHC, Kanchanbari			PHC, Ganganagar		
	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)
2016-17	113	2 (18)	0	106	1 (9)	0	171	0	0
2017-18	186	1 (5)	0	97	0	0	153	0	0
2018-19	215	0	0	99	0	0	198	1 (5)	0
2019-20	187	0	0	119	0	0	196	0	0
2020-21	166	0	0	112	2 (18)	0	223	0	0
2021-22	143	0	0	103	0	0	204	0	0
Total	1010	3 (3)	0	636	3 (5)	0	1145	1 (1)	0

Source: Records of the health centres'

Trend of MMR and IMR in the sampled PHCs

Year	Kanika Memorial PHC			PHC, Chachubazar			PHC, Champaknagar		
	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)	Live births	Infant deaths (IMR in parenthesis)	Maternal Deaths (MMR in parenthesis)
2016-17	82	1 (12)	0	Records could not be produced by the PHC			IPD Service in the PHC commenced in December 2019		
2017-18	65	0	0						
2018-19	57	0	0						
2019-20	38	0	0	126	0	1	3	0	0
2020-21	32	0	0	97	0	0	9	0	0
2021-22	32	0	0	171	0	0	20	0	0
Total	306	1 (3)	0	394	0	2 (5)	32	0	0

Source: Records of the health centers'

Appendix 2.2.16

Statement showing stock out position of allopathic medicines in the sampled CHCs and PHCs during the period from 2016-17 to 2021-22

(Reference: Paragraph 2.2.11.2)

Name of the Health Facility	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Average
Community Health Centres								
Manu	Medicines not supplied	NA	95	57	185	126	185	130
	Stock out position							
	0-6 month	NA	1	1	3	5	5	10
	6-12 month	NA	7	9	10	2	5	
Kherengbar	Medicines not supplied	49	48	43	45	45	71	50
	Stock out position							
	0-6 month	0	0	1	1	0	10	4
	6-12 month	0	0	0	0	0	13	
Kumarghat	Medicines not supplied	51	62	77	132	107	66	83
	Stock out position							
	0-6 month	8	4	7	1	5	6	15
	6-12 month	9	18	8	10	5	9	
Primary Health Centres								
Dhumacherra	Medicines not supplied	25	NA	53	52	58	30	44
	Stock out position							
	0-6 month	2	NA	4	3	6	3	16
	6-12 month	5	NA	14	14	6	21	
Kanchanbari	Medicines not supplied	55	NA	153	150	129	62	110
	Stock out position							
	0-6 month	3	NA	1	2	0	0	1
	6-12 month	0	NA	0	0	0	0	
Ganganagar	Medicines not supplied	71	63	69	77	77	Data awaited from PHC	71
	Stock out position							
	0-6 month	4	14	2	0	4		9
	6-12 month	11	3	1	3	1		
Chachubazar	Medicines not supplied	NA	NA	67	65	67	59	65
	Stock out position							
	0-6 month	NA	NA	11	12	18	12	31
	6-12 month	NA	NA	3	22	12	34	
Kanika Memorial	Medicines not supplied	33	37	30	121	49	28	50
	Stock out position							
	0-6 month	18	2	0	5	17	19	21
	6-12 month	4	7	7	20	9	15	
Champaknagar	Medicines not supplied	25	25	85	53	58	Data awaited from PHC	49
	Stock out position							
	0-6 month	3	2	11	7	7		9
	6-12 month	0	0	2	5	8		

Appendix 2.2.16 (Contd.)

Statement showing stock out position of medicines in the store of Central Ayurvedic Medicine Store during the period from 2016-17 to 2021-22

(Reference: Paragraph 2.2.11.2)

Sl. No.	Name of Medicine	Stock-out position						Total No. of months
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
1	Ashokarishtha	12	12	8	10	12	11	65
2	Agnitundivati	12	4	12	5	12	4	49
3	Kaishore Guggula	9	0	5	2	0	0	16
4	Arugyavardhini	12	12	12	12	12	11	71
5	Chandraprava	1	12	7	7	11	0	38
6	Sanjivanivati	5	9	6	12	11	0	43
7	Vyoshadi	12	12	12	0	12	12	60
8	M. Swadistha Virichan Churna	0	2	12	0	6	0	20
9	Kutaj Ghana vati	12	10	8	6	3	11	50
10	Yugraj Guggula	4	7	5	4	12	11	43
11	Bhaskar Laban	0	0	7	11	2	11	31
12	M. Sarpagandha Misran	0	4	12	0	0	3	19
13	Trayodasanga Guggula	0	0	5	3	4	8	20
14	Panchaguna Tail (50 ml)	1	3	0	0	0	5	9
15	Chitrakadi Vati Gutika	1	0	9	4	0	10	24
16	M. Vasako	8	3	5	0	0	0	16
17	Laxmivilash	0	0	5	12	4	0	21
18	Trivibhankirti Ras	10	12	12	12	12	12	70
19	Mahamash Tail (450 ml)	11	3	12	12	11	3	52
20	Hingustak Churna	2	12	12	12	12	12	62
21	Sito Paladi Churna	0	9	12	12	12	12	57
22	Ashwagandha Churna	0	3	12	12	11	5	43
23	Dhatrilouha Cap.	0	3	12	12	11	0	38
24	Dasamalarishtha	5	8	6	12	11	10	52
25	Drakshasava	5	12	12	12	12	12	65
26	Eranda Tail	0	1	12	12	11	2	38
27	Mahanarayan Tail	0	1	12	12	12	11	48
28	Panchaguna Tail (450 ml)	0	4	12	12	12	12	52
29	Anu Tail	0	4	12	12	12	12	52
30	Br. Saindhavadya Tail	0	4	12	12	12	12	52
31	Balashvagandha Lakshadhi Tail	0	1	12	12	12	11	48
32	M. Liv	0	4	12	0	11	0	27
33	Punarnabadi Mandour	0	3	12	3	0	6	24
34	Khirabala Tail	10	3	12	12	11	0	48
35	Dasamulakwath	10	0	9	12	11	5	47

Appendix 2.2.16 (Concl'd.)

Statement showing stock out position of medicines in the store of Central Ayurvedic Medicine Store during the period from 2016-17 to 2021-22

(Reference: Paragraph 2.2.11.2)

Sl. No.	Name of Medicine	Stock-out position						Total No. of months
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
36	Rasnairandadi kwath	10	0	9	12	12	12	55
37	Rasnasapta kwath	10	12	12	12	11	5	62
38	Vistinduk vati	10	0	6	1	12	12	41
39	Vidangadya Lauha	10	4	12	12	12	12	62
40	Chandramitha Ras	10	4	12	4	0	4	34
41	Khadiradi vati	0	8	5	12	11	2	38
42	Haridrakhanda	0	11	3	12	0	5	31
43	Abayarishtha	0	11	8	12	11	2	44
44	Singhanadh Guggula	0	0	0	3	12	12	27
45	M. Sudarshanghana vati	0	0	0	2	12	11	25
46	Arabindoshav	0	0	0	8	12	12	32
47	Brihatmarichadi Tail	0	0	0	1	11	3	15
48	Kanchanar Guggula	0	0	0	1	9	11	21
49	Mrityunjoy Ras	0	0	0	7	12	12	31
50	Navayush Louha	0	0	0	0	2	12	14
51	Ekangavir Ras	0	0	0	0	0	10	10
52	Avipattikar Churna	0	0	0	0	11	5	16
53	Dhannantar Tail	0	0	0	0	11	3	14
54	Vatavidhansan Ras	0	0	0	0	11	5	16
55	Krimimudgar Ras	0	0	0	0	11	6	17
56	Ayush 64	0	0	0	0	0	10	10
57	Prasarani Tail	0	0	0	0	0	10	10
58	Samsamani Vati	0	0	0	0	0	10	10
59	Chawanaprasha	0	0	0	0	0	10	10
60	Pinda Tail	0	0	0	0	0	11	11
61	Arjunarishtha	0	0	0	0	0	11	11
62	Jatradi Tail	0	0	0	0	0	11	11
63	Trifala Guggula	0	0	0	0	0	11	11
64	Swaskuta Ras	0	0	0	0	0	11	11
65	Ashwakuta Ras	0	0	0	0	0	11	11

Appendix 2.2.17

Statement showing procurement of COVID materials by Government of Tripura

(Reference: Paragraph 2.2.22.1)

Sl. No.	Name of the Item	AGMC	IGM	RCC	TMC	DH UNK	DH DHL	DH KHW	DH GMT	DHS NTB	DH DMN	CMO UNK	CMO DHL	CMO KHW	CMO GMT	CMO SOUTH	CMO NORTH	CMOW EST	CMOS PJ	Red Cross Society	SDH BSLG	SBS Youth Hostel	Kiran Gitte	MD, NHM	Total
1	3 Layer Surgical Mask	3,68,250	58700	37650								178400	331600	95000	167500	172200	263080	229506	193450						20,95,336
2	ABG Machine (Blood Gas Analyser)	3																							3
3	Air Conditioner Machine (Split)	13	9									9	9	2	9	9	9								69
4	Accessories for Oxygen Concentrator														30										30
5	Android Tablet	4	1									1	1	1	1	1	1	1	1						13
6	Apron (Disposable Gown)	764	200									350					100								1,414
7	Autoclave	7											1			1									9
8	BiPAP Machine	7	9									2	2	2	2	2	2								28
9	Body Bag Adult (36)	638	15	10								30	34	57	62	65	77	35	30						1,053
10	Bubble CPAP Mechine with Air Compressor Humidifier Air Oxygen Blunder Stand	2	2									2	2	2	2	2	2								16
11	COVERALL	37650	8600	1500								6400	12050	9660	8900	17380	14230	14350	10200						1,40,920
12	Disposable Gloves	214500	74440	79200								232040	368100	154200	182400	208100	318700	237800	201471						22,70,951
13	Deep Freezer				1				1		1		1			1									5
14	Defibrillator Machine	3	3									3	3	3	3	3	3								24
15	Digital BP Machine	6	3	5								6	12	6	11	11	10	10	6						86
16	ECG Machine	9	3									3	3	3	3	3	3								30
17	EEG Machine with Monitor CPU Key Board UPS Printer Stand	1	1									2	1	1	1	1									8
18	FACE SHIELED	4840	2550	500								3770	3150	500	3600	3450	6180		3300						31,840
19	Glucometer with Strip	3	3									3	3	3	3	3	3								24
20	GOGGLE	42650	8500	1500								9400	9150	9900	8900	16980	13130	13240	9910						1,43,260
21	Humidifier for Oxygen Concentrator																10								10
22	ICU Bed	52	22									22	22	22	22	22	22								206
23	Incubator	2	2									2	2	2	2	2	2								16
24	Infrared Thermometer	10		5								28	54	40	51	38	63	77	30						396
25	Laminar Air Flow				1				1				1			1	1								5
26	BiPAP Machine with Accesories	5	4	5																					14
27	Multipara Patient Monitor	56	13																						69
28	N95 Mask	135740	23650	4650								37750	73120	31270	31780	32170	50590	27650	25700						4,74,070
29	High Flow Nasal Canula	25	15									10	10	10	10	10	10								100
30	Nasal Oxygen Cannula Adult	500	1000														200								1,700
31	Nasal Oxygen Cannula Paediatric		1000														100								1,100
32	Nebuliser Mask		10												5										15
33	Needle Cutters	2	2									2	2	2	2	2	2								16
34	Non-Breathing Oxygen Mask	100	50													50									200

Appendix 2.2.17 (contd.)

Statement showing procurement of COVID materials by Government of Tripura
(Reference: Paragraph 2.2.22.1)

Sl. No.	Name of the Item	AGMC	IGM	RCC	TMC	DH UNK	DH DHL	DH KHW	DH GMT	DH SNTB	DH DMN	CMO UNK	CMO DHL	CMO KHW	CMO GMT	CMO SOUTH	CMO NORTH	CMOW EST	CMO SPJ	Red Cross Society	SDHB SLG	SBS Youth Hostel	Kiran Gitte	MD, NHM	Total
35	Ophthalmoscope Machine	2	2									2	2	2	2	2	2								16
36	OT Light with Stand	2	2									2	2	2	2	2	2								16
37	Otoscope Machine	2	2									2	2	2	2	2	2								16
38	Oxygen Concentrator	185	110	91								56	166	66	188	140	201	151	95	40					1,489
39	Oxygen Conserver High Flow Nasal Cannula Device		10									100	200		75	100	350								835
40	Oxygen Face Mask-Adult	200	4000																						4,200
41	Oxygen Humidifier with Flow Meter											40													40
42	Oxygen Mask Paediatric		500									20	200			50	250								1,020
43	Paediatric Ambu Bag	32	22									22	22	22	22	22	22								186
44	Paediatric Laryngoscope Set(Adult 3 Blade	6	4									4	4	4	4	4	4								34
45	Patient Stretcher	4	3									3	3	3	3	3	3								25
46	Phototherapy Machine	2	2									2	2	2	2	2	2								16
47	PPE Kit	5300	650	50								1305	1320	800	1200	990		850	505						12,970
48	Pulse Oximeter	63	50	60								640	1125	567	822	1428	790	2687	792				1		9,025
49	Radiant Warmer	6	6									6	6	6	6	6	6								48
50	Refrigerator Domestic	2	2		1				1		1	2	3	2	2	3	2								21
51	Refrigerator Micro Centrifuge	2											1			1									4
52	RT-PCR Machine	2											1			1									4
53	Sanitizer (2L)	258	16	161								525	911	240	606	716	1292	816	609						6,150
54	Sanitizer (10L)	36	8	13								47	105	23	70	47	136	67	36						588
55	Sanitizer (100ml)	60	20									100	15	20	20	80	40	50	20						425
56	Sanitizer (500ml)	34	24	48								377	769	244	174	387	1179	1040	552						4,828
57	Sanitizer (5L)	272	90	69								198	428	225	345	290	504	150	398						2,969
58	Sanitizer (20L)	59	45	10								9	65	40	33	43	39	50	30						423
59	Suction Machine	7	7									7	7	7	7	7	7								56
60	Surgical Gloves6.5			3500								15500	28900	15500	13000	13500	24200		16400						1,30,500
61	Surgical Gloves7.5		5000	11960								39680	62680	23320	27656	27856	62720	22400	26460						3,09,732
62	Syringe Pump	14	59									9	9	9	9	9	9								127
63	UPS for Ventilator	10	4	4								6	10	6	8	8	6								62
64	Ventilator Neonatal with Consumables	1	1										1		1										4
65	Ventilator Paediatric with Consumables	40	26	4								9	12	9	10	11	14		4						139
66	Vortex Mixture	1			1				1		1		1		1										6
67	Wheel Chair	4	3									3	3	1	3	1	1								19
68	Oxygen Cylinder (Type-D)	550																							550
69	Oxygen Cylinder (Type-B)	738																							738
70	RNA Kit	5000																							5,000

Appendix 2.2.17 (concl.)

Statement showing procurement of COVID materials by Government of Tripura

(Reference: Paragraph 2.2.22.1)

Sl. No.	Name of the Item	AGMC	IGM	RCC	TMC	DH UNK	DH DHL	DH KHW	DH GMT	DH SNTB	DH DMN	CMO UNK	CMO DHL	CMO KHW	CMO GMT	CMO SOUTH	CMO NORTH	CMOW EST	CMO SPJ	Red Cross Society	SDH BSLG	SBS Youth Hostel	Kiran Gite	MD, NHM	Total
71	X Ray Machine				1																				1
72	Furniture Items	159	350		60																				569
73	Matress and allied Items		200		45																				245
74	Pillow				200																				200
75	Viral RNA Kit	50																							50
76	BSL-2 Fome Cup Board				1	1	1	1	1	1	1										1				8
77	Infusion Pump	20																							20
78	Laryngo Scope	5																							5
79	Refrigerated Micro-Centrifuge				1				1		1														3
80	CCTV Surveillance System																					44			44
81	Wireless Keyboard Mouse Combo	4																							4
82	CR System (Computer Radiography)	1																							1
83	Video Conference System																						1		1
84	Smartphone (Mobile)											1	1	1	1	1	1	1	1						8

Appendix 2.2.18

Status of verification of important Covid equipment and other hospital items in the three major hospitals in the State

(Reference: Paragraph 2.2.22.2)

Sl. No.	Name of the item	Total quantity received	Quantity issued to wards	Lying idle in the hospital Store	Lying idle in wards	Total idle assets (in No.)	Name of the hospital
1.	AC Machine	13	13	0	13 in Paediatric Department	13	AGMC
Total		13	13	0	13	13	
2.	BIPAP Machine	15	2	13	0	13	AVBRC
		10	10	0	2	2	AGMC
		13	0	13	0	13	IGM
Total		38	12	26	2	28	
3.	Bubble CPAP Machine	2	2	0	Two in DCH ²⁰³	2	IGM
Total		2	2	0	2	2	
4.	Defibrillator Machine	1	0	1	0	1	AVBRC
		3	3	0	Three in DCH	3	IGM
Total		4	3	1	3	4	
5.	ECG Machine	5	3	2	Three in DCH	5	IGM
		8	8	0	Two in DCH	2	AGMC
Total		13	11	2	5	7	
6.	EEG Machine with Monitor, CPU, UPS and Keyboard	1	1	0	One in DCH	1	IGM
Total		1	1	0	1	1	
7.	ICU Bed	22	22	0	22 in DCH	22	IGM
		20	20	0	Five in MICU ²⁰⁴	5	AVBRC
Total		42	42	0	27	27	
8.	Multipara Monitor (Low End)	10	0	10	0	10	IGM
		43	43	0	10 Nos. in Covid Centre	10	AGMC
		12	12	0	12 Nos. in DCH	12	IGM
Total		65	55	10	22	32	
9.	Nassal Oxygen Canula Adult and Paediatric	1000	100	900	0	900	IGM
		1000	500	500	500 Nos. in DCH	1000	IGM
Total		2000	600	1400	500	1900	

²⁰³ DCH-Dedicated Covid Hospital²⁰⁴ MICU-Medical Intensive Care Unit

Appendix 2.2.18 (Conclld.)

Status of verification of important Covid equipment and other hospital items in the three major hospitals in the State

(Reference: Paragraph 2.2.22.2)

Sl. No.	Name of the item	Total quantity received	Quantity issued to wards	Lying idle in the hospital Store	Lying idle in wards	Total idle assets (in No.)	Name of the hospital
10.	Oxygen Concentrator	91	91	0	70 with Nodal Officer, DCH	70	AVBRC
		210	96	114	50 Nos. in DCH	164	IGM
		180	176	4	41 Nos. in Covid Centre	45	AGMC
		5	5	0	5 Nos. in Post Covid Ward (AICU ²⁰⁵)	5	AGMC
Total		486	368	118	166	284	
11.	Ventilator	26	26	0	10 Nos. in Covid Centre	10	AGMC
12.	Ventilator Neonatal with Consumables	1	1	0	1 No. in DCH	1	IGM
13.	Ventilator Paediatrics with Consumables	26	17	9	10 Nos. in DCH	19	IGM
Total		53	44	9	21	30	

²⁰⁵ AICU- Acute Intensive Care Unit