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

## for the year ended March 2022

## Government of the Union Territory of Puducherry

**Report No. 3 of 2024**

**(Performance Audit - Civil)**

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## PREFACE

**This Report for the year ended March 2022 has been prepared for submission to the Lieutenant Governor under Section 49 of the Government of Union Territories Act, 1963.**

**The Report of the Comptroller and Auditor General of India contains the results of Performance Audit on Public Health Infrastructure and Management of Health Services in the Union Territory of Puducherry covering the period from 2016-17 to 2021-22.**

**The instances mentioned in this Report are those, which came to notice in the course of Performance Audit conducted during November 2021 to October 2022. Matters relating to the periods outside the audit period have also been reported in places where they were found necessary.**

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

**Audit wishes to acknowledge the co-operation received from Department of Health and Family Welfare Services.**

# EXECUTIVE SUMMARY

# EXECUTIVE SUMMARY

## Why we did this Audit?

'Health is wealth' is an adage of far reaching significance in a welfare State. Delivery of public health and medical services is one of the major functions of the State Government, with significant support from the Central Government. The system for health care delivery in the State is organised with three layers; PHCs providing the primary health care with greater focus of preventive care, Community Health Centres providing secondary health care or the first level referral services and the Government General Hospitals and Medical College Hospitals at the top of the pyramid, providing the tertiary care or second level referral services.

Considering the importance of infrastructure and management of health services in ensuring a healthy nation and the priority accorded to health by both the Central and State Governments, CAG took up this Performance Audit covering the activities during 2016-22. The objectives of this Audit were to assess the: (1) availability of necessary human resource at all levels, (2) adequacy of provision of health care services (3) availability of drugs, medicines and equipment, (4) availability and management of health care infrastructure, (5) adequacy of the funding for the health care sector, (6) effectiveness of implementation of centrally sponsored schemes, (7) adequacy and effectiveness of the regulatory mechanisms for ensuring quality health care services and (8) achievements against SDG-3 targets.

## What we found?

Sanctioned strength of doctors, nurses and para-medical staff in tertiary care institutions was inadequate with respect to the IPHS norms. The shortfall in para-medical staff was 26 *per cent* as at the end of March 2022. Vacancies in the cadre of nurses and paramedical staff at all test-checked HCFs were noticed. The availability of doctors and nurses in GH, Puducherry was more than the requirement and there were shortage of doctors and nurses in other hospitals indicating uneven manpower distribution across the HCFs.

The UT Government did not prepare any Health Policy to ensure that the challenges relating to health sector are adequately addressed so that objective of providing quality and improved healthcare services is attained. The average number of patients attended to by a doctor in PHCs were higher leading to lesser consultation time. Some of the essential services like Accident and Trauma Ward, Burn ward, Dialysis, full range of Radiology and Pathology services were not available in test-checked HCFs.

The savings under procurement of drugs during 2020-21 and 2021-22 were 49 and 38 *per cent* respectively, which had led to non- procurement of essential drugs in the range of 13 to 54 *per cent* as per the essential drugs list. Equipment for physiotherapy and occupational therapy were lying idle. Non-availability of laboratory equipment affected the patient care offered by the hospitals. Mammography unit at Women and Children Hospital, Puducherry was not functioning since December 2020.

Primary and Secondary health care suffered for want of adequate number of PHCs/CHCs. As against the requirement of 53 PHCs and 14 CHCs, there were only 44 PHCs and 4 CHCs respectively. The sub-optimal working conditions of HCFs was a greater cause for concern. PHCs were functioning in dilapidated buildings and there was insufficient space in HCFs, lack of residential accommodation, non-provision of lift/ramp, inadequate fire safety measures, etc.

The expenditure on health care in the Union Territory of Puducherry fell short of the allocation by 2 to 16 *per cent* during 2016-22. Except during 2019-20, the capital expenditure constituted just 0.82 *per cent* to 2.96 *per cent* of total expenditure on healthcare of the UT and the savings ranged between 6 and 92 *per cent* during the same period indicating that lesser priority was given for healthcare infrastructure creation.

The institutional deliveries were more than 25,000 per annum during the period 2016-17 to 2021-22, but the coverage of beneficiaries under "Janani Shishu Suraksha Karyakram" was less than 10 *per cent,* which indicates that the scheme was not implemented effectively. There was a shortfall of 37 *per cent* in coverage of beneficiaries under AB-PMJAY. There were shortfalls in the provision of benefits to the women beneficiaries under 'Janani Suraksha Yojana' and 'Janani Shishu Suraksha Karyakram' despite availability of funds.

The Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 was not being enforced effectively and there was no monitoring mechanism available in the department to ensure timely registration and renewal of clinical establishments. None of the hospitals in the UT had applied for accreditation by NABH. Bio-medical wastes were handled/disposed off in violation of rules.

The UT Government is yet to fully achieve the SDG-3 targets. Two out of the 10 targets were achieved by the UT Government. Performance under Tuberculosis, HIV, suicide rate, road accidents and immunisation of children in the age group of 9 to 11 months were matters of concern.

## What we recommend?

We have made 16 recommendations covering the need to increase the spending for infrastructure creation, improving basic facilities, enlarging primary care network, procurement of full range of drugs and equipment, strengthening enforcement of Clinical Establishments Rules, monitoring the achievement of SDG targets, etc.

### HUMAN RESOURCE

- The UT Government should ensure that the Directorates periodically assess the vacancy position of different categories of staff and prepare an Annual Recruitment Calendar for recruitment of different categories of manpower.
- The UT Government should also review the adequacy of the sanctioned strength and should revise it in line with the IPHS norms and also re-distribute the manpower to the needy hospitals.

### HEALTHCARE SERVICES

- The UT Government should ensure that all essential services as per norms are provided in HCFs through availability of required infrastructure.
- The UT Government should ensure procurement of required radiology equipment and availability of proper pathology services at all HCFs to

improve the level of diagnostic services as per IPHS norms for providing evidence-based treatment.

- The UT Government should study the feasibility of implementing a fully automated GPS enabled monitoring system for ambulance service.

## AVAILABILITY OF DRUGS, MEDICINES AND EQUIPMENT

- The UT Government should ensure availability of essential drugs, medicines and equipment in HCFs, as prescribed in the IPHS norms and a monitoring mechanism should be put in place to ascertain that the entire budget provision for procurement of essential drugs is utilised so that the HCFs do not run out of the essential drugs.
- The UT Government should ensure that the equipment procured meets the actual requirement and sufficient infrastructure facilities are available to install/commission them. Further, the UT Government should also ensure that the equipment are covered under Annual Maintenance Contract.

## HEALTHCARE INFRASTRUCTURE

- The UT Government should provide an optimal level of quality healthcare by enlarging the primary and secondary healthcare network and upgrade the facilities to meet the IPHS norms to cater to the needs of the population.
- The UT Government should ensure close monitoring on execution of infrastructure projects and also ascertain that supervision on maintenance of HCF buildings are carried out periodically.

## ADEQUACY OF FUNDS FOR THE HEALTHCARE SECTOR

- The UT Government should strive to utilise the budget allotment in full, especially funds provided for capital creation to improve the infrastructure and advanced equipment procurement for HCFs.

## IMPLEMENTATION OF CENTRALLY SPONSORED SCHEMES

- The UT Government should ensure that adequate awareness is created to ensure that scheme benefits reach all the eligible women under 'Janani Suraksha Yojana' and 'Janani Shishu Suraksha Karyakram' so as to reduce their out of pocket expenditure on healthcare.

## ADEQUACY AND EFFECTIVENESS OF REGULATORY MECHANISMS

- The UT Government should ensure that all clinical establishments (both public and private) in the UT are registered under the Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 and the DHFWS deploy adequate manpower to effectively enforce the Rules.
- The UT Government should ensure that NABH accreditation/NQAS certification is obtained to improve the credibility of hospitals.
- The UT Government should ensure enforcement of Bio-Medical Waste Management Rules, 2016 for avoiding its serious implication on environment and human health.

## SUSTAINABLE DEVELOPMENT GOAL – 3 (GOOD HEALTH AND WELL BEING)

- The UT Government should ensure that Planning and Research Department forms a SDG Cell to assess the financial requirement, identification of gaps and to assess the timeframe required to achieve the SDG.
- The UT Government should ensure that periodical meetings of the State High Level Steering Committee are conducted to monitor the progress towards achievement of the SDG.



# CHAPTER 1

# INTRODUCTION



# CHAPTER 1 : INTRODUCTION

## 1.1 Introduction

The Union Territory of Puducherry comprises of four geographically isolated regions (*viz*., Puducherry, Karaikal, Mahe and Yanam) with a total population of 12.48 lakh as per 2011 Census. The Department of Health and Family Welfare Services functions with the objective of providing preventive and curative healthcare to the public.

As per the Indian Public Health Standards (IPHS), 2012 guidelines, the public healthcare delivery system is provided at the UT through a three tier health care system *viz*., primary, secondary and tertiary. The primary healthcare facilities are the first level of contact between the public and healthcare providers. The primary healthcare is delivered through a network of Sub-Centres (SCs) and Primary Health Centres (PHCs). The secondary healthcare is provided by the Community Health Centres (CHCs), which function as first referral centres. Tertiary healthcare facilities are provided by the District Hospitals/General Hospitals, Women and Children Hospital, Medical College Hospitals and other speciality hospitals. Healthcare is provided in UT of Puducherry under both Allopathic and Indian System of Medicine. To achieve the objectives of providing quality and improved healthcare services in the UT of Puducherry, a comprehensive health policy was required to be framed in line with the National Health Policy, which the Government of Puducherry (GoP) has not yet prepared.

The UT of Puducherry has adopted IPHS norms, which has also been adopted by Audit as the benchmark for assessing healthcare facilities in the hospitals. While the IPHS guidelines stipulate the essential and desirable services that are to be provided by the District Hospitals (DHs) and General Hospitals (GHs), the Medical Council of India (MCI) stipulates the services that are to be provided by the Teaching and Autonomous Hospitals.

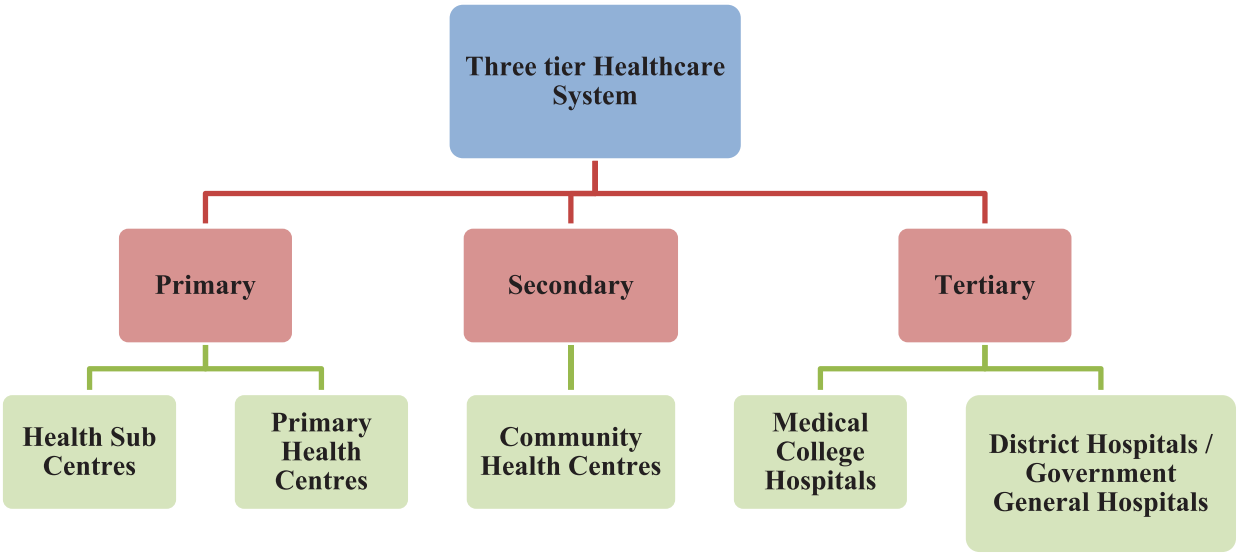
## 1.2 Health services

| *Line services* | *Support services* |
|---|---|
| • Outdoor patient department<br>• Indoor patient department<br>• Emergency services<br>• Super specialty (OT, ICU)<br>• Maternity<br>• Blood bank<br>• Diagnostic services | • Oxygen services<br>• Dietary service<br>• Laundry service<br>• Biomedical waste management<br>• Ambulance service<br>• Mortuary service |

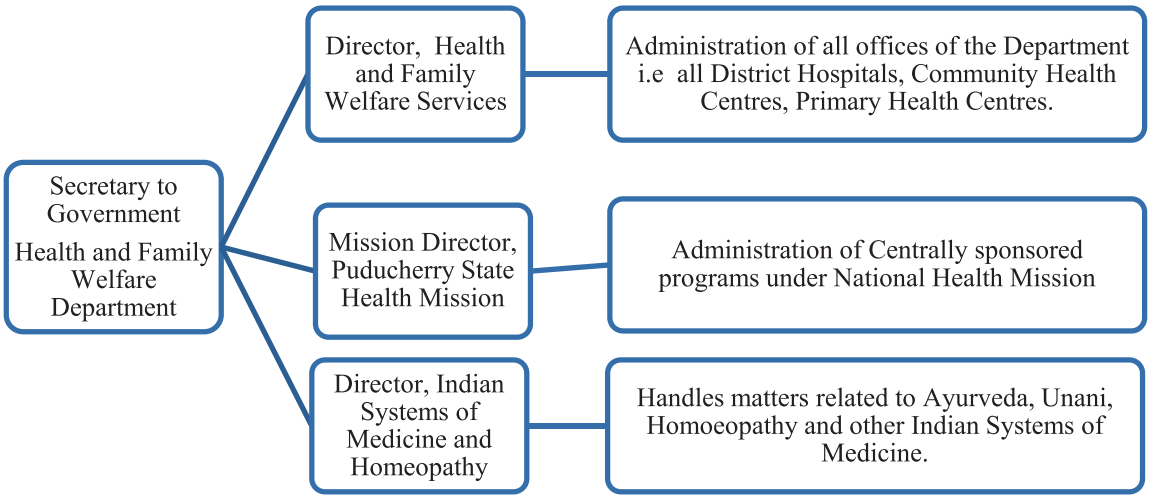
The terms and abbreviations used in this Report are listed in the Glossary at Page No.170.

| *Auxiliary services* | *Resource Management* |
|---|---|
| • Patient safety facilities<br>• Patient registration<br>• Grievance/complaint redressal<br>• Stores | • Building Infrastructure<br>• Human Resource<br>• Drugs and Consumables<br>• Equipment |

## 1.3 Overview of healthcare facilities in the UT




## 1.4 Organisational Setup

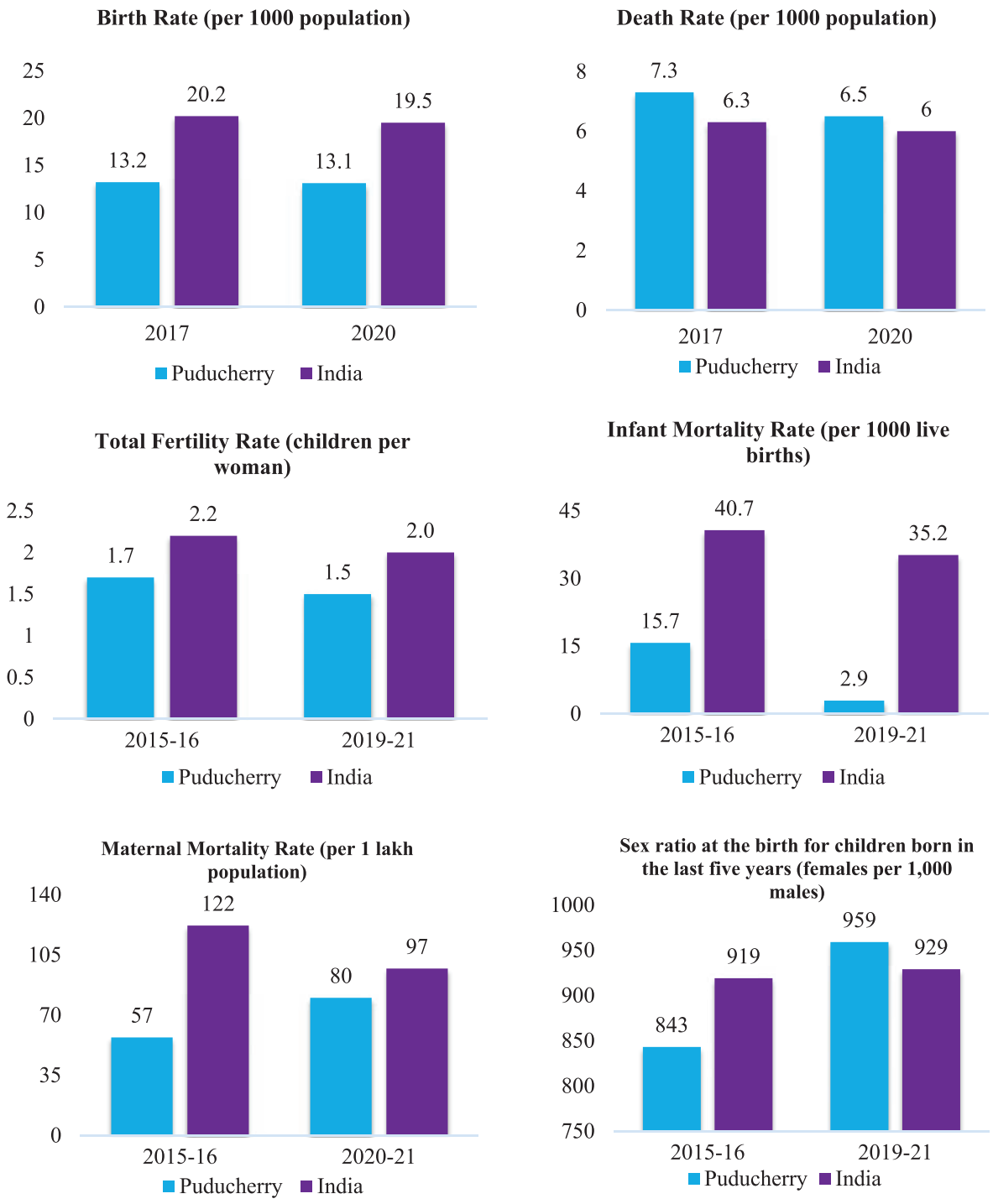



## 1.5 Status of Health Indicators in the UT

The World Health Organisation (WHO) defines Health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. As health cannot be measured in exact measurable forms,

Health indicators are helpful to provide a crude picture about the health scenario of a particular geographical area. Some of the major health indicators of the State are given in **Chart 1.1**.

**Chart 1.1: Health Indicators in the UT**




(Source: National Family Health Survey – 4 & 5, Sample Registration System Bulletins and Director of Health and Family Welfare Services)

As per Sustainable Development Goal (SDG) for the year 2030, the Maternal Mortality Rate (MMR) should be brought to less than 70 per one lakh live

births by the year 2030. Though, the MMR of UT of Puducherry was 57 in the year 2015-16, it had increased to 80 during 2020-21.

## 1.6 Improvement in overall Health Indicators

The Sustainable Development Goals (SDGs), adopted by the United Nations in 2015, began to be implemented across the world from January 2016. By 2030, the Nation shall ensure universal access to high quality, effective and affordable healthcare to all, minimising incidence and mortality from communicable, non-communicable and lifestyle diseases. The ranking of the UT in implementation of SDGs are given in **Table 1.1**.

**Table 1.1: Ranking of UT of Puducherry**

| Overall and SDG-03 | 2018 | | 2019 | | 2020 | |
|---|---|---|---|---|---|---|
| | Score | Rank | Score | Rank | Score | Rank |
| Overall SDG | 65 | 2 | 66 | 2 | 68 | 2 |
| SDG 3: Good Health and Wellbeing | 66 | 7 | 71 | 6 | 70 | 20 |

(Source- SDG India Index Baseline Reports)

### 1.6.1 Puducherry Health Indicators compared with National Health Indicators as per National Family Health Survey-5

The National Family Health Survey 2019-21 (NFHS-5) provides information on population, health and nutrition for India and UT of Puducherry. **Table 1.2** indicates the fact sheet which provides information on key indicators and trends for India and Puducherry as per NFHS-4 and 5.

**Table 1.2: Comparison of Puducherry Health Indicators as per NFHS-4 and 5**

| Indicators | NFHS-4 (2015-16) | | NFHS-5 (2019-21) | |
|---|---|---|---|---|
| | UT | India | UT | India |
| Sex ratio of the total population (females per 1,000 males) | 1,068 | 991 | 1,112 | 1,020 |
| Sex ratio at birth for children born in the last five years (females per 1,000 males) | 843 | 919 | 959 | 929 |
| Total fertility rate (children per woman) | 1.7 | 2.2 | 1.5 | 2.0 |
| Neonatal mortality rate (NNMR) | 5.8 | 29.5 | 2.3 | 24.9 |
| Infant mortality rate (IMR) | 15.7 | 40.7 | 2.9 | 35.2 |
| Under-five mortality rate (U5MR) | 16.2 | 49.7 | 3.9 | 41.9 |
| Mothers who had an antenatal check-up in the first trimester (*per cent*) | 80.6 | 58.6 | 82.4 | 70.0 |
| Mothers who had at least 4 antenatal care visits (*per cent*) | 87.7 | 51.2 | 86.9 | 58.1 |

| Indicators | NFHS-4 (2015-16) | | NFHS-5 (2019-21) | |
|---|---|---|---|---|
| | UT | India | UT | India |
| Mothers whose last birth was protected against neonatal tetanus[1] (*per cent*) | 82.1 | 89.0 | 91.9 | 92.0 |
| Mothers who consumed iron folic acid for 100 days or more when they were pregnant (*per cent*) | 66.3 | 30.3 | 84.1 | 44.1 |
| Mothers who consumed iron folic acid for 180 days or more when they were pregnant (*per cent*) | 36.3 | 14.4 | 64.9 | 26.0 |
| Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (*per cent*) | 98.0 | 89.3 | 98.8 | 95.9 |
| Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (*per cent*) | 84.9 | 62.4 | 93.1 | 78.0 |
| Average out-of-pocket expenditure per delivery in a public health facility (₹) | 2,101 | 3,197 | 3,259 | 2,916 |
| Children born at home who were taken to a health facility for a check-up within 24 hours of birth (*per cent*) | NA | 2.5 | NA | 4.2 |
| Children who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (*per cent*) | NA | NA | 95.7 | 79.1 |
| Institutional births (*per cent*) | 99.9 | 78.9 | 99.6 | 88.6 |
| Institutional births in public facility (*per cent*) | 82.0 | 52.1 | 76.6 | 61.9 |
| Home births that were conducted by skilled health personnel[2] (*per cent*) | 0.1 | 4.3 | 0.3 | 3.2 |
| Births attended by skilled health personnel (*per cent*) | 100.0 | 81.4 | 99.9 | 89.4 |
| Births delivered by caesarean section (*per cent*) | 33.6 | 17.2 | 36.3 | 21.5 |
| Births in a private health facility that were delivered by caesarean section (*per cent*) | 48.3 | 40.9 | 42.0 | 47.4 |
| Births in a public health facility that were delivered by caesarean section (*per cent*) | 30.4 | 11.9 | 34.8 | 14.3 |

(Source: National Family Health Survey – 4 & 5)

## 1.7 Audit Objectives

The Performance Audit on Public Health Infrastructure and Management of Health Services in the UT of Puducherry was conducted to assess:

[1] Includes mothers with two injections during the pregnancy for their last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

[2] Doctor/nurse/LHV/ANM/midwife/other health personnel.

- the adequacy of the funding for healthcare
- the availability and management of healthcare infrastructure
- the availability of drugs, medicines, equipment and other consumables
- the availability of necessary human resource at all levels
- whether various schemes of Government of India were being implemented properly
- the adequacy and effectiveness of the regulatory mechanisms for ensuring quality healthcare services
- whether State spending on health has improved the health and wellbeing conditions of people as per SDG 3.

## 1.8 Audit Scope, sampling and methodology

The Performance Audit has covered the healthcare facilities under primary, secondary and tertiary levels under both Allopathy and Indian System of Medicines. The scope of audit involved scrutiny of records relating to the period 2016-17 to 2021-22. The audit examination included inspection of records of Director of Health and Family Welfare Services (DHFWS), Office of the Director of Indian Systems of Medicine and Homeopathy (ISMH) and Puducherry State Health Mission (PSHM) and records of the General Hospitals, CHCs and PHCs.

In the UT of Puducherry, primary, secondary and tertiary healthcare services are provided by 44 PHCs, four CHCs, 10 Tertiary healthcare facilities and 49 ISMH units (**Appendix 1.1**) respectively. Out of these, seven PHCs and three CHCs, four General Hospitals[3] (GHs), two Medical College Hospitals[4] (MCHs) and one Women and Children Hospital[5] (WCH) were selected by simple random sampling method. 15 units under the Directorate of ISMH, comprising of Ayurveda, Siddha, Homeopathy, Yoga and Naturopathy units, which are co-located with the selected PHCs, CHCs and hospitals were also selected for performance audit. The details of selected units and the dispensaries are given in **Appendices 1.2** and **1.3**.

The methodology included scrutiny of documents, evidence gathering by issue of audit enquiries and joint physical inspection in the sampled units along with departmental officials.

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3 One each in Puducherry, Karaikal, Mahe and Yanam regions.

4 (1) Indira Gandhi Medical College and Research Institute, Puducherry and (2) Rajiv Gandhi Ayurveda Medical College and Hospital, Mahe.

5 Rajiv Gandhi Government Women and Children Hospital, Puducherry.

An entry conference was held on 25 November 2021 with the Secretary to Government (Health), Government of Puducherry, with whom the audit objectives, scope, criteria, etc., were discussed. Exit conference was held on 20 October 2022. The Report was issued to the Government in September 2023, seeking replies/comments on the audit observations. The Government replies had been received (November 2023) to few of the audit observations, which have suitably been incorporated in the Report. The replies to other audit observations are still awaited (March 2024).

## 1.9 Doctors'/patients' Survey

Beneficiary survey of patients (320) and survey of doctors (43) were also conducted to ascertain the level of patient's satisfaction on the service delivery of the hospitals.

## 1.10 Audit Criteria

The following criteria are adopted as yardsticks in the performance audit to arrive at the audit conclusions:

- National Health Policy, 2017
- National Commission for Indian System of Medicine Act, 2020
- Indian Medical Council Act, 1956
- National Commission for Homoeopathy Act, 2020
- National Medical Commission Act, 2019
- Bio Medical Waste Management Rules, 2016
- Indian Public Health Standards, 2012
- Atomic Energy (Radiation Protection) Rules, 2004
- Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002
- Minimum Standards Requirement Regulations, 1999
- Clinical Establishment (Registration and Regulation) Act, 2010
- Sustainable Development Goals, 2012
- Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014
- Drugs and Cosmetics Act, 1940
- GoI/GoP orders, circulars, etc.

## 1.11 Consideration of Ayushman Bharat in this Report

GoI had launched Ayushman Bharat Scheme during September 2018, which includes promotive, preventive, curative, palliative and rehabilitative aspects of Universal Healthcare through access of Health and Wellness Centres (HWCs) at the primary level and provision of financial protection for accessing curative care at the secondary and tertiary levels through engagement with both public and private sector. It adopts a continuum of care approach, comprising of two inter-related components:

- Creation of Health and Wellness Centres.
- Pradhan Mantri Jan Arogya Yojana (PMJAY).

**Health and Wellness Centres (HWCs)**

- Creation of 1,50,000 HWCs by transforming the existing Sub Centres and Primary Health Centres in February 2018.
- Aim to deliver Comprehensive Primary Healthcare (CPHC) covering maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.

**PM-JAY**

- Aims to provide a cover of ₹ 5 lakh per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India.
- Over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits.
- Provides cashless access to healthcare services for the beneficiary at the point of service, that is, the hospital.
- Benefits of the scheme are portable across the country i.e., a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
- Services include approximately 1,387 procedures covering all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician's fees, room charges, surgeon charges, OT, and ICU charges etc.
- Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

The details of PMJAY are given in Chapter 7 of this Report.

## 1.12 Audit Findings

The audit findings are grouped under the following Chapters:

| | |
|---|---|
| **Chapter 2** | Human Resource |
| **Chapter 3** | Healthcare Services |
| **Chapter 4** | Availability of Drugs, Medicines and Equipment |
| **Chapter 5** | Healthcare Infrastructure |
| **Chapter 6** | Adequacy of funds for the Healthcare Sector |
| **Chapter 7** | Implementation of Centrally Sponsored Schemes |
| **Chapter 8** | Adequacy and effectiveness of regulatory mechanisms |
| **Chapter 9** | Sustainable Development Goal - 3 (Good health and well being) |



# CHAPTER 2

# HUMAN RESOURCE





# CHAPTER 2: HUMAN RESOURCE

## AVAILABILITY OF MANPOWER

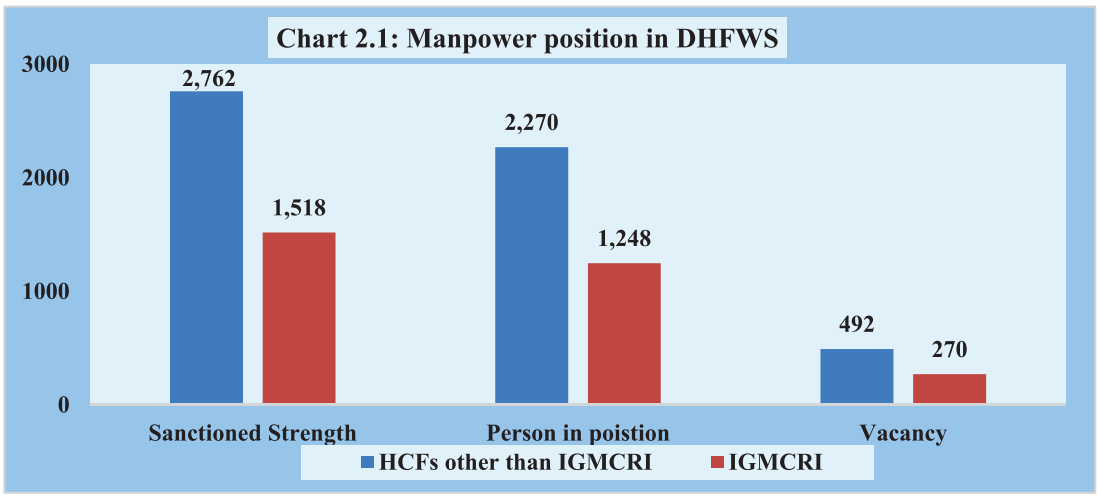
**The health workforce includes clinical staff such as physicians, nurses and paramedical staff such as pharmacists, lab technicians, X-Ray technicians and other management and supporting staff. Sanctioned strength of doctors, nurses and paramedical staff in tertiary care institutions was inadequate with respect to the IPHS norms. There were vacancies in the cadre of nurses and paramedical staff at all test-checked Healthcare Facilities including ISMH hospitals. The shortfall in paramedical staff was 26 *per cent* as at the end of March 2022. The availability of doctors and nurses in GH, Puducherry was more than the requirement and there were shortage of doctors and nurses in other hospitals indicating uneven manpower distribution across the HCFs.**

## 2.1 Availability of human resources in DHFWS

### 2.1.1 Vacancies in the post of doctors, nurses, paramedical staff and others

The IPHS norms contemplate the manpower requirement for District Hospitals, CHCs and PHCs. The overall manpower position in Government Health Care Facilities (HCFs)[1] in the UT, as of March 2022, is given in **Chart 2.1** and the details of sanctioned strength (SS), persons-in-position (PIP) and vacancies in the post of doctors, nurses, paramedical staff and others are given in **Table 2.1**.

[1] General Hospitals - 4; Medical College Hospitals - 2; Speciality Hospitals - 4; CHCs - 4; PHCs - 44; Ayush Centres - 49 and Sub centres - 81.




(Source : Details furnished by the DHFWS)

**Table 2.1: Details of Sanctioned Strength, Persons-in-Position and vacancies**

| Posts | Sanctioned Strength | | Persons-in-position | | Vacancy | | Percentage of vacancy | |
|---|---|---|---|---|---|---|---|---|
| | HCFs | IGMCRI | HCFs | IGMCRI | HCFs | IGMCRI | HCFs | IGMCRI |
| Specialists | 119 | 116 | 62 | 96 | 57 | 20 | 48 | 17 |
| Doctors | 380 | 169 | 347 | 133 | 33 | 36 | 9 | 21 |
| Nurses | 1,243 | 401 | 1,110 | 206 | 133 | 195 | 11 | 49 |
| Paramedical staff | 410 | 186 | 304 | 70 | 106 | 116 | 26 | 62 |
| Others | 604 | 646 | 444 | 743 | 160 | 97* | 26 | -- |
| **Total** | **2,756** | **1,518** | **2,267** | **1,248** | **489** | **270** | **18** | **18** |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

*Denotes excess

(Source: Details furnished by the DHFWS)

It could be seen from **Table 2.1** that the percentage of vacancies were 48, 26 and 26 in respect of specialist, paramedical staff and others respectively in the HCFs whereas in IGMCRI, the percentage of vacancies were 49 and 62 in respect of nurses and paramedical staff. Huge vacancies in respect of specialist would attribute to specialised services not being provided by the hospitals. Similarly, the percentage of vacancy in respect of nurses, paramedical staff would impact the service delivery to patients who have direct responsibility of patient care. However, the details of referral of patients to other hospitals for want of staff were not maintained by the hospitals. Thus, the shortage of health care facilities as discussed in paragraph 5.1.2 coupled with shortage of manpower would have serious impact on the delivery of health care services.

Government stated (November 2023) that action was being taken for filling up of vacancies on regular basis.

### 2.1.2 Vacancies of paramedical staff

Paramedical staff also provide critical services and they ensure smooth functioning of the hospitals. As could be seen from **Table 2.1**, the highest number of vacancies were noticed among paramedics. A list of major paramedical posts, SS, PIP, vacancies are given in **Table 2.2.**

**Table 2.2: Vacancy position of major paramedical staff posts (As of March 2022)**

| Sl. No. | Post Name | Sanctioned Strength | Person in position | Vacant Posts | Vacancy Percentage |
|---|---|---|---|---|---|
| 1. | Occupational Therapist | 3 | 2 | 1 | 33 |
| 2. | Ophthalmic Technician | 40 | 27 | 13 | 33 |
| 3. | Physiotherapist | 9 | 6 | 3 | 33 |
| 4. | Senior Lab Technician | 92 | 75 | 17 | 18 |
| 5. | Chief Pharmacist | 4 | 1 | 3 | 75 |
| 6. | Radiographer | 33 | 31 | 2 | 6 |
| 7. | Technical Assistant (Lab) | 22 | 16 | 6 | 27 |
| 8. | Technician (CT/MRI Scan) | 2 | 0 | 2 | 100 |
| 9. | Technician (Ultrasound) | 2 | 0 | 2 | 100 |
| 10. | BCG Technician | 8 | 0 | 8 | 100 |
| 11. | ECG Technician | 14 | 8 | 6 | 43 |
| 12. | Pharmacist (Allopathy) | 164 | 135 | 29 | 18 |
| 13. | Technical Assistant (NMEP) | 7 | 2 | 5 | 71 |
| 14. | Technician (Operation Theatre) | 4 | 1 | 3 | 75 |
| 15. | X-ray Technician | 6 | 0 | 6 | 100 |
| **Total** | | **410** | **304** | **106** | **26** |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

(Source : Details furnished by the DHFWS)

The large number of vacancies of paramedics have an impact on service delivery to the needy patients and also there are chances of under-utilisation of hospital equipment related straightway to Paramedics.

### 2.1.3 Region-wise vacant posts of doctors

World Health Organisation (WHO) norms recommended Doctor-Population ratio of 1:1000. The details of sanctioned strength, persons-in-position and vacancies region-wise in the post of doctors including specialists are given in **Table 2.3**.

**Table 2.3: Details of sanctioned strength, persons-in-position and vacancies in the post of Doctors**

| Region | Population (projected 2021) | Sanctioned strength | Persons in position | Doctor to Population ratio | Vacancy | Percentage of Vacancy |
|---|---|---|---|---|---|---|
| Puducherry | 12,28,082 | 622 | 526 | 1:2,335 | 96 | 15.43 |
| Karaikal | 2,34,725 | 91 | 63 | 1:3,726 | 28 | 30.76 |
| Yanam | 98,562 | 33 | 22 | 1:4,480 | 11 | 33.33 |
| Mahe | 47,480 | 38 | 27 | 1:1,758 | 11 | 28.94 |
| **Total** | **16,08,849** | **784** | **638** | **1:2,521** | **146** | **18.62** |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

**Note:** The above position include all HCFs except for HCFs under AYUSH.
(Source : Details furnished by the DHFWS)

It could be seen from **Table 2.3** that the Doctor-Population ratio of Government HCFs was lower when compared with WHO norms in all the regions. The vacancy in respect of doctors ranged from 15.43 *per cent* to 33.33 *per cent* in the regions of Puducherry.

### 2.1.4 Manpower position in PHCs

The IPHS norms contemplate one doctor and three nurses for a PHC. The status regarding the sanctioned strength and men-in-position in respect of PHCs are given in **Appendix 2.1**. The region-wise availability of manpower is given **Table 2.4**.

**Table 2.4: Availability of manpower in PHCs**

| Region | No. of PHCs | Doctors | | Nurses | | Paramedics | | Others | |
|---|---|---|---|---|---|---|---|---|---|
| | | Sanctioned strength | Men-in-postion | Sanctioned strength | Men-in-postion | Sanctioned strength | Men-in-postion | Sanctioned strength | Men-in-postion |
| Puducherry | 27 | 37 | 33 | 119 | 113 | 287 | 232 | 35 | 23 |
| Karaikal | 11 | 40 | 35 | 46 | 45 | 133 | 92 | 117 | 78 |
| Mahe | 1 | 3 | 3 | 3 | 1 | 4 | 4 | 4 | 4 |
| **Total** | **39*** | **80** | **71** | **168** | **159** | **424** | **328** | **156** | **105** |

* In addition to 39, there are 5 more PHCs (Two in Puducherry and one each in Karaikal, Mahe and Yanam) under Puducherry State Health Mission (formed as part of NHM), which were not part of the audit sample.

(Source : Details furnished by the DHFWS)

It could be seen from **Table 2.4** that though the PHCs in Karaikal region were only 11, the availability of manpower was high when compared to Puducherry region which has 27 PHCs which was indicative of imbalance in distribution of

manpower requiring redeployment. In Mahe, there was only one nurse as against the requirement of three nurses.

The Government stated (November 2023) that redeployment of manpower would be considered.

### 2.1.5 Manpower position in CHCs

The IPHS norms contemplated eight doctors and ten nurses for a CHC. The status regarding the sanctioned strength and men-in-position in respect of CHCs are given in **Table 2.5**.

**Table 2.5: Availability of manpower in CHCs**

| Region | No. of CHCs | Doctors | | Nurses | | Paramedics | | Others | |
|---|---|---|---|---|---|---|---|---|---|
| | | Sancti-oned strength | Men-in-postion | Sancti-oned strength | Men-in-postion | Sancti-oned strength | Men-in-postion | Sancti-oned strength | Men-in-postion |
| Puducherry | 2 | 14 | 12 | 29 | 26 | 12 | 11 | 69 | 48 |
| Karaikal | 1 | 7 | 4 | 13 | 13 | 8 | 5 | 24 | 15 |
| Mahe | 1 | 7 | 5 | 11 | 10 | 6 | 4 | 23 | 14 |
| **Total** | **4** | **28** | **21** | **53** | **49** | **26** | **20** | **116** | **77** |

(Source : Details furnished by the DHFWS)

It could be seen from **Table 2.5** that the sanctioned strength of doctors was 7 as against the norm of eight in all the test-checked CHCs. The vacancies of doctors, paramedics and others were high in Karaikal and Mahe Regions whereas in Puducherry Region the vacancy was high in others category only.

### 2.1.6 Manpower availability in District hospitals

IPHS norms prescribe the manpower for District hospitals based on bed strength. The details of manpower required and available for the year 2021-22 are given in **Table 2.6**.

**Table 2.6: Prescribed manpower based on bed strength**

| Name of the Hospital | | GH, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | WCH |
|---|---|---|---|---|---|---|
| **Number of Beds** | | **626** | **474** | **171** | **100** | **440** |
| **Doctors** | Required as per IPHS | 68 | 68 | 34 | 29 | 68 |
| | Sanctioned Strength | 124 | 59 | 31 | 33 | 79 |
| | Available | 111 | 38 | 22 | 22 | 72 |
| | Percentage of shortfall | -- | 44 | 35 | 24 | -- |
| **Nurses** | Required as per IPHS | 225 | 225 | 90 | 45 | 225 |

| Name of the Hospital | | GH, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | WCH |
|---|---|---|---|---|---|---|
| | Sanctioned Strength | 342 | 218 | 75 | 70 | 214 |
| | Available | 314 | 181 | 64 | 62 | 202 |
| | Percentage of shortfall | -- | 20 | 29 | -- | 10 |
| **Paramedical** | Required as per IPHS | 100 | 100 | 42 | 31 | 100 |
| | Sanctioned Strength | 179 | 67 | 29 | 34 | 55 |
| | Available | 118 | 39 | 20 | 20 | 37 |
| | Percentage of shortfall | -- | 61 | 52 | 35 | 63 |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

(Source : Details furnished by the Directorate)

It could be seen from **Table 2.6** that shortfall of doctors against the IPHS norm at the test-checked District Hospitals, except GH, Puducherry and WCH ranged from 24 to 44 *per cent*. Similarly, the shortfall of nurses, except GH, Puducherry and GH, Yanam, ranged from 10 to 29 *per cent.* With regard to the paramedical staff, the shortfall ranged from 35 to 63 *per cent.* As the availability of doctors and nurses at GH, Puducherry was more than the requirement and there were shortage of doctors and nurses in other hospitals, Government needs to reassess the requirement and redeploy manpower from hospitals which have excess deployment to the needy hospitals as per the IPHS norms.

### 2.1.7 Availability of human resources in test-checked hospitals

The details of sanctioned strength (SS) and Person-in-position (PIP) of doctors, nurses and paramedics in test-checked primary, secondary and tertiary HCFs, as of March 2022, are given in **Appendix 2.2**. It could be seen that in the test-checked HCFs, the vacancy position of all posts in CHCs was more than 11 *per cent* and in respect of paramedical staff, it was higher in all the test-checked HCFs which would impact the service delivery to the needy patients and cause under-utilisation of hospital equipment.

Government stated (November 2023) that action was being taken to fill up the vacancies and proposal would be submitted to the Union Public Service Commission (UPSC) for filling up the post of Medical Officers.

### 2.1.8 Recruitment of manpower

The details of manpower recruited during the period 2016-22 in DHFWS is given in **Table 2.7**.

**Table 2.7: Details of manpower recruited in DHFWS during the period 2016-22**

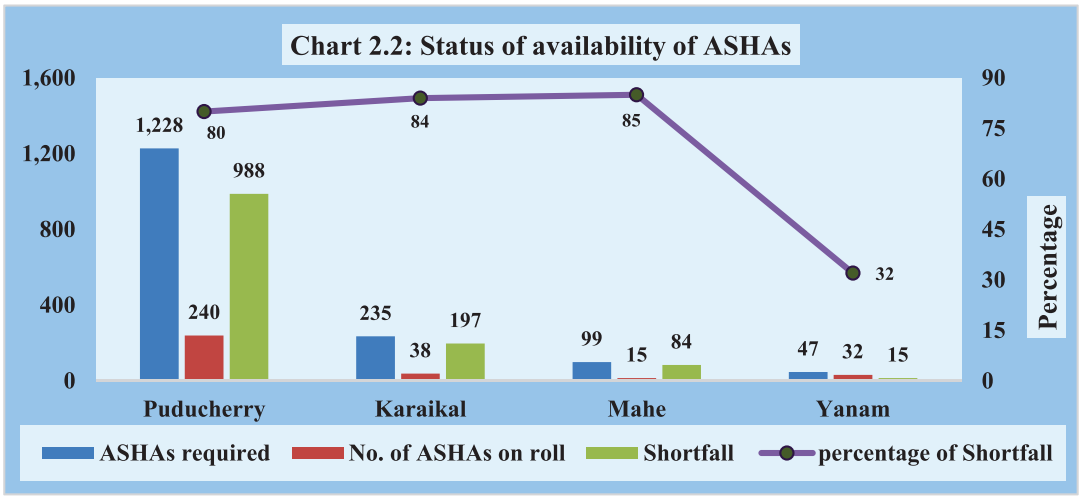
| Financial year | Category | No. of employees recruited |
|---|---|---|
| 2016-17 | Refrigeration Mechanic | 2 |
| | Health Assistant | 1 |
| | Senior Lab Technician | 12 |
| 2017-18 | Pharmacist | 15 |
| 2018-19 | Staff Nurse | 55 |
| 2019-20 | -- | Nil |
| 2020-21 | -- | Nil |
| 2021-22 | -- | Nil |

(Source : Details furnished by DHFWS)

It is seen that no new recruitments took place in DHFWS after 2018-19.

### 2.1.9 Availability of Accredited Social Health Activists (ASHAs)

One of the key components of NHM is to provide every village in the country with a trained female community health activist (ASHAs). Selected from the village itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system. Guidelines on ASHA of NHM prescribe one ASHA per 1000 population. The status of availability of ASHAs in UT of Puducherry is given in **Chart 2.2**.




(Source : Details furnished by Puducherry State Health Society)

As seen from the above, as of March 2022, there was huge vacancy in the post of ASHAs ranging from 32 *per cent* in Yanam region to 85 *per cent* in Mahe region. Government has to take early action to fill up the shortfall so as to strengthen the public health system at village level.

## 2.2 Directorate of Indian Systems of Medicine and Homeopathy

### 2.2.1 Shortage of manpower

The details of posts sanctioned and person-in-position in the Rajiv Gandhi Ayurveda Medical College and Hospital, Mahe are as given in **Table 2.8**.

**Table 2.8: Details of posts sanctioned and person-in-position in the RGAMCH**

| Category | Sanctioned | Filled | Vacant | Percentage of Vacancy |
|---|---|---|---|---|
| Specialists | 41 | 39 | 2 | 5 |
| Medical Officers | 10 | 7 | 3 | 30 |
| Nurses | 16 | 14 | 2 | 13 |
| Paramedics | 39 | 14 | 25 | 64 |
| Others | 11 | 6 | 5 | 45 |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

(Source : Details furnished by the Hospital)

The shortage of staff in cadres of Medical Officers, paramedics and others ranged between 30 and 64 *per cent.* The shortage of manpower would impact the teaching and service delivery to the needy patients and cause under-utilisation of hospital equipment.

The details of posts sanctioned and men-in-position in dispensaries are as given in **Table 2.9**.

**Table 2.9: Details of posts sanctioned and person-in-position in the Dispensaries**

| Category | Sanctioned | Filled | Vacant | Percentage of Vacancy |
|---|---|---|---|---|
| Medical Officers | 79 | 74 | 5 | 6 |
| Pharmacists | 48 | 31 | 17 | 35 |
| Ayush Attendant | 52 | 47 | 5 | 10 |
| Others* | 24 | 11 | 13 | 54 |

| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |
|---|---|---|

* Others include Naturopathy and Yoga Therapist, Yoga Demonstrator and Masseurs

(Source: Details furnished by the Department)

The shortage of staff in cadres of Medical Officers (MO), Pharmacists, Ayush attendants and others ranged from 6 to 54 *per cent*. Audit noticed that in 15 test-checked dispensaries, MOs were not available in eight and Pharmacist were not available in six dispensaries on all the days. In nine dispensaries, the

posts of Pharmacist were vacant. Due to non-posting of Pharmacist, the MOs were distributing the medicines to the patients and also maintaining the stores records after attending the patients. In the ISMH units at Puducherry, Karaikal and Mahe, the post of Masseur was vacant.

Government stated (November 2023) that necessary proposal has been submitted by Directorate of ISMH for filling up of vacant posts of Medical Officers through UPSC and that the Masseur post would be filled up shortly.

## 2.3 Conclusion

The health workforce includes clinical staff such as physicians, nurses and paramedical staff such as pharmacists, lab technicians, X-Ray technicians, etc., and other management and supporting staff. Sanctioned strength of doctors, nurses and paramedical staff in tertiary care institutions was inadequate with respect to the IPHS norms. There were vacancies in the cadre of nurses and paramedical staff at all test-checked HCFs including ISMH hospitals. The shortfall in paramedical staff ranged between 35 *per cent* and 63 *per cent* as at the end of March 2022. The availability of doctors and nurses in GH, Puducherry was more than the requirement and there were shortage of doctors and nurses in other hospitals indicating uneven manpower distribution across the HCFs.

## 2.4 Recommendations

- The UT Government should ensure that the Directorates periodically assess the vacancy position of different categories of staff and prepare an Annual Recruitment Calendar for recruitment of different categories of manpower.
- The UT Government should also review the adequacy of the sanctioned strength and should revise it in line with the IPHS norms and also re-distribute the manpower to the needy hospitals.



# CHAPTER 3

# HEALTHCARE SERVICES



# CHAPTER 3: HEALTHCARE SERVICES

**The UT Government did not prepare any Health Policy to ensure that the challenges relating to health sector are adequately addressed so that objective of providing quality and improved healthcare services is attained. The average number of patients attended to by a doctor in PHCs were higher leading to lesser consultation time. Some of the essential services like Accident and Trauma Ward, Burn ward, Dialysis, full range of Radiology and Pathology services were not available in test-checked HCFs. Most of the surgical procedures were not available in the test-checked CHCs. Out of the 23 diagnostic services, 15 and 16 services were not available in GH, Yanam and GH, Mahe respectively. None of the patients, doctors, hospital workers were provided with all types of linen as prescribed in IPHS norms which may lead to infection. The Ambulance turnout time at the patients' locations were not recorded by the call centre, as a result of which, the time taken by the Ambulances to reach the locations could not be ascertained.**

## 3.1 Planning

### 3.1.1 Non-framing of Union Territory Health Policy

The National Health Policy (NHP), 2017 envisages attainment of the highest possible level of health and well-being for all at all ages, through a preventive and promotive healthcare orientation in all developmental policies and universal access to good quality healthcare services without anyone having to face financial hardship as a consequence. This goal would be achieved through increasing access, improving quality and lowering the cost of healthcare delivery.

Audit observed that the Government of Puducherry (GoP) has not yet developed an exclusive Health Policy for the UT which takes into account the challenges relating to health sector, milestones to be achieved, monitoring mechanism, evaluation, etc., which are necessary to achieve the objectives of providing quality and improved healthcare services in the UT of Puducherry.

Government stated (November 2023) that DHFWS was in the process of formulating Health Policy for the UT of Puducherry.

## 3.2 Outpatient Services

To avail the outpatient services in the hospitals, the patients first register at the Outpatient Department (OPD). Thereafter, the doctor examines the patient and either prescribes diagnostic tests or medicines as per the diagnosis made during the consultation process.

### 3.2.1 Patient load in OPD

The number of outpatients (OP) attended to in the test-checked hospitals is shown in **Table 3.1**.

**Table 3.1: Number of outpatients attended to in the test-checked hospitals**

**(Numbers in lakh)**

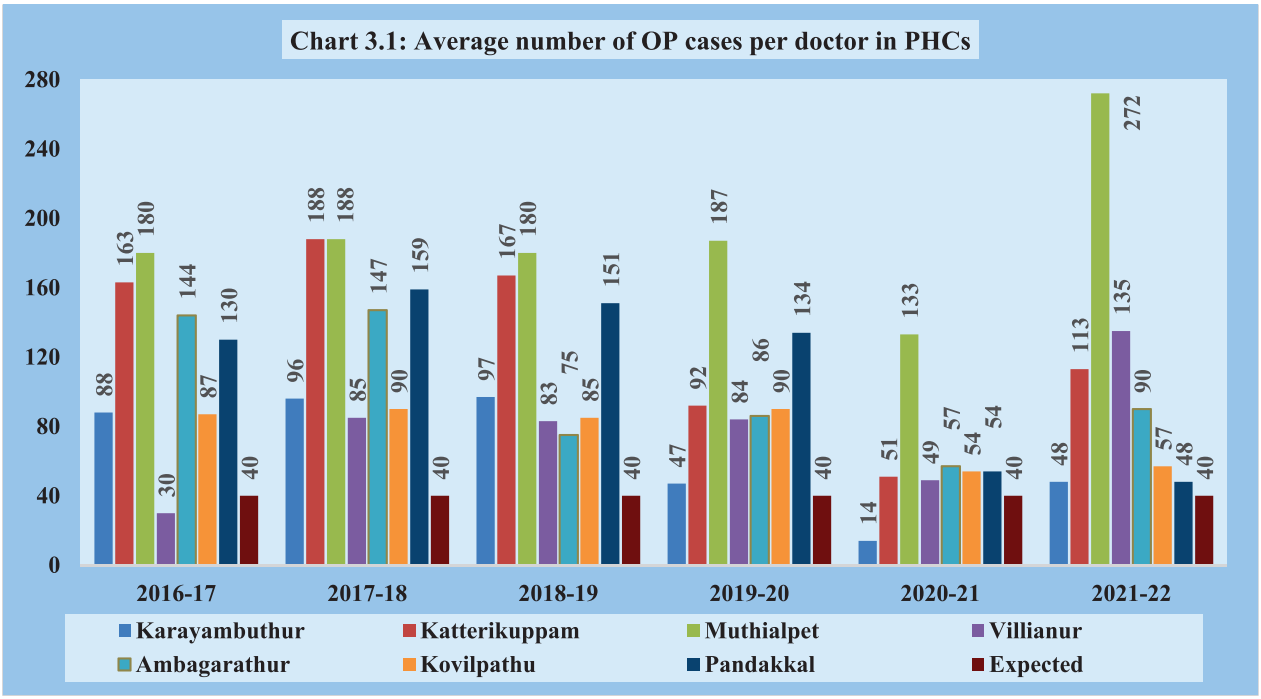
| Year | No. of out-patients in GHs/WCH/ IGMCRI | Increase (YoY) (in *per cent*) | No. of out-patients in RGAMCH | Increase (YoY) (in *per cent*) | No. of out-patients in CHCs | Increase (YoY) (in *per cent*) | No. of out-patients in PHCs | Increase (YoY) (in *per cent*) |
|---|---|---|---|---|---|---|---|---|
| 2016-17 | 36.02 | -- | 0.45 | -- | 4.90 | -- | 4.42 | -- |
| 2017-18 | 36.67 | 1.81 | 0.46 | 2.22 | 5.16 | 5.30 | 6.03 | 36.42 |
| 2018-19 | 36.00 | (-) 1.82 | 0.40 | (-) 13.04 | 4.98 | (-) 3.48 | 5.80 | (-) 3.81 |
| 2019-20 | 36.15 | 0.42 | 0.43 | 7.50 | 4.73 | (-) 5.02 | 5.97 | 2.93 |
| 2020-21 | 16.47 | (-) 54.44 | 0.22 | (-) 48.84 | 1.99 | (-) 57.93 | 3.55 | (-) 40.54 |
| 2021-22 | 17.43 | 5.83 | 0.48 | 118.18 | 2.49 | 69.39 | 5.75 | 61.97 |

(Source: Information furnished by test-checked hospitals/CHCs/PHCs)

Though the reduction in 2020-21 was attributable to COVID-19 pandemic, the reduction in 2018-19 in all the test-checked hospitals, reduction in tertiary care hospitals during 2021-22 and reduction in secondary care in 2019-20 were unexplainable and pointed towards falling reliance in Government healthcare facilities in urban areas.

### 3.2.2 OPD cases per doctor

OPD cases per doctor is an indicator for measuring efficiency of OPD services in a hospital. IPHS recommends that the Medical Officers (MO) in OPD were to conduct clinical consultation for six hours per working day and atleast 40 patients per doctor per day which works out to nine minutes per patient. The number of OP cases per doctor in test-checked PHCs are given in **Chart 3.1**.



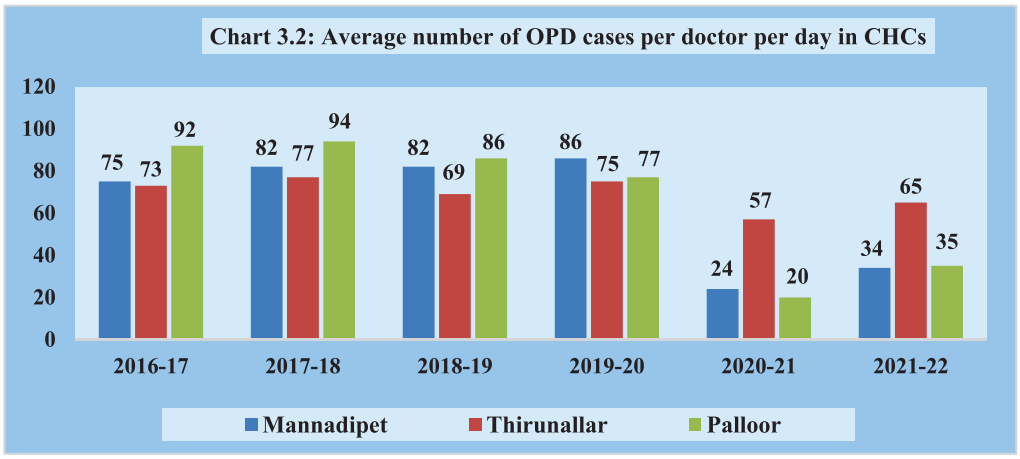

(Source : Information furnished by test-checked PHCs)

It could be seen from **Chart 3.1** that OPD cases per doctor in the test-checked PHCs was above 40 patients per doctor except in two PHCs in two years. The higher patient load per doctor eventually resulted in lesser consultation time per patient to the extent of less than two minutes for 31 *per cent* of the OPs, between two and five minutes for 55 *per cent* of OPs leaving only 14 *per cent* of OPs getting consultation time of over five minutes, which is an indicator of inadequate examination of patients and therefore deprival of proper clinical care in OPD in PHCs.

**During survey, 86 *per cent* of the outpatients responded that the time taken for consultation with the doctor ranged upto five minutes.**

**Chart 3.2** indicates the average number of OPD cases per doctor per day in respect of three test-checked[1] CHCs.

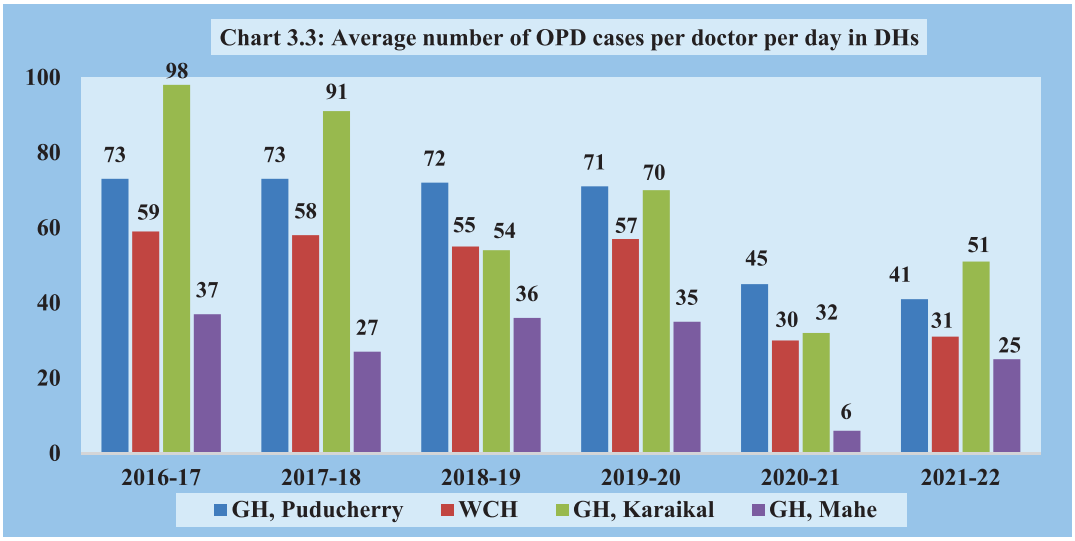
[1] Mannadipet, Thirunallar and Palloor.




(Source : Information furnished by test-checked CHCs)

It could be seen from **Chart 3.2** that the average patient per doctor per day was more than the IPHS norms of 40 patients per day per doctor during 2016-22[2]. In CHC, Thirunallar, it was more than the norms in all the years. The higher patient load per doctor eventually results in lesser consultation time per patient to the extent of two and five minutes for 87 *per cent* of OPs leaving only 13 *per cent* of OPs getting consultation time of over five minutes.

Similarly, the **Chart 3.3** indicates the average number of OPD cases per doctor per day in respect of four test-checked[3] tertiary care hospitals.




(Source : Information furnished by test-checked DHs)

Audit noticed that the consultation time was less than five minutes for 56 *per cent* of OPs and more than five minutes for the 44 *per cent* of OPs in test-checked tertiary care hospitals.

Government stated (November 2023) that the patients visiting for the first time take long duration whereas the follow-up treatment requires lesser time. The

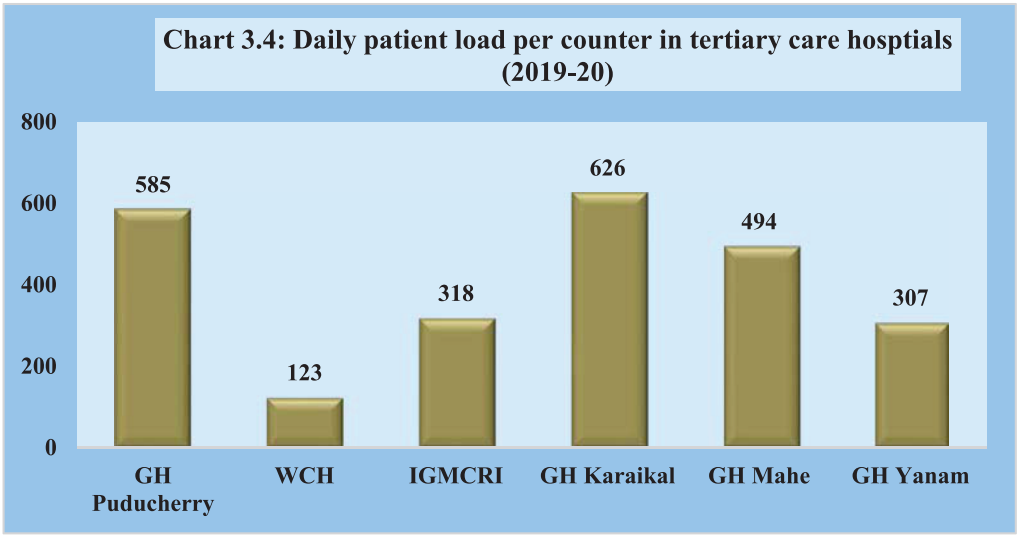
[2] Except during 2020-22 in CHCs, Mannadipet and Palloor.

[3] Except RGAMCH, Mahe, GH, Yanam and IGMCRI for which details were not available.

fact remained that the number of OPD cases per doctor was high when compared to IPHS norms. Further, the number of physicians has to be increased commensurate with the increase in number of OPD cases.

### 3.2.3 Registration facility for OPD

Registration counter is the first point of contact with the hospital for a patient and is an important component of the hospital experience for patients and their attendants. The availability of sufficient number of registration counters in proportion to OP load ensures speedy receipt of OP ticket and avoidable long queues. The average daily patient load in the test-checked tertiary care hospitals on a registration counter during 2019-20[4] is shown in **Chart 3.4**.



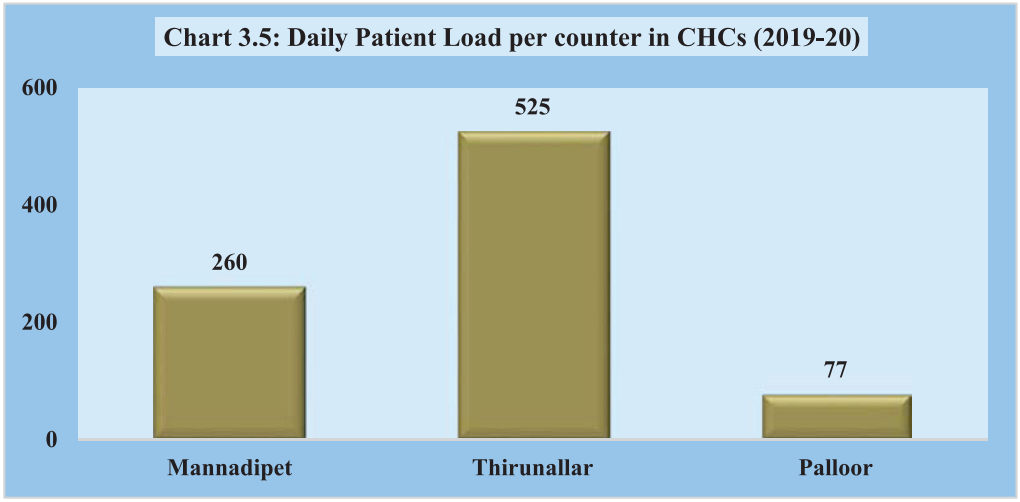

(Source: Test-checked hospitals)

During 2019-20, the average daily patient load on a registration counter was 408 for six test-checked GHs/WCH/IGMCRI. The patient load was significantly higher in GH, Karaikal (626) and GH, Mahe (494) which had only two counters each and GH, Puducherry (585) had seven counters, thus warranting the need for more counters. Further, in the seven test-checked PHCs, the average daily patient load on a registration counter varied from 90 to 587 patients with PHCs in Muthialpet (374) and Villianur (587) having higher load than the average of 234.

Similarly, the average daily patient load in the three test-checked CHCs on a registration counter during 2019-20[5] is shown in **Chart 3.5**.

[4] Since the number of outpatients during COVID pandemic was less during 2020-22, patient load of 2019-20 was considered.

[5] Since the number of outpatients during COVID pandemic was less during 2020-22, patient load of 2019-20 was considered.




(Source : Information furnished by test-checked CHCs)

During 2019-20, the average daily patient load on a registration counter was significantly higher in CHC, Thirunallar (525) which had only one counter, thus warranting the need for more counters.

**During survey, out of 176 outpatients, 30 patients suggested that more registration counters were required in the HCFs. Further, 25 *per cent* of the outpatients surveyed stated that they had to wait for 10 to 30 minutes for registration.**

Government stated (November 2023) that steps will be taken to increase the registration counters to avoid the waiting time for OPD patients.

### 3.2.4 Availability of OPD services in hospitals

IPHS norms, 2012 stipulates the essential services for the health care facilities especially in the District hospitals/General hospitals. **Table 3.2** shows the details of OPD services available in the test-checked District Hospitals.

**Table 3.2: Availability of OPD services in hospitals**

| Essential Services (OPD) | GH, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | IGM CRI |
|---|---|---|---|---|---|
| ENT | A | A | A | A | A |
| General Medicine | A | A | A | A | A |
| Paediatrics | A | A | A | A | A |
| General Surgery | A | A | A | A | A |
| Ophthalmology | A | A | A | A | A |
| Dental | A | A | A | A | A |
| Obstetric | NA* | A | A | A | A |
| Gynaecology | NA* | A | A | A | A |
| Psychiatry | A | A | NA | NA | A |
| Orthopedics | A | A | A | A | A |

| Essential Services (OPD) | GH, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | IGM CRI |
|---|---|---|---|---|---|
| Dermatology | A | A | NA | NA | A |
| Venereology | A | A | NA | A | NA |

* There is a separate Women and Children Hospital in Puducherry

A - Available-Green colour, NA - Not Available-Red colour

(Source: Information furnished by test-checked MCHs/GHs)

It could be seen from **Table 3.2** that the services of Psychiatry and Dermatology were not available in respect of GH Mahe and Yanam and Venereology was not available in GH Mahe and IGMCRI.

### 3.2.5 Basic facilities in OPD

The requirement of basic facilities in OPD *viz*., waiting room, drinking water, toilets (including toilets for physically challenged persons), seating facility, etc., are essential while patients are waiting for consultation with doctors. Audit observed shortcomings in provisions of basic facilities in the test-checked hospitals/CHC/PHCs which are detailed in **Table 3.3** and **Appendix 3.1**.

**Table 3.3: Non-availability of seating arrangement, toilet facility, etc., in test-checked hospitals, MCHs, CHCs and PHCs**

| Sl. No. | Name of the service | Hospitals / MCHs (Total 7) | CHCs (Total 3) | PHCs (Total 7) |
|---|---|---|---|---|
| 1 | Display of fluorescent fire exit sign | 6 | 2 | 5 |
| 2 | Enquiry/ May I Help Desk with staff fluent in local language | 4 | 1 | 3 |
| 3 | Directional signage for Emergency, Departments and Utilities | 2 | 1 | 1 |
| 4 | Display of safety, hazard and caution signs at prominent places | 2 | 1 | 3 |
| 5 | Details of important contacts like higher medical centres, blood banks, and fire department, police and ambulance services were displayed | 4 | 2 | 3 |
| 6 | Mandatory information (under RTI Act, PNDT Act, etc.) was displayed | 1 | 2 | 2 |
| 7 | Adequate seating facility | 0 | 1 | 0 |
| 8 | Patient Calling System (Digitalisation) | 3 | 2 | 4 |
| 9 | Separate toilets for male and female | 0 | 0 | 1 |

(Source : Details furnished by the health institutions concerned)

It was noticed that most of the test-checked HCFs did not have florescent fire exit sign, failed to provide patient help desks, did not display contact details of important services and lacked in providing digitised patient calling system which are essential requirements as per IPHS norms.



**Picture 3.1: Crowding of patients outside OPD pharmacy at PHC, Villianur**

**During survey, out of 176 outpatients surveyed across all test-checked HCFs, 27 patients responded that enquiry desk was not available, 29 patients mentioned that drinking water facility was not available, 14 patients complained that toilets were not maintained properly and 20 patients mentioned that seating arrangements were not adequate at the registration counters.**

Government stated (November 2023) that some of the shortcomings have been rectified and that the post of pharmacist will be filled up to manage the crowd outside pharmacy in PHC, Villianur.

### 3.2.6 Availability of OPD services in CHCs

As per IPHS norms, there should be certain essential services available in the OPDs at CHCs, which include General Surgery, General Medicine, Obstetrics and Gynaecology, Paediatrics, Dental, etc. The details of the OPD services available in the test-checked CHCs are as under:

**Table 3.4: Availability of OPD services in test-checked CHCs**

| Sl. No. | Name of Routine and Emergency care service | CHC, Mannadipet | CHC, Thirunallar | CHC, Palloor |
|---|---|---|---|---|
| 1 | General Medicine | A | A | A |
| 2 | General Surgery | NA | NA | NA |
| 3 | Obstetrics and Gynaecology | NA | NA | NA |
| 4 | Paediatrics | NA | NA | A |
| 5 | Eye | A | A | A |
| 6 | ENT | A | A | A |
| 7 | Dermatology | A | A | A |
| 8 | Psychiatry | A | A | A |
| 9 | Orthopedics | A | A | A |
| 10 | Dental OPD | A | A | A |

A=Available NA=Not Available

(Source : Details furnished by the health institutions concerned)

Out of the three test-checked CHCs, Audit noticed that none of the CHCs had services available in General Surgery, Obstetrics and Gynaecology. While CHC, Palloor provided services for Paediatrics, the other two CHCs did not have Paediatric facilities.

### 3.2.7 Care of routine and emergency cases in medicine in CHCs

IPHS 2012 norms for CHCs requires that every CHC has to provide Care of routine and emergency cases in medicine, which has been identified as an essential service. The essential care that are provided in the CHCs are given in **Table 3.5**.

**Table 3.5: Availability of routine and Emergency Care in test-checked CHCs**

| Sl. No. | Name of Routine and Emergency care service | CHC, Mannadipet | CHC, Thirunallar | CHC, Palloor |
|---|---|---|---|---|
| 1 | Dengue Haemorrhagic Fever | NA | NA | A |
| 2 | Cerebral Malaria | NA | NA | A |
| 3 | Dog and snake bite cases | A | A | A |
| 4 | Poisonings | A | A | A |
| 5 | Congestive Heart Failure | NA | NA | A |
| 6 | Left Ventricular Failure | NA | NA | A |
| 7 | Pneumonia | A | NA | A |
| 8 | Meningoencephalitis | NA | NA | A |
| 9 | Acute respiratory conditions | A | A | A |
| 10 | Status Epilepticus | A | NA | A |
| 11 | Burns | A | A | A |
| 12 | Shock | NA | A | A |
| 13 | Acute dehydration | A | A | A |
| 14 | Obstetric Care including surgical interventions like Caesarean Sections and other medical interventions | NA | NA | NA |

A=Available NA=Not Available
(Source : Details furnished by the CHCs)

As seen from **Table 3.5**, only five of the 14 services were provided by all the three test-checked CHCs. The health care system in CHCs need to be improved by providing medicinal care for all the routine and emergency cases received.

### 3.2.8 Management of emergency cases in PHCs

IPHS 2012 norms for PHCs prescribes that 24 hour emergency service has to be provided to patients as essential service. The extent of these services provided by the test-checked PHCs is given in **Table 3.6**.

**Table 3.6: Availability of Emergency services in test-checked PHCs**

| Sl. No. | Availability of 24 Hrs Management of selected Emergency Services | PHC, Villianur | PHC, Muthialpet | PHC, Karayambuthur | PHC, Katterikuppam | PHC, Kovilpathu | PHC, Ambagarathur | PHC, Pandakkal |
|---|---|---|---|---|---|---|---|---|
| 1. | Whether the PHC is working 24 hours. | Yes | Yes | No | Yes | No | Yes | No |
| 2. | Management of injuries and accident | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 3. | First Aid | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 4. | Stitching of wounds | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 5. | Incision and drainage of abscess | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 6. | Stabilisation of the condition of the patient before referral | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 7. | Dog bite /snake bite /scorpion bite cases | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 8. | Whether Medical Officer is available to attend to emergencies on call basis. | Yes | Yes | No | Yes | No | No | Yes |
| 9. | Availability of 24 hours normal delivery services | Yes | Yes | No | Yes | No | Yes | No |
| 10. | Availability of 24 hours referral services | Yes | Yes | No | Yes | No | Yes | No |

(Source : Details furnished by the PHCs)

Only four out of seven test-checked PHCs provided 24 hour service to patients. Three PHCs functioned only from 8AM to 2PM daily. Due to this the Medical Officers of other three PHCs could not provide 24 hour normal delivery service and 24 hour referral services to patients since they were not available to attend emergency cases on call as corroborated by the MOs. Despite availability of infrastructure, no delivery cases took place in all the seven PHCs during the audit period. The DHFWS should ensure that all the PHCs functioned 24x7 so that emergency services could be provided round the clock to patients.

### 3.2.9 Patient satisfaction survey of outpatients

NHM Assessor's Guidebook requires hospitals to conduct patient satisfaction surveys of OPs on a monthly basis. Audit observed that patient satisfaction surveys were not conducted in five[6] out of the seven test-checked tertiary care hospitals during 2016-21. Therefore, the hospitals failed to comply with the

[6] GH, Puducherry, Karaikal, Mahe, Yanam and RGAMCH, Mahe.

NHM norms and squandered the opportunity of eliciting the views of patients regarding the outpatient services in the respective hospitals.

Government stated (November 2023) that action is being taken to implement patient satisfaction survey in future in all the hospitals.

## 3.3 Inpatient services

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

### 3.3.1 Availability of inpatient services

IPHS stipulated that a District Hospital is expected to provide some of the essential services which includes inpatient services pertaining to General Medicine, General Surgery, Ophthalmology, Orthopaedics, etc. Audit observed that the required services were, however, not available in the test-checked GHs as shown in **Table 3.7**.

**Table 3.7: Inpatient services in General Hospitals**

| Hospital | Act | Bur | Dia | GM | GS | Oph | Orth | Psy | Den | Ped |
|---|---|---|---|---|---|---|---|---|---|---|
| GH, Puducherry | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| GH, Karaikal | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| GH, Mahe | No | No | No | Yes | Yes | Yes | Yes | No | Yes | Yes |
| GH, Yanam | No | Yes | No | Yes | Yes | Yes | Yes | No | Yes | Yes |

* **Act**: Accident and trauma ward, **Bur**: Burn ward, **Dia**: Dialysis, **GM**: General medicine, **GS**: General surgery, **Oph**: Ophthalmology, **Orth**: Orthopedics, **Psy**: Psychiatry, **Den**: Dentistry, **Ped**: Paediatrics

Yes - Available-Green colour, No - Not Available-Red colour

(Source: Test-checked hospitals)

It could be seen from **Table 3.7** that while GH, Puducherry and Karaikal are well equipped, GH, Mahe and Yanam lacked many services. Audit noticed that though the proposal for establishment of dialysis facilities in GH, Mahe and Yanam was initiated during 2016-17 the dialysis units were not installed till date. No specific reasons for non-establishment were available in the records. This indicates that the DHs except GH, Puducherry failed to provide all types of inpatient services, thus denying the needs of the patients.

Government stated (November 2023) that priority would be given to start Dialysis Unit in GH, Mahe and Yanam and Psychiatry service would be made available subject to availability of specialist/paramedical staff.

### 3.3.2 Availability of Intensive Care Unit services

IPHS norms for District Hospital prescribed that the number of beds in the ICU may be restricted to five *per cent* of the total bed strength initially but should be expanded to 10 *per cent* gradually. The availability of ICU beds against the IPHS norms is shown in **Table 3.8**.

**Table 3.8: Details of ICU beds**

| Name of District Hospital | Total bed strength | ICU beds required as per IPHS norms (10 *per cent*) | ICU beds available | Shortage of beds | Shortage (in *per cent*) |
|---|---|---|---|---|---|
| GH, Puducherry | 626 | 63 | 76 | -- | 0 |
| GH, Karaikal | 474 | 47 | 21 | 26 | 55 |
| GH, Mahe | 171 | 17 | 3 | 14 | 82 |
| GH, Yanam | 100 | 10 | 9 | 1 | 10 |

(Source: Details furnished by the hospitals)

It could be seen from **Table 3.8** that in GHs at Karaikal, Mahe and Yanam, the shortfall in bed strength was 55 *per cent*, 82 *per cent* and 10 *per cent* respectively as against the IPHS norms. In respect of GH, Karaikal and Mahe, even the initial contemplation of five *per cent* bed strength was not available. This would hamper the ICU services in case of emergency and may cause hardship to the patients as they are likely to be referred to other hospitals due to shortage of ICU beds.

Government stated (November 2023) that ICU beds would be provided after construction of building in GH, Mahe and steps would be taken to provide ICU beds in GH, Yanam.

### 3.3.3 Availability of infrastructure in Intensive Care Unit

IPHS prescribes availability of infrastructure and other services to patients admitted to ICUs of General/District/Medical College hospitals. The availability of infrastructure in the test-checked Hospitals is given in **Table 3.9**.

**Table 3.9: Availability of infrastructure in ICUs**

| Sl. No. | Particulars | GH, Puducherry | WCH, Puducherry | GH, Karaikal | GH, Yanam | GH, Mahe | IGMCRI |
|---|---|---|---|---|---|---|---|
| 1 | Availability of various types of ICU services as prescribed by national standards | A | A | NA | A | NA | A |
| 2 | Functional in-patient beds in ICU | A | A | A | A | A | A |
| 3 | Percentage of patients admitted in ICU who were monitored for fluid/electrolyte charting (in *per cent*) | 100 | 70 | 50 | Not provided | 8 | Not provided |
| 4 | Percentage of patients admitted in ICU who were monitored for intake and output charting (in *per cent*) | 100 | 70 | 100 | Not provided | 6 | Not provided |
| 5 | Percentage of patients admitted in ICU who were monitored for cardiac care monitoring (in *per cent*) | 100 | 100 | 100 | Not provided | 18 | Not provided |
| 6 | Availability of ICU ventilators | A | A | A | A | A | A |
| 7 | Facilities for curative services in ICU | A | A | A | A | A | A |
| 8 | Facilities for diagnostic services in ICU | A | A | A | A | NA | A |
| 9 | User charges displayed in local and simple language and communicated to patients effectively | A | NA | NA | NA | NA | NA |
| 10 | Availability of adequate space and waiting area for ICU as per requirement | A | A | NA | NA | NA | A |
| 11 | Nutritional assessment of patient was done as required and directed by doctor | A | A | A | A | NA | A |

(Source : Details furnished by the hospitals concerned)

As seen from **Table 3.9**, GH, Mahe was far behind in providing most of the above ICU services. GH, Karaikal and GH, Yanam had inadequate space and waiting area for ICU. Further, ICU services such as medical ICU, surgical ICU, neonatal ICU, paediatric ICU, etc., were not available in GH, Karaikal and GH, Mahe. The Government needs to attach adequate priority on improving the facilities, infrastructure and the services provided in the hospitals so as to cater to the health needs of the citizens.

### 3.3.4 Availability of Isolation Wards

IPHS norms for District Hospital prescribes separate isolation ward to isolate patients with infectious and communicable diseases, provided with independent access. The status of availability of isolation wards in the test-checked Hospitals/MCHs as on March 2022 is given in **Table 3.10**.

**Table 3.10: Availability of Positive and Negative isolation wards**

| Sl. No. | Name of Hospital / MCH | No. of Positive isolation wards | No. of Negative isolation wards |
|---|---|---|---|
| 1 | GH, Puducherry | NA | NA |
| 2 | WCH, Puducherry | A | NA |
| 3 | IGMCRI, Puducherry | A | A |
| 4 | GH, Karaikal | A | A |
| 5 | GH, Mahe | NA | A |
| 6 | Rajiv Gandhi Ayurveda Medical College and Hospital, Mahe | NA | NA |
| 7 | GH, Yanam | A | A |

A-Available NA-Not Available

(Source : Details furnished by the hospitals concerned)

Except IGMCRI, Puducherry, GH, Karaikal and GH, Yanam, all the other hospitals did not have either one or both types of isolation wards. Absence of separate positive and negative isolation wards has the impact of putting other patients at health risk.

### 3.3.5 Availability of Emergency Services in District Hospitals and Medical College Hospital

IPHS norms prescribe emergency services that are required to be available in hospitals. The details of availability of emergency services in the District/General Hospitals and Medical College Hospital are shown in **Table 3.11**.

**Table 3.11: Availability of emergency services**

| Name of Emergency Service | GH, Puducherry | WCH, Puducherry | IGM CRI | GH, Karaikal | GH, Yanam | GH, Mahe |
|---|---|---|---|---|---|---|
| Emergency OT | A | A | A | A | NA | NA |
| Emergency ward | A | A | A | A | A | NA |
| Trauma ward | A | NA@ | A | A | NA | A |
| Standard treatment protocol for Triaging of patients | A | A | A | NA | NA | NA |
| Availability of surgical facilities for Emergency Appendicectomy | A | NA@ | A | A | NA | A |
| Availability to diagnose and to treat Hypoglycemia, Ketosis and Coma | A | NA@ | A | A | A | A |
| Treatment of Assault /Bowel /Head /Stab injuries | A | NA@ | A | A | NA | NA |
| Emergency laboratory | A | A | A | A | A | A |
| Blood bank in close proximity to emergency department | A | A | A | A | NA | A |
| Mobile X-ray/ laboratory, side labs/plaster room in Accident and Emergency Service | A | A | A | A | NA | NA |

| Name of Emergency Service | GH, Puducherry | WCH, Puducherry | IGM CRI | GH, Karaikal | GH, Yanam | GH, Mahe |
|---|---|---|---|---|---|---|
| Emergency Operation Theatre for Maternity, Orthopaedic., Burns and plastic and Neurosurgery cases round the clock | * | A | A | A | NA | NA |
| Facilities for Accident and emergency services including poisoning and Trauma Care | A | A | A | A | A | NA |
| Separate provision for examination of rape/sexual assault victim | * | A | A | NA | NA | NA |
| Sufficient separate waiting areas and public amenities in emergency ward for patients and relatives. | A | A | A | NA | A | NA |
| Emergency protocols in emergency ward. | A | A | A | A | A | NA |
| Availability of disaster management plan in emergency ward. | NA | A | A | A | A | A |

* Emergency OT for maternity services and provision for examination of rape/sexual assault victims are available in WCH, Puducherry.

@ Emergency and Trauma care are referred to District Hospital.

(Source: Details furnished by the hospitals)

As seen from the above **Table 3.11**, many of the emergency services such as Emergency OT, mobile X-ray/side labs for accident and emergency services were not available in GH, Yanam and GH, Mahe. IGMCRI, Puducherry provided all the required emergency services as per norms.

It can also be seen from the table above that Blood Banks are available in all the General Hospitals, which are also located in close proximity to the respective Emergency Departments, as per the IPHS norms except for GH, Yanam where there is no blood bank available at all.

Government stated (November 2023) that necessary steps would be taken to provide emergency services at GH, Karaikal and Yanam.

### 3.3.6 Emergency cases referred to other hospitals

The details of number of emergency cases and number of emergency cases referred to other hospitals during the period 2016-22 with respect to the test-checked hospitals is given in **Table 3.12**.

**Table 3.12:Emergency cases referred to other hospitals**

| Sl. No. | Name of the Hospital | No. of emergency cases | No. of cases referred to other hospitals | Referral (in *per cent*) |
|---|---|---|---|---|
| 1 | GH, Puducherry | 16,46,636 | 3,130 | 0.19 |
| 2 | WCH, Puducherry | 5,17,325 | 868 | 0.17 |
| 3 | IGMCRI, Puducherry | 6,86,362 | 1,520 | 0.22 |
| 4 | GH, Karaikal | 83,342 | 3,604 | 4.32 |
| 5 | GH, Mahe | 3,57,136 | 4,692 | 1.31 |
| 6 | GH, Yanam | 4,820 | 4,820 | 100.00 |

(Source : Information furnished by test-checked DH and MCH)

The percentage of emergency cases referred to other hospitals was less than five *per cent* in all hospitals except GH, Yanam where all the emergency cases were referred to other hospitals for treatment. This indicated that GH, Yanam was not well equipped to meet the requirement of emergency cases as evident from **Table 3.12** since there was non-availability of critical emergency services.

### 3.3.7 Availability of inpatient beds

IPHS recommends the number of beds to be available in the various medical wards of a District Hospital for providing inpatient services. The availability of inpatient beds in the wards of the DHs as against the recommended requirement as per IPHS norms is shown in **Table 3.13**.

**Table 3.13: Availability of inpatient beds in the wards**

| Sl. No. | Name of Ward | Require-ment of Beds as per IPHS | GH, Puducherry | WCH, Puducherry | GH, Karaikal | Require-ment of Beds as per IPHS | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|---|---|
| 1 | General Medicine | **80** | 62 | NA | A* | **30** | 29 | 27 |
| 2 | General Surgery | **70** | 51 | NA | 45 | **30** | 15 | 19 |
| 3 | Post – Operative Ward | **30** | 19 | 20 | 20 | **26** | 21 | 9 |
| 4 | Ophthalmology | **20** | 27 | NA | 50 | **5** | 5 | NA |
| 5 | Accident and trauma | **15** | 34 | NA | 5 | **10** | NA | NA |
| 6 | Paediatrics | **40** | 3 | 120 | 30 | **10** | 15 | 10 |
| 7 | New Born Ward | **10** | NA | NA | 10 | **5** | NA | NA |
| 8 | Mothers room with dining and toilets | **10** | NA | NA | NA | **5** | NA | NA |
| 9 | Critical care ward – IMCU | **10** | 10 | NA | 10 | **5** | NA | NA |
| 10 | Isolation Ward | **5** | 10 | 2 | A* | **4** | 12 | A |
| 11 | Dialysis unit | **3** | 6 | NA | 6 | -- | NA | NA |
| 12 | Thoracic medicine ward with room for pulmonary function test | **20** | NA | NA | A* | -- | NA | NA |
| 13 | Labour room Boards | **8** | NA | 12 | 6 | **3** | 2 | 2 |
| 14 | Labour room (Eclampsia) beds | **3** | NA | 3 | 2 | -- | NA | NA |
| 15 | Septic Labour room Boards | **2** | NA | 4 | 1 | -- | 1 | NA |
| 16 | Ante-natal ward | **30** | NA | 31 | 29 | **15** | 6 | 11 |
| 17 | Post-natal ward | **30** | NA | 108 | 20 | **15** | 18 | NA |

| Sl. No. | Name of Ward | Require-ment of Beds as per IPHS | GH, Puducherry | WCH, Puducherry | GH, Karaikal | Require-ment of Beds as per IPHS | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|---|---|
| 18 | Postpartum ward | **50** | NA | 16 | NA | **20** | 10 | NA |
| 19 | Post operative ward | **40** | NA | 20 | 4 | **--** | NA | 9 |
| 20 | Burns Ward | **10** | 12 | NA | A* | **--** | NA | 1 |
| 21 | Blood Bank | **Yes** | 1 | A | 1 | **Yes** | 1 | NA |

NA: Not Available ; A: Available

* Adequacy of beds in these wards with reference to IPHS norms could not be ascertained by Audit

(Source: Details furnished by the hospitals)

It could be seen from **Table 3.13** that GH, Karaikal had inadequate bed strength in most of the wards. None of the hospitals provided mothers' room with dining and toilet facility. WCH, Puducherry had lesser beds in isolation ward and lesser number of post partum and post- operative beds. Number of beds in the General Medicine, General Surgery, Post-operative and Paediatric wards of GH, Puducherry were found to be inadequate as compared to IPHS norms. None of these hospitals (except GH, Karaikal) had Thoracic medicine ward with room for pulmonary function test. GH, Mahe and GH, Yanam were not provided with Accident and Trauma ward as well as Dialysis unit with required beds. Availability of inpatient services/beds for providing maternal and child care services in GH, Karaikal, GH, Mahe and GH, Yanam were also inadequate.

Government stated (November 2023) that in WCH, Puducherry, the excess beds in post-natal ward was reallocated to other wards as per need and that necessary steps would be taken to start new services in GH, Yanam and to provide Dialysis unit in GH, Mahe and Yanam under NHM.

### 3.3.8 Availability of surgical procedures in test-checked hospitals

IPHS norms require that service delivery in District Hospitals and CHCs should include essential surgical procedures to take care of routine and emergency care in surgery. The availability of surgical procedures in the test-checked healthcare institutions is given in the **Table 3.14**.

**Table 3.14: Availability of Surgical Procedures in test-checked Healthcare Institutions**

| Name of procedure (as per IPHS) | Puducherry | | | Karaikal | | Yanam | Mahe | |
|---|---|---|---|---|---|---|---|---|
| | GH, Puducherry | IGMCRI, Puducherry | CHC, Mannadipet | GH, Karaikal | CHC, Thirunallar | GH, Yanam | GH, Mahe | CHC, Palloor |
| Hernia | A | A | NA | A | NA | A | A | NA |
| Hydrocele | A | A | NA | A | NA | A | A | NA |
| Appendicitis | A | A | NA | A | NA | A | A | NA |

| Name of procedure (as per IPHS) | Puducherry | | | Karaikal | | Yanam | Mahe | |
|---|---|---|---|---|---|---|---|---|
| | GH, Puducherry | IGMCRI, Puducherry | CHC, Mannadipet | GH, Karaikal | CHC, Thirunallar | GH, Yanam | GH, Mahe | CHC, Palloor |
| Haemorrhoids | A | A | NA | A | NA | A | A | NA |
| Fistula | A | A | NA | A | NA | A | A | NA |
| Intestinal Obstruction | A | A | NA | A | NA | NA | NA | NA |
| Haemorrhage | A | A | NA | A | NA | A | A | NA |
| Nasal packing | A | A | A | A | A | A | A | NA |
| Tracheostomy | A | A | A | A | NA | NA | NA | NA |
| Foreign body removal | A | A | A | A | A | A | A | NA |
| Fracture reduction | A | A | NA | A | NA | A | A | NA |
| Putting splints/ plaster cast | A | A | A | A | NA | A | A | NA |

NA - Not Available A - Available
(Source: Details furnished by the hospitals)

As seen from the **Table 3.14**, all the test-checked CHCs lagged behind in providing the prescribed surgical procedures. CHC, Palloor was not equipped to provide any of the surgical procedures. Surgical procedures of Intestinal obstruction and Tracheostomy were not provided by two[7] General hospitals. Two[8] General hospitals and one[9] medical college hospital provided all the surgical procedures. Non-availability of the above procedures as per IPHS norms has the effect of depriving the patients requiring surgical interventions.

The Government stated (November 2023) that action would be taken to renovate the OT in CHC, Thirunallar. The reply was, however, silent about CHC, Palloor where none of the surgical procedures as per IPHS norms were in place.

### 3.3.9 Availability of inpatient beds, labour service and OTs in test-checked PHCs

IPHS prescribes that it is essential to have six inpatient beds in PHCs. However, audit noticed that the number of inpatient beds available was below the norm in six out of seven PHCs test-checked as shown in **Table 3.15**.

7 GH, Mahe and GH, Yanam.
8 GH, Puducherry and GH, Karaikal.
9 IGMCRI, Puducherry.

**Table 3.15: Availability of beds in PHC**

| Sl. No. | Name of PHC | Region | No. of beds available | Shortfall | Percentage of shortfall |
|---|---|---|---|---|---|
| 1 | Muthialpet | Puducherry | 5 | 1 | 17 |
| 2 | Katterikuppam | Puducherry | 3 | 3 | 50 |
| 3 | Villianur | Puducherry | 2 | 4 | 67 |
| 4 | Karayamputhur | Puducherry | 3 | 3 | 50 |
| 5 | Ambagarathur | Karaikal | 10 | - | 0 |
| 6 | Kovilpathu | Karaikal | 5 | 1 | 17 |
| 7 | Pandakkal | Mahe | 2 | 4 | 67 |

(Source: Joint inspection and Annual Reports of PHCs)

It could be seen from **Table 3.15** that except PHC, Ambagarathur shortage of inpatient beds ranged from 17 to 67 *per cent* in the test-checked PHCs. It was further noticed that deliveries were not conducted in PHCs since patients prefer District Hospital of the concerned region. Further, none of the seven test-checked PHCs had operation theatre services to perform Vasectomy, Tubectomy, Laparoscopy and Cataract surgeries.

The Government stated (November 2023) that though the PHCs had facilities for deliveries, yet the patients preferred district hospitals because of close proximity. The Government further stated that additional beds could not be provided due to space constraints and that it would be considered while upgrading PHCs.

### 3.3.10 Skewed availability of inpatient beds

World Health Organisation recommends two beds per 1,000 population as 'Desirable'. Government HCFs in the UT of Puducherry had a total of 3,141 beds, which worked out to 1.95 beds per 1,000 population. Analysis of inpatient bed availability in different regions of Puducherry revealed that the availability was not uniform throughout the UT; it ranged from 1.01 beds per thousand population in Yanam region to 5.53 beds per thousand population in Mahe region.

## 3.4 Operation Theatre services

### 3.4.1 Shortage of Operation Theatres

IPHS for District Hospitals prescribes one Operation Theatre (OT) for every 50 general inpatient beds and one OT for every 25 surgical beds. The details of

requirement, availability and shortfall in number of OTs in the District Hospitals are given in **Table 3.16**.

**Table 3.16: Details of shortfall in number of Operation Theatres**

| Name of hospital | General inpatient beds | Surgical beds | OTs required as per IPHS norms | | | Total OTs available | Shortfall | Shortfall (in *per cent*) |
|---|---|---|---|---|---|---|---|---|
| | | | One OT for every 50 general inpatient beds | One OT for every 25 surgical beds | Total requirement | | | |
| GH, Puducherry | 283 | 343 | 6 | 14 | 20 | 13 | 7 | 35 |
| GH, Karaikal | 418 | 56 | 8 | 2 | 10 | 5 | 5 | 50 |
| GH, Mahe | 156 | 15 | 3 | 1 | 4 | 2 | 2 | 50 |
| GH, Yanam | 81 | 19 | 2 | 1 | 3 | 1 | 2 | 67 |

(Source: Details furnished by the hospitals)

It could be seen from **Tables 3.16** that there were shortage of OTs which would have an impact in conduct of surgeries and maintenance of the OTs.

The number of major and minor surgeries conducted during April 2021 to March 2022 in the OTs are given in **Table 3.17**.

**Table 3.17: Number of surgeries conducted during April 2021 to March 2022**

| Name of hospital | Major surgeries | Minor surgeries | Total | Average number of surgeries per day (Col 4/365 days) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| GH, Puducherry | 2,934 | 17,132 | 20,066 | 55 |
| GH, Karaikal | 1,353 | 2,555 | 3,908 | 11 |
| GH, Mahe | 311 | 417 | 728 | 2 |
| GH, Yanam | 422 | 1,104 | 1,526 | 4 |

(Source: Details furnished by the hospitals)

Government stated (November 2023) that minor surgeries took less time whereas major surgeries are elective and there was no overstretching of cases. However, the reply was silent about the shortage of OTs with reference to IPHS norms.

### 3.4.2 Operation Theatres for major/emergency surgeries

IPHS norms prescribe the requirement of OTs for elective major surgeries, emergency surgeries for district hospitals having bed strength of 101 to 500. The requirement and availability of OTs in the GHs are shown in **Table 3.18**.

**Table 3.18: Availability of OTs in test-checked GHs**

| Name of Hospital / Bed Strength | OT for elective major surgeries | | OT for emergency surgeries | |
|---|---|---|---|---|
| | Required | Available | Required | Available |
| GH, Puducherry (626) | 3 | 3 | 1 | 1 |
| GH, Karaikal (474) | 3 | 1 | 1 | 1 |
| GH, Mahe (171) | 1 | 1 | 1 | 0 |
| GH, Yanam (100) | 1 | 1 | 1 | 0 |

(Source: Details furnished by the hospitals)

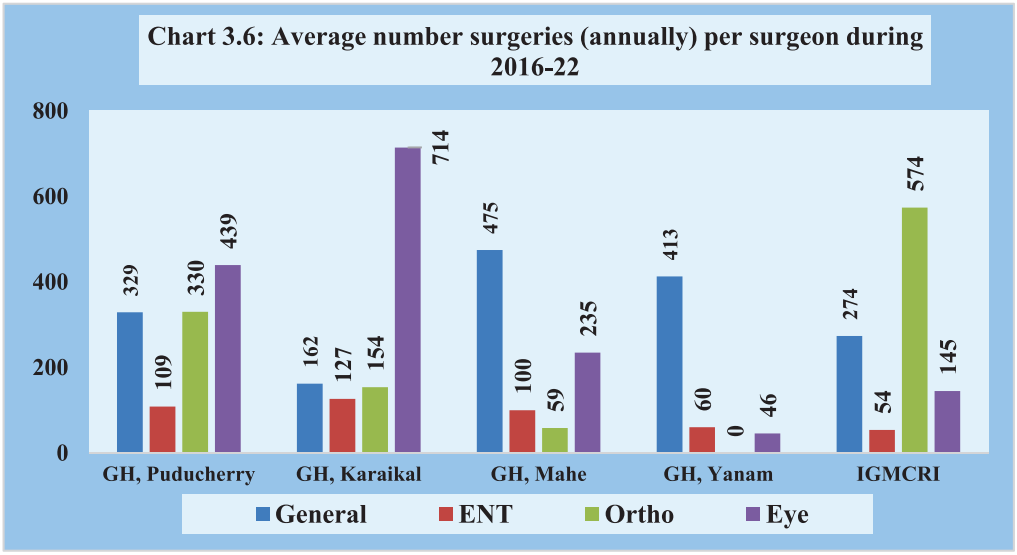
It could be seen from **Table 3.18** that there was shortage of OTs in GH, Mahe and GH, Yanam.

Audit further noticed that as against IPHS norms of one minor OT per CHC, Minor OT was not available in two[10] out of three CHCs test-checked. This would have denied the facility of minor surgical operations to the patients, forcing them to access the facility from either private hospitals or the GHs thereby putting strain on the resources of GHs.

### 3.4.3 Average number of surgeries per surgeon

As per NHM Assessor's Guidebook, surgeries performed per surgeon is an indicator to measure efficiency of the hospitals. Analysis of the surgeries conducted during 2016-17 to 2021-22 in the test-checked health institutions showed substantial variation in the number of surgeries per surgeon as shown in **Appendix 3.2**. The **Chart 3.6** indicates the annual average number of surgeries per surgeon for six years in the test-checked DHs and IGMCRI during the audit period.

[10] CHC, Palloor and Thirunallar.




(Source: Details furnished by the hospitals and IGMCRI)

As evident from the **Chart 3.6** the average number of eye surgeries conducted in GH, Yanam and IGMCRI were low compared to other GHs. No Orthopaedic surgeries were conducted in GH, Yanam inspite of the availability of one surgeon while it was lesser in GH, Mahe and Karaikal.

It could also be seen from the **Appendix 3.2** that only two and nil orthopaedic surgeries were conducted in GH, Mahe during 2020-21 and 2021-22 by one surgeon. GH, Karaikal and IGMCRI, Puducherry had considerably lesser number of General surgeries per surgeon as compared to the rest of the hospitals. Average number of eye surgeries per surgeon reduced considerably during 2019-22 in GH, Karaikal and during 2020-22 in GH, Yanam and the number of eye surgeons had reduced from four to one during this period in GH, Yanam. As compared to its own performance during 2016-19, the number of patients as well as number of surgeries per surgeon in Orthopaedic and eye operation theatres of IGMCRI, Puducherry came down during 2019-22.

The patients preferring private health institutions could not be ruled out since there was fall in average number of surgeries performed in these hospitals.

Government stated (November 2023) that some patients preferred to go to higher institutions for treatment.

### 3.4.4 Availability of basic necessities to provide Operation Theatre services

IPHS prescribes certain basic necessities in providing Operation Theatre service such as its location, disabled-friendly, availability of piped suction and medical gases, calibration of measuring equipment, coverage of equipment under annual maintenance contract, etc. The status of availability in this regard is shown in **Table 3.19**.

**Table 3.19: Availability of basic necessities to provide OT service**

| Description | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Yanam | GH, Mahe |
|---|---|---|---|---|---|---|
| OT have convenient relationship with surgical ward, intensive care unit, radiology, pathology, blood bank and CSSD. | Yes | Yes | Yes | Yes | No | Yes |
| Access to facility is provided without any physical barrier and friendly to people with disabilities. | Yes | Yes | Yes | Yes | Yes | No |
| OT have piped suction and medical gases, electric supply, heating, air-conditioning, ventilation. | Yes | Yes | Yes | Yes | No | Yes |
| Patient's records and clinical information is maintained. | Yes | Yes | Yes | Yes | Yes | Yes |
| Has defined and established grievance redressal system in place. | Yes | Yes | Yes | Yes | Yes | No |
| Whether all equipment are covered under AMC including preventive maintenance? | Yes | No | Yes | No | Yes | Yes |
| Whether the facility has established procedure for internal and external calibration of measuring Equipment | No | No | Yes | Yes | No | Yes |

(Source: Details furnished by the hospitals)

From **Table 3.19**, it could be seen that the OT equipment which are very critical, were not covered by AMC in WCH, Puducherry and GH, Karaikal. Further, calibration of measuring equipment was not done periodically in GH, Puducherry, WCH, Puducherry and GH, Yanam. GH, Mahe did not have barrier free access to OT facility to benefit people with disabilities and did not have established grievance redressal system. Audit observed that the Operation Theatre in GH, Yanam was situated away from surgical ward, ICU, Central Sterile Services Department (CSSD) and radiology departments causing inconvenience to the patients. Deputy Director, GH, Mahe assured to provide the facilities to the OTs.

### 3.4.5 Evaluation of inpatient services through Outcome Indicators

The IPD services provided during 2016-22 in the five test-checked GHs (Puducherry, Karaikal, Mahe and Yanam) and WCH were evaluated through the Outcome Indicators *viz*., Bed Occupancy Rate (BOR)[11], Bed

[11] BOR: Bed Occupancy Rate is an indicator of the productivity of the hospital services and is a measure of verifying whether the available infrastructure and processes are adequate for delivery of health services.

Turnover Rate (BTR)[12], Discharge Rate (DR)[13], Leave Against Medical Advice (LAMA) Rate[14] and Absconding Rate[15]. The outcome of evaluation is given in **Table 3.20**.

**Table 3.20: Outcome indicators of selected of Hospitals for the period 2016-22**

| Hospital | Outcome Indicators | | | | |
|---|---|---|---|---|---|
| | Bed Occupancy Rate as per IPHS (80 *per cent*) | Bed Turn Over Rate | Discharge Rate | LAMA Rate | Absconding Rate |
| | | Calculated based on Formula prescribed in the IPHS norms for assessing performance of the Hospitals | | | |
| GH, Puducherry | 84.83 | 6.82 | 93.35 | 4.10 | 6.54 |
| WCH, Puducherry | 80.49 | 4.51 | 93.51 | 1.26 | 0.54 |
| GH, Karaikal | 54.83 | 4.26 | 63.09 | 11.99 | 2.02 |
| GH, Mahe | 37.33 | 3.20 | 102.04 | 13.92 | 0.44 |
| GH, Yanam | 51.20 | 3.27 | 85.07 | 1.42 | 3.15 |

(Source: Details furnished by the hospitals)

It could be seen from **Table 3.20** that

- the BOR rate was below the optimum level of 80 *per cent* in GHs Karaikal, Mahe and Yanam in the test-checked months[16] which indicated that the infrastructure and medical care being provided in the GHs are not up to the expected level which may force the public to seek medical assistance from private hospitals.
- except in GH, Puducherry, the efficiency of the remaining hospitals as indicated by BTR was found to be on the lower side indicating that fewer patient admissions or longer duration of stay in these hospitals.
- the lowest discharge rate was in GH, Karaikal, this implied that the hospital was the most under-performing hospital among the five test-checked hospitals.
- the average LAMA rate was alarmingly high in GH, Mahe and GH, Karaikal which was indicative of the fact that the patients may have preferred to leave because of poor service quality in these hospitals.

12 BTR: Bed Turnover Rate is the rate of usage of beds in an inpatient department in a given period of time and is a measure of the utilisation of the available bed capacity and serves as an indicator of the efficiency of the hospital.

13 DR: Discharge rate measures the number of patients leaving a hospital after receiving due healthcare.

14 LAMA: Leave against Medical Advice (LAMA) rate is evaluated to measure service quality of a hospital.

15 Abs rate: Absconding rate refers to patients who leave the hospital without informing the hospital authorities.

16 May 2016, July 2017, September 2018, November 2019, January 2021 and March 2022.

- absconding rate was substantially high in GH, Puducherry when compared with the other test-checked Hospitals.

Government stated (November 2023) that the Health Department is taking adequate measures to increase the bed occupancy rate in GH, Karaikal and Mahe. Action was being taken to improve the infrastructure facilities in GH, Karaikal. In respect of GH, Mahe the Government admitted that the people in the region prefer admission in private hospitals as they have advanced medical facilities.

### *3.4.5.1 Low bed occupancy in IGMCRI*

As per clause B.1.9 of Minimum Standard Requirements for the Medical College for 150 Admissions Annually Regulations, 1999 (Amended up to January 2018) of MCI, the Teaching Hospitals are required to have 650 beds for providing training to MBBS students. The shortfall noticed in the bed occupancy rate is shown in **Table 3.21**.

**Table 3.21: Shortfall in bed occupancy rate**

| Year | Bed strength required as per MCI norms | Bed strength actually available | Bed occupancy rate as prescribed in MCI norm (in *per cent*) (as per clause B.1.9) | Actual percentage of bed occupancy |
|---|---|---|---|---|
| 2016-17 | 650 | 705 | 75 | 79 |
| 2017-18 | 650 | 705 | 75 | 60 |
| 2018-19 | 650 | 685 | 75 | 67 |
| 2019-20 | 650 | 685 | 75 | 63 |
| 2020-21 | 650 | 695 | 75 | 25 |
| 2021-22 | 650 | 695 | 75 | 45 |

(Source : Details furnished by IGMCRI)

It is seen that during the years from 2017-18 to 2021-22, the BOR was below the MCI norms of 75 *per cent*.

Government stated (November 2023) that the shortfall in the bed occupancy rate was mainly due to referral of many patients for need of super speciality care such as Cardiology, Nephrology, Neurology and necessary action is being taken to establish the Super Speciality Departments in this Hospital which will increase the bed occupancy rate in future.

### *3.4.5.2 Bed Occupancy Rate in test-checked CHCs*

The IPHS norms for CHCs were projected based on the assumption that there will be average bed occupancy of 60 *per cent*. The details of BOR for the test-checked CHCs are shown in **Table 3.22**.

**Table 3.22: BOR of the test-checked CHCs**

| Year | BOR as per IPHS | Mannadipet | Thirunallar | Palloor |
|---|---|---|---|---|
| 2016-17 | 60 | 17.82 | 53.91 | 84.14 |
| 2017-18 | 60 | 20.10 | 57.51 | 73.56 |
| 2018-19 | 60 | 13.35 | 44.47 | 68.04 |
| 2019-20 | 60 | 10.29 | 40.17 | 79.93 |
| 2020-21 | 60 | 1.06 | 0.90 | 34.18 |
| 2021-22 | 60 | 2.08 | 5.61 | 59.57 |

(Source: Details furnished by the hospitals)

The BOR in CHC, Mannadipet ranged between 1.06 and 20.10 *per cent* during 2016-22. In respect of CHC, Thirunallar, BOR was between 0.90 and 57.51 *per cent* during the same period. Hence, the productivity of CHC, Mannadipet and CHC, Thirunallar were very low against the norm of 60 *per cent*.

However, the BOR of CHC, Palloor was much higher at 68.04 to 84.14 *per cent* during 2016-20, which saw a dip during 2020-22 due to COVID pandemic. The peak BOR of 84.14 *per cent* in 2016-17 and average BOR of 76.41 *per cent* during 2016-20 in CHC, Palloor implied strain on resources of the CHC, that could adversely impact the quality of care provided, which requires increase in bed strength and manpower.

Government stated (November 2023) that action was being taken to improve the infrastructure facilities and posting of adequate Doctors/staff in the CHCs Thirunallar and Mannadipet to improve the Bed Occupancy Rate.

### 3.4.6 Outcome Indicators in respect of SNCUs and Maternity Hospital

Special New born Care Units (SNCUs) provide care for sick new borns, that is, all type of neonatal care except assisted ventilation and major surgeries. Out of four Government hospitals providing maternal care in the four regions, Special New Born Care Unit has not been established in GH, Mahe and GH, Yanam.

The outcome indicators in respect of Special New Born Care Units (SNCU) and Maternity wards of Government Hospitals are given in **Appendices 3.3** and **3.4**. It could be seen that the Referral rate and Neonatal death rate for SNCUs in WCH, Puducherry and GH, Karaikal had shown increase during 2016-17 to 2020-21, which reflects on the need for these HCFs to improve healthcare for sick new borns.

## 3.5 Emergency Response and Health System Preparedness Package

### 3.5.1 Statistical data on COVID-19

The COVID-19 pandemic caused serious impact on the healthcare networks of the Union Territory since March 2020. Government of Puducherry notified (March 2020) COVID-19 as epidemic. Indira Gandhi Medical College Hospital was declared as dedicated COVID hospital. All the Government tertiary, secondary and primary health institutions were involved in testing, isolating and treating the COVID patients. Due to surge of cases, private medical colleges functioning in the UT were directed (August 2020) to dedicate 300 beds for treating patients referred by the GoP. **Table 3.23** summarises Government's response and outcomes of COVID-19 as of 31 March 2022.

**Table 3.23: Government's response and outcomes of COVID-19**

| Particulars | Numbers |
|---|---|
| No. of hospital beds | 6,954 |
| No. of oxygen beds | 1,804 |
| No. of ICU Beds | 638 |
| No. of COVID -19 Test Centres | 57 |
| Total Number of Tests done | 22,28,522 |

(Source: Details furnished by the Directorate)

### 3.5.2 Funding for COVID-19

To mitigate the disaster, funds were released under various components by GoP, GoI, UTDRF, MPLAD, etc., for providing healthcare, treatment, rehabilitation, containment of spread and connected activities.

Details of assistance by GoI and GoP towards COVID-19 and its utilisation are given in **Appendix 3.5 (a)** and **(b)**. In this connection the following observations are made:

- Out of ₹ 32.52 crore released upto March 2022, an expenditure of ₹ 26.86 crore was incurred with unspent balance of ₹ 5.66 crore.
- It was noticed that an amount of ₹ one crore was provided under ECRP-II for installation of Liquid Medical Oxygen Tanks (LMOTs).
- As against the allocation of ₹ 63.53 crore by GoP, an amount of ₹ 26.20 crore was spent resulting in a savings/surrender of ₹ 37.33 crore (59 *per cent*).

Government stated (November 2023) that since LMOTs were provided in all the COVID care hospitals the amount provided were utilised for purchase of other essential equipment required by the hospitals.

### 3.5.3 Availability of Ventilators and Oxygen Concentrators

The status of availability of ventilators and oxygen concentrators (OCs) in the District/Medical College hospitals for management of COVID-19 pandemic is given in **Appendices 3.6** and **3.7** respectively. It could be seen that out of 179 ventilators, 98 ventilators were installed with delays ranging from one to 93 days. Thus, the delay in installing the critical equipment would have affected the treatment of the patients during COVID pandemic.

In respect of OCs, audit noticed that nine OCs were not put to use in GH, Karaikal and kept in hospital stores. National Informatics Centre had developed the "OC-MIS" mobile app for National Health Mission, Ministry of Health and Family Welfare, GoI as a free app for restricted use by authorised Government users working in Health Facilities across the country. The application is developed to facilitate receipt of Heath equipment being sent to the Health Facilities by GoI under PM Cares, by scanning of secure QR code pasted on item boxes. However, none of the test-checked hospitals had connected the OCs received to the mobile application.

### 3.5.4 Non-availability of COVID-19 drugs, protective equipment and consumables

In order to manage the COVID-19 pandemic, the Government Pharmacy, Puducherry effected centralised purchase of 56 numbers of drugs, protective equipment, consumables and disposables for distribution to health care institutions in UT of Puducherry as detailed in **Appendix 3.8**. The status of availability of these items in the stock of the General/Medical College Hospitals as on March 2022 is given in **Table 3.24**.

**Table 3.24 : Availability of COVID-19 drugs, protective equipment and consumables**

| Name of Hospital | Number of items available | Percentage of availability |
|---|---|---|
| GH, Puducherry | 34 | 61 |
| IGMCRI, Puducherry | 26 | 46 |
| GH, Karaikal | 21 | 38 |
| GH, Mahe | 20 | 36 |
| GH, Yanam | 30 | 54 |

(Source : Details furnished by respective health institutions)

The availability of the above items varied between 36 *per cent* in GH, Mahe and 61 *per cent* in GH, Puducherry which showed that the hospitals did not have all the items in stock to effectively manage the pandemic.

### 3.5.5 Oxygen Services

Oxygen is an essential medicine. Healthcare professionals use oxygen to treat respiratory illnesses like COVID-19 and pneumonia. Oxygen is also essential for surgery and trauma. Elderly, pregnant women and new borns need oxygen in regular basis. The availability of oxygen services in General hospitals is given in **Appendix 3.9**.

Assessment of Oxygen requirement for necessary infrastructure creation was not made by GH, Yanam and it did not prepare SOP for providing Oxygen service. The Eclampsia Room in GH, Karaikal was not provided with required number of Central Oxygen supply. The hospital also did not have Double Outlet Oxygen Concentrator in SNCU. The oxygen services available in GH, Karaikal and GH, Yanam need to be improved to meet the needs of vulnerable patients.

## 3.6 Maternity Services

### 3.6.1 Provision of post-natal care after delivery

As per the Operational Guidelines on Maternal and New born Health, every mother must be provided with post-natal care that ensures support to her in this period, identifies complications and arranges for referral when required. This care must be preferably institutional in the first 48 hours.

Region-wise details of women discharged within 48 hours after delivery in post-natal care during 2021-22 are given in **Table 3.25**:

**Table 3.25: Women discharged within 48 hours after delivery in post-natal care during 2021-22**

| Name of Region | Total number of institutional delivery | Total number of women discharged within 48 hours | Percentage |
|---|---|---|---|
| Puducherry | 28,230 | 31 | 0.1 |
| Karaikal | 2,665 | 290 | 10.9 |
| Mahe | 390 | 48 | 12.3 |
| Yanam | 371 | 0 | 0.0 |

(Source: Information provided by test-checked hospitals)

It could be seen from **Table 3.25** that significantly higher percentage of women were discharged within 48 hours after delivery in Karaikal (10.9 *per cent*) and

Mahe (12.3 *per cent*) regions, indicating non-provision of post-natal healthcare that may require after delivery.

Government stated (November 2023) that instruction has been issued to GH, Karaikal to ensure post-natal care after delivery.

### 3.6.2 Vaccination of birth doses to new born

As per the National Immunisation Schedule, the vaccines to be administered at birth to new born are Oral Polio Vaccine (OPV) and Hepatitis B birth dose. As per the Operational Guidelines issued by Child Health Division, Ministry of Health and Family Welfare, all new borns with birth weight of 1,000 gm or more should be administered 1 mg of Vitamin K intramuscularly, while those weighing less than 1,000 gm should receive 0.5 mg dose. The status of achievement of birth doses to new born are given in **Table 3.26**.

**Table 3.26: Achievement of birth doses given to new born during 2021-22***

| Name of Region | Year | Total live births | Number of birth doses given | | | Achievement (in percentage) | | |
|---|---|---|---|---|---|---|---|---|
| | | | Vitamin 'K' | OPV | Hepatitis B | Vitamin 'K' | OPV | Hepatitis B |
| Puducherry | 2021-22 | 28,087 | 27,995 | 28,055 | 27,996 | 99.7 | 99.9 | 99.7 |
| Karaikal | 2021-22 | 2,650 | 2,642 | 2,638 | 2638 | 99.7 | 99.5 | 99.5 |
| Mahe | 2021-22 | 389 | 327 | 388 | 388 | 84.1 | 99.7 | 99.7 |
| Yanam | 2021-22 | 371 | 366 | 340 | 371 | 98.7 | 91.6 | 100.0 |

* The information/data pertains to both Public and Private Health Facilities.
(Source: Information provided by Deputy Director (Family Welfare), DHFWS)

From **Table 3.26**, it is noticed that the administration of Vitamin-K injection at birth in Mahe region stood at 84.1 *per cent*. Since Vitamin-K injection at birth reduces new born mortality, administration of the same to all new born requires to be ensured in Mahe region.

Government stated (November 2023) that instructions have been issued to the Deputy Director (Family Welfare) to ensure compliance regarding administration of Vitamin K doses to the new born in all the District Hospitals particularly in GH, Mahe.

### 3.6.3 Non-availability of investigation services for pregnant women in CHCs

Guidelines for Ante-natal Care and Skilled Attendance at Birth by ANMs/LHVs/SNs published (April 2010) by Maternal Health Division,

Ministry of Health and Family Welfare prescribed six[17] investigation services in CHCs depending upon the condition of pregnancy during Ante-natal Care visits to identify pregnancy related complications.

Audit noticed that out of three[18] test-checked CHCs, two[19] CHCs did not conduct Rapid Malaria test and all the three CHCs did not conduct Hepatitis B Surface Antigen (HBsAg) test. Non-availability of all the required laboratory investigation services will have an impact on the quality of Ante-natal Care provided to pregnant women.

Government stated (November 2023) that instructions have been issued to the Deputy Director (Family Welfare) to ensure availability of investigation services for pregnant women in CHCs.

### 3.6.4 Labour room facilities in CHCs/PHCs

IPHS 2012 norms requires that CHCs and PHCs should have a labour room. CHCs should be provided with an Obstetrician-Gynaecologist. The status of deliveries conducted in the CHCs/PHCs is given **Table 3.27**.

**Table 3.27: Availability of Labour Room and deliveries conducted in test-checked CHCs/PHCs**

| Type of Health Institution | Total number of health institutions test-checked | Availability of labour room | Whether deliveries are conducted |
|---|---|---|---|
| CHCs | 3 | 3 | 2 |
| PHCs | 7 | 7 | 0 |

(Source : Details furnished by the test-checked CHCs/PHCs)

Even though all the test-checked CHCs and PHCs were equipped with a labour room, deliveries were not conducted in CHC, Palloor.

### 3.6.5 C-Section deliveries conducted in test-checked DHs/MCH

The number and percentage of C-Section deliveries conducted in the Government Hospitals and IGMCRI, Puducherry during 2016-22 are given in **Table 3.28**.

**Table 3.28 : C-Section deliveries conducted in the test-checked Hospitals during 2016-22**

| Name of the Hospital/ MCH | Total live deliveries | Number of normal deliveries | Number of C-Section deliveries | Percentage of C-Section deliveries |
|---|---|---|---|---|
| WCH, Puducherry | 58,417 | 35,262 | 23,155 | 40 |
| IGMCRI, Puducherry | 9,600 | 6,780 | 2,820 | 29 |

[17] Blood grouping, VDRL/RPR, HIV, Rapid Malaria, Blood Sugar, Hepatitis B surface Antigen (HBsAg).

[18] CHC, Mannadipet, CHC, Thirunallar and CHC, Palloor.

[19] CHC, Mannadipet and CHC, Palloor.

| | | | | |
|---|---|---|---|---|
| GH, Karaikal | 12,058 | 4,792 | 7,266 | 60 |
| GH, Mahe | 1,121 | 461 | 660 | 59 |
| GH, Yanam | 2,092 | 1,331 | 761 | 36 |

(Source : Details furnished by respective health institutions)

C-Section deliveries conducted in GH, Karaikal and GH, Mahe were 60 *per cent* and 59 *per cent* respectively out of the total deliveries and were found to be more than normal deliveries in each of the years during 2016-22. The reason for the high percentage of C-Section deliveries as compared to the other health institutions requires to be examined by the health department.

### 3.6.6 Partographs plotted against total deliveries

The Partograph is a graphic recording of the progress of labour and the condition of the mother and foetus. It is a tool which helps assess the need for action and recognises the need for referral at the appropriate time to save the life of the mother and foetus. The details of number of partographs plotted against total deliveries in the General hospitals, WCH and MCH during the period 2016-22 is given in **Table 3.29**.

**Table 3.29 : Number of Partographs plotted against total deliveries**

| Name of the Hospital/MCH | WCH, Puducherry | | IGMCRI | | GH, Karaikal | | GH, Mahe | | GH, Yanam | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total deliveries | Partographs plotted | Total deliveries | Partographs plotted | Total deliveries | Partographs plotted | Total deliveries | Partographs plotted | Total deliveries | Partographs plotted |
| 2016-17 | 9,135 | 5,378 | 2,172 | * | 2,513 | 1,185 | 214 | 118 | 420 | * |
| 2017-18 | 9,927 | 5,330 | 2,002 | * | 2,387 | 958 | 338 | 110 | 301 | * |
| 2018-19 | 10,270 | 6,381 | 2,214 | * | 2,137 | 836 | 158 | 104 | 237 | * |
| 2019-20 | 10,717 | 6,503 | 2,198 | 1,600 | 1,957 | 738 | 150 | 103 | 423 | * |
| 2020-21 | 8,959 | 5,726 | 534 | 380 | 1,525 | 559 | 120 | 70 | 367 | * |
| 2021-22 | 9,409 | 5,662 | 480 | 222 | 1,539 | 540 | 141 | 82 | 344 | * |
| **Total** | **58,417** | **34,980** | **9,600** | **2,202** | **12,058** | **4,816** | **1,121** | **587** | **2,092** | |
| Percentage | 60 | | 23 | | 40 | | 52 | | - | |

* - No record

(Source : Details furnished by respective health institutions)

While WCH, Puducherry, which is a speciality hospital for Women and Children in Puducherry recorded the highest number of partographs (60 *per cent*), GH, Yanam had not plotted partographs during the period 2016-22, that could have enabled timely referral to higher health care facilities.

### 3.6.7 Immunisation of children

As per the National Immunisation Schedule, three doses of DPT (Diphtheria, Pertussis and Tetanus Toxoid) Liquid vaccine have to be administered at 6, 10 and 14 week and two booster doses at 16-24 month and 5-6 years of age. Also,

TT (Tetanus Toxoid) – Liquid vaccine has to be administered at 10 and 16 years of age. The target and achievement in the immunisation programme in UT of Puducherry during the years 2016-17 to 2021-22 is given in the **Table 3.30**.

**Table 3.30: Target and achievement in Immunization programme in UT of Puducherry**

| Year | DPT | | TT10 | | TT16 | | Achievement (in *per cent*) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Target | Achie-vement | Target | Achie-vement | Target | Achie-vement | DPT | TT10 | TT16 |
| 2016-17 | 17,655 | 18,788 | 19,418 | 20,522 | 18,145 | 18,164 | 106.42 | 105.69 | 100.10 |
| 2017-18 | 21,329 | 19,993 | 21,193 | 19,429 | 20,725 | 19,288 | 93.74 | 91.68 | 93.07 |
| 2018-19 | 20,095 | 18,627 | 20,820 | 19,582 | 19,633 | 19,277 | 92.70 | 94.05 | 98.19 |
| 2019-20 | 18,314 | 13,434 | 19,804 | 15,295 | 19,008 | 14,976 | 73.35 | 77.23 | 78.79 |
| 2020-21 | 13,434 | 7,560 | 15,295 | 8,582 | 14,976 | 10,140 | 56.28 | 56.11 | 67.71 |
| 2021-22 | 13,457 | 11,523 | 16,675 | 14,385 | 18,398 | 17,635 | 85.63 | 86.27 | 95.85 |

(Source : Details furnished by DHFWS, Puducherry)

While the achievement in implementing the immunisation programme was more than the target fixed for 2016-17, the performance slipped during the subsequent years. The DHFWS should strive to achieve the targets fixed for implementing the immunisation programme.

## 3.7 Diagnostic Services

Radiological and pathological services are amongst the most essential healthcare facilities required for delivering quality treatment to the public based on diagnosis. Audit noticed that many of the radiology and pathology tests as prescribed in the IPHS norms were not performed in the test-checked hospitals.

### 3.7.1 Availability of the Imaging and Diagnostic services

As per IPHS norms, the availability of the following imaging (radiology) and diagnostic services should be ensured by all district hospitals. The status of availability of these services in the District Hospitals and Medical College Hospital are shown in **Table 3.31**.

**Table 3.31: Availability of Imaging (Radiology) and Diagnostic Services in district hospitals and Medical College Hospital**

| Name of Service | Name of Test/ Diagnostic Service | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | WCH, Pudu-cherry |
|---|---|---|---|---|---|---|---|
| Radiology | X-ray for chest, Skull, Spine, Abdomen, bones | A | A | A | A | A | A |
| | Dental X-ray | A | A | A | A | A | NA |
| | Ultrasonography | A | A | A | NA | A | A |

| Name of Service | Name of Test/ Diagnostic Service | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | WCH, Puducherry |
|---|---|---|---|---|---|---|---|
| | CT scan | A | A | A | A | A | NA |
| | Barium Swallow, Barium meal, Barium enema, IVP | A | A | NA | NA | NA | A |
| | MMR (Chest) | NA | NA | NA | NA | NA | NA |
| | HSG | A | A | NA | NA | NA | A |
| Cardiac Investigation | ECG | A | A | A | A | A | A |
| | Stress tests | A | NA | A | NA | A | NA |
| | ECHO | A | A | A | NA | NA | A |
| ENT | Audiometry | A | A | A | NA | NA | A |
| | Endoscopy for ENT | A | A | A | NA | NA | NA |
| Ophthalmology | Refraction by using Snellen's chart | A | A | A | A | A | A |
| | Retinoscopy | A | A | A | A | NA | NA |
| | Ophthalmoscopy | A | A | A | A | A | A |
| Endoscopy | Laparoscopic (diagnostic) | A | A | A | NA | NA | NA |
| | Oesophagus | A | A | A | NA | NA | NA |
| | Stomach | A | A | A | NA | NA | NA |
| | Colonoscopy | A | A | NA | NA | NA | NA |
| | Bronchoscopy | NA | A | NA | NA | NA | NA |
| | Arthroscopy | A | NA | NA | NA | NA | NA |
| | Hysteroscopy | NA | A | NA | NA | NA | A |
| Respiratory | Pulmonary function tests | A | A | NA | NA | NA | NA |

(Source: Details furnished by the hospitals)

Out of the 23 diagnostic services, in GH, Yanam and GH, Mahe 15 and 16 services were not available respectively and 13 services were not available in WCH, Puducherry. Three and four out of the seven radiology and endoscopy services/tests respectively were not available in GH, Karaikal.

Audit scrutiny revealed non-availability of radiology services in the test-checked GHs as given in the **Table 3.32**.

**Table 3.32: Availability of radiology services**

| Radiology Services | Services available | | | | |
|---|---|---|---|---|---|
| | GH, Puducherry | GH, Mahe | GH, Karaikal | GH, Yanam | WCH, Puducherry |
| X-RAY 500 MA | Yes | No | Yes | No | Yes |
| X-RAY 300 MA | Yes | Yes | No | Yes | No |
| X-RAY 100 MA | Yes | No | Yes | No | Yes |
| X-RAY 60 MA (Mobile) | No | No | No | No | No |
| Dental X-Ray | Yes | Yes | No | Yes | No |
| Ultrasonography | Yes | No | Yes | Yes | Yes |
| CT Scan | Yes | Yes | Yes | Yes | No |
| Mammography | No | No | No | No | No[20] |

Yes - Available-Green colour, No - Not Available-Red colour
(Source: Information provided by test-checked hospitals)

It could be seen from **Table 3.32** that the test-checked hospitals lacked one or more radiology services and Mammography service was not available in any of the test-checked hospitals.

Thus, the absence of full range of imaging and diagnostic services impacted the efficiency and appropriateness of the level of care to be offered in District Hospitals as per IPHS norms.

Government stated (November 2023) that action will be taken to procure Dental X-ray and Mammography Unit for GH, Karaikal. Other equipment required for radiology services will be provided based on need.

### 3.7.2 Availability of radiology services in CHCs

As per the IPHS 2012 norms for CHCs, the diagnostic services to be provided includes Radiology and Cardiac investigation services. The availability of these services in the test-checked CHCs is given in **Table 3.33**.

**Table 3.33: Availability of Radiology services in CHCs**

| Region | Name of the CHC | Radiology | | | Cardiac Investigation |
|---|---|---|---|---|---|
| | | X-ray for chest, skull, spine, abdomen, bones | Dental/ X-ray | Ultrasonography | ECG |
| Puducherry | CHC, Mannadipet | Yes | Yes | No | Yes |
| Karaikal | CHC, Thirunallar | Yes | Yes | No | Yes |
| Mahe | CHC, Palloor | Yes | Yes | No | Yes |

(Source : Information furnished by test-checked CHCs)

[20] In WCH, Puducherry, though the Mammography machine was available, it is not functional since December 2020.

Audit noticed that all the three test-checked CHCs were not equipped with Ultrasonography, that provides pictures of organs, tissues and other structures inside the body without a surgery, using sound waves.

### 3.7.3 Non-availability of radiology services in Ayurveda Medical College Hospital, Mahe

Schedule-I of CCIM (Requirements of Minimum Standard for under-graduate Ayurveda Colleges and attached Hospitals) Regulations, 2016 envisaged that each Ayurveda College Hospital shall have radiologist chamber, X-ray room, dark room and film drying room. It was noticed that in RGAMCH, Mahe, the above facilities were not provided. Due to non-availability of the above facilities, the patients were required to go to the Government General Hospital, Mahe, which was 3.60 Kilometres away from RGAMCH or get the tests done in private laboratories by incurring out of pocket expenditure. During the period 2016-22, due to non-availability of radiology services, 831 patients for X-ray, 110 patients for ECG and 562 patients for USG were referred to General Hospital, Mahe causing hardship to patients.

Government stated (November 2023) that it has initiated the construction to set up a full-fledged hospital.

### 3.7.4 Pathology Services

Pathology services are the backbone of any hospital for extending evidence-based healthcare to the public. As in the case of radiology services, availability of essential equipment, reagents and human resources are the main drivers for the delivery of quality pathology services through in-house laboratories.

#### *3.7.4.1 Shortfall in availability of Pathology Services*

IPHS requires that the District Hospital Laboratory shall also serve the purpose of public health laboratory and should be able to perform all tests required to diagnose epidemics or important diseases from public health point of view. It prescribes 70 types of investigation services in the categories of clinical, microbiology, serology, haematology and biochemistry to be provided by the laboratories.

It was observed in Audit that out of 70 types of investigation services to be carried out, 10, 18, 37, 44 and 15 investigations were not carried out in GHs at Puducherry, Karaikal, Mahe, Yanam and WCH, Puducherry respectively. Further, none of the desired investigations under the categories of microbiology and pathology were carried out in GHs at Mahe and Yanam, which is not in accordance with the IPHS requirement of carrying out the prescribed investigations.

**During survey, out of 144 inpatients, 33 patients stated that the IPD facilities on investigation services were not adequate.**

Government stated (November 2023) that the investigations by and large depends on the clinical acumen of the clinician who equate with time tested levels of evidence of the disease process and renders treatment. Mere lack of some investigations does not mean that evidence based treatment is not being achieved. GH, Karaikal, in co-ordination with JIPMER, Karaikal, carry out the pathology and Bio-chemistry investigations. In respect of GH, Mahe and Yanam, action would be taken to fill up the posts of Lab Technicians, Microbiologist and Pathologist. The reply is not acceptable since the norms of IPHS regarding full range of pathology services was not adhered to.

#### *3.7.4.2 Availability of Pathology services in test-checked CHCs*

The availability of the required number of essential pathology services as per IPHS, 2012 norms for Community Health Centre is given in **Table 3.34**.

**Table 3.34: Availability of Pathology and other services in test-checked CHCs**

| Name of the Region | Name of CHC | Clinical pathology (18) | Pathology (01) | Microbiology (02) | Serology (03) | Bio-chemistry (05) |
|---|---|---|---|---|---|---|
| Puducherry | Mannadipet | 13 | 0 | 1 | 3 | 4 |
| Karaikal | Thirunallar | 12 | 0 | 1 | 2 | 3 |
| Mahe | Palloor | 14 | 1 | 2 | 3 | 3 |

(Source : Details furnished by the CHCs)

DHFWS should adequately equip the CHCs in order to ensure that all the essential pathology diagnostic services are provided to the public.

### 3.7.5 Availability of emergency care in CHCs

IPHS requires that it is essential to provide routine and emergency care to patients to handle emergencies like Dengue Haemorrhagic Fever, Cerebral Malaria, Dog and snake bite cases, Poisonings, Congestive Heart Failure, Left Ventricular Failure, Pneumonia, meningoencephalitis, acute respiratory conditions, status epilepticus, Burns, Shock, acute dehydration and Obstetric care including surgical interventions like Caesarean Sections and other medical interventions. The details of availability of these services in the test-checked CHCs are given in **Table 3.35**.

**Table 3.35: Availability of routine and emergency care services in CHCs**

| Name of Routine and Emergency care service | CHC, Mannadipet | CHC, Thirunallar | CHC, Palloor |
|---|---|---|---|
| Dengue Haemorrhagic Fever | A | A | NA |
| Cerebral Malaria | NA | NA | NA |
| Dog and snake bite cases | A | A | A |
| Poisonings | A | A | A |
| Congestive Heart Failure | A | A | A |
| Left Ventricular Failure | A | A | A |
| Pneumonias | A | A | A |
| Meningoencephalitis | A | NA | NA |
| Acute respiratory conditions | A | A | A |
| Status Epilepticus | A | A | A |
| Burns | A | A | A |
| Shock | A | A | A |
| Acute dehydration | A | A | A |
| Obstetric Care including surgical interventions like Caesarean Sections and other medical interventions | NA | NA | NA |

Available-Green colour, NA- Not Available-Red colour
(Source: Details furnished by the hospitals)

Audit noticed that emergency care for Cerebral Malaria and surgical interventions like Caesarean Sections was not provided in all the three test-checked CHCs. Emergency care for Meningoencephalitis was not provided in CHC, Thirunallar and CHC, Palloor. Medical Officer, CHC, Palloor stated that emergency services were not provided due to non-availability of ICU and Operation Theatre.

Government stated (November 2023) that due to shortage of qualified physicians and surgeons some of the services could not be provided in CHCs.

## 3.8 Auxiliary and Support Services

### 3.8.1 Availability of Ambulance services

As per IPHS 2012, a District Hospital shall have Basic Life Support (BLS) and desirably one Advanced Life Support (ALS) ambulance with 24 hours patient service. There shall be separate space for emergency for parking of ambulances. Hospitals with 101-300 beds shall have 3 ambulances and upto 500 beds shall

have 4 ambulances. IPHS 2012 for PHCs states that it is desirable that the PHC has ambulance facilities for transport of patients for timely and assured referral to functional First Referral Units (FRUs) in case of complications during pregnancy and child birth. Availability of Ambulance services in test-checked Health Institutions are given in **Appendix 3.10**. In this connection, audit noticed that GH, Karaikal with 474 functional beds had only three ambulances (one BLS and two ALS) and GH, Mahe with 171 beds had only one BLS ambulance. Further, PHC, Kovilpathu and PHC, Pandakkal were not provided with patient transport ambulances for timely referral to FRUs.

### 3.8.2 '108' Emergency Ambulance service

Puducherry State Health Society (PSHS) has signed Memorandum of Understanding with Indian Red Cross Society, Puducherry to provide free Emergency Medical Referral Services (EMRS) Ambulance service and referral transport services to the public in Puducherry and Karaikal, as and when required.

Under the National Health Mission, Puducherry State Health Society has provided 15 number of '108' ambulances in UT of Puducherry (8 for Puducherry Region, 4 for Karaikal Region, 2 for Mahe Region and 1 for Yanam Region).

Audit noticed that the Call Centre in Puducherry has manually recorded the data regarding the time of receipt of call, transfer of call to ambulance driver and the driver reached the hospital with the patient. However, the time of arrival of driver at the scene was not recorded by the call centre. Hence, the delay in reaching the scene could not be ascertained in audit.

Further, the number of patients not available at the scene when the ambulance called on during the period January 2021 to March 2022 was 705 out of 8,277 calls received (nine *per cent*). The possibility that the patients were making their own arrangement for reaching a healthcare facility due to delay in arrival of ambulance cannot be therefore, ruled out.

## 3.9 Dietary Services

The dietary service of a hospital is an important therapeutic tool. Hence, it is essential that the quantity and quality of diet should be of the requisite standard. The details of Dietary services in the test-checked hospitals are given in **Table 3.36**.

**Table 3.36: Dietary services in test-checked DHs / MCHs**

| Particulars | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam | RGAMC, Mahe |
|---|---|---|---|---|---|---|---|
| Availability of dietary service | A | A | A | A | A | A | A |
| If available, in-house/ outsourced | In-house | Outsourced | In-house | In-house | In-house | In-house | Outsourced |
| Availability of dedicated Kitchen | A | A | A | A | A | NA | NA |
| Availability of dietician | A | NA since 2020 | A | A | A | NA since 2017 | NA |
| Availability of standard procedures for preparation of food to indoor patients as per their caloric requirement | A | A | A | A | A | NA | A |
| Availability of refrigerator, water purifier and storage room | Water purifier not functional | A | A | Water purifier not available | Refrigerator and Water purifier not available | NA | NA |
| Provision of trolly for serving food | A | A | A | A | A | A | NA |
| Maintenance of hygenic kitchen | A | A | A | A | A | NA | A |
| Use of protective gears (apron, head gear, plastic gloves) by the cooks | NA | A | A | Apron not used | NA | NA | NA |
| Availability of Quality testing of diet supplied in health facilities | NA | A | A | NA | NA | NA | NA |

A - Available-Green colour, NA - Not Available-Red colour
(Source: Joint Physical Verification Report of test-checked DHs/MCHs)

It could be seen from **Table 3.36** that use of protective gears by cooks and availability of quality testing of diet supplied were not available in any of the General Hospitals.

### 3.9.1 Shortage of Dieticians and Cooks

The Dietician is responsible for assessing the patients' nutritional needs and developing a food plan for the patient in consultation with the doctors. The deficiencies noticed in the dietary services of the test-checked hospitals are detailed in **Table 3.37**.

**Table 3.37: Deficiencies in the dietary services**

| Name of the Hospital | Shortfall noticed |
|---|---|
| GH, Puducherry | One out of three sanctioned posts of Dietician, 13 out of 19 posts of Cook and eight out of 16 posts of Assistant Cook were vacant. |
| GH, Karaikal | Out of two sanctioned posts of Dietician, one post is vacant from December 2018. Two posts of Cooks out of six posts were vacant from September 2019. Three posts of Assistant cooks out of four posts were vacant from October 2018. |
| GH, Mahe | One out of four sanctioned posts of Cook and one out of three posts of Assistant Cook were vacant. |
| GH, Yanam | The post of Dietician is vacant from the year 2017. |

(Source : Information furnished by GHs)

Shortage of Dieticians, Cooks and Assistant Cooks would have an impact in providing proper balanced diet to the patients.

Government stated (November 2023) that action would be taken for filling up of vacant post of Dieticians, Cooks and Assistant Cooks.

### 3.9.2 Requirement of diet

NHM Assessor's Guidebook envisages that the health facility must have standard procedures for preparation, handling, storage and distribution of food as per the requirement of diet for patients. The following deficiencies were noticed during the joint inspection of the diet sections of the test-checked hospitals.

The system of diet counselling to patients, formulation of calorific requirement and pattern of diet for patients was not adopted in GH, Yanam. List of items to be provided in the diet (Menu chart) was also not prepared. The Dietary services of all four GHs did not have FSSAI registration certificate under Food Safety and Standards Act, 2006.

The facilities of refrigerator, water purifier and storage room were not available in the kitchen of GH, Yanam. Water purifier was not in working condition in GH, Puducherry and was not available in GH, Karaikal and GH, Mahe. Steam cooking utensils and the steam boiler were in rusted condition in the kitchen of GH, Puducherry (**Pictures 3.2** and **3.3**).



**Picture 3.2: Steam cooking vessel in rusted condition**



**Picture 3.3: Steam boiler for cooking diet in rusted condition.**

Government stated (November 2023) that steps would be taken to ensure testing by District authorities.

## 3.10 Laundry Services

Laundry management is important to prevent hospital acquired infection and ensure a hygienic hospital environment. As per Kayakalp guidelines issued by Ministry of Health and Family Welfare, GoI in May 2015, the patient's linen including bed sheets and patient gowns need to be changed on a daily basis. The details of laundry services in the test-checked GHs are given in **Table 3.38**.

**Table 3.38: Laundry services in test-checked DHs/MCHs**

| Particulars | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|
| Bed linen changed everyday | N | Y | Y | N | N | N |
| Different coloured bed linen is provided on different weekdays | N | N | N | N | N | N |
| Bed linen is changed everytime when got soiled | Y | Y | Y | Y | Y | Y |
| Neat and clean bed linen are provided which are dry and ironed | Not ironed | Y | Not ironed | Not ironed | Not ironed | Y |
| Clean bed side curtains are provided with each bed | N | Y | N | N | N | N |
| Daily check of quality of linen by an officer | N | Y | Y | N | N | Y |

Y - Available-Green colour, N - Not Available-Red colour
(Source: Joint Physical Verification Report of test-checked DHs/MCHs)

It could be seen from **Table 3.38** that none of the test-checked hospitals provided different coloured linen for different weekdays. Further, in GH, Puducherry, Karaikal, Mahe and IGMCRI, the linen are provided without ironing.

### 3.10.1 Availability of linen

Indian Public Health Standards for District Hospitals prescribes 23 types of linen that are required to be available for patient care service in hospitals.

Audit observed shortage of different types of linen such as bedsheets, bedspreads, patna towels, patients house coat (for female), pillows, pillow covers, etc., in the three test-checked GHs, for which details were furnished. The shortage ranged between five (22 *per cent*) and 14 (61 *per cent*) against the 23 different types of linen that were to be available. Further, six (26 *per cent*)

to 16 (70 *per cent*) types of linen were not available in the test-checked hospitals. The details are given in **Table 3.39**.

**Table 3.39: Shortage of linen items**

| Description | GH, Puducherry | GH, Mahe | GH, Yanam |
|---|---|---|---|
| Shortage in types of linen | 14 | 14 | 5 |
| Types of linen not available at all | 6 | 7 | 16 |

(Source: Information collected from test-checked hospitals)

This indicated that patients, doctors, hospital workers were not provided with all types of linen as prescribed in IPHS norms which may lead to infection.

Government stated (November 2023) action was being taken for provision of all the shortage of linen items as pointed out by Audit.

## 3.11 Infection Control

### 3.11.1 Availability of services related to infection control

Guidelines for implementation of 'Kayakalp' initiative issued by Ministry of Health and Family Welfare requires that hospitals should engage a pest control agency for carrying out pest control activities including anti-termite treatment for wooden furniture and fixtures, rodent traps should be placed in various areas and checked daily and cattle traps should be installed at all entrances and exits of the hospital to restrict entry of stray animals. The details of services available in the test-checked GHs are given in **Table 3.40**.

**Table 3.40: Availability of services related to infection control**

| Particulars | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe |
|---|---|---|---|---|---|
| Checklist for Hygiene and infection control | A | A | A | A | A |
| Hospital Infection Control Committee (HICC) | A | A | A | A | A |
| Conducting meeting of HICC | A | A | A | A | A |
| Pest control | A | A | A | A | NA |
| Rodent control | A | A | A | A | NA |
| Availability of anti-termite treatment | A | NA | A | A | NA |
| Installation of cattle trap | NA | NA | A | NA | NA |

A - Available-Green colour, NA- Not Available-Red colour

(Source: Details furnished by the hospitals)

Audit noticed that most of the infection control measures were not done in GH, Mahe. GH, Puducherry and GH, Karaikal did not install cattle trap. WCH, Puducherry did not provide cattle trap and anti-termite treatment. The Medical Officer in-charge, Department of Microbiology, GH, Puducherry stated (March 2023) that steps will be taken to install cattle trap soon. Deputy Director, GH, Mahe stated that arrangements will be made to provide all non-available services.

Government stated (November 2023) that instructions were issued to the hospitals to follow the guidelines regarding engagement of Pest Control Agency and to restrict the entry of stray animals in the hospitals.

### 3.11.2 Infection control as per Quality Assurance

NHM Assessor's Guidebook for Quality Assurance in District Hospitals, 2013[21] prescribed that every hospital must have an infection control program and procedures in place for prevention and measurement of hospital associated infection. The hospitals should have established procedures for regular monitoring of infection control practices by conducting infection control audits at periodic intervals.

GH, Mahe undertakes regular environmental sampling and microbiological survey once in three months at Operation Theatres (OTs), Labour room, etc., and swabs were sent to Calicut Medical College for testing. GH, Yanam also conducted Microbiological survey of surface and environmental samples in OT and Intensive Care Units. However, both these hospitals did not conduct infection control audits at periodic intervals. Deputy Director, GH, Mahe stated that infection control audits were not conducted due to non-availability of Microbiologist and well established laboratory services.

Government stated (November 2023) that Infection control audit would be conducted in GH, Yanam. However, the reply in respect of GH, Puducherry is silent about conduct of Infection Control audit.

### 3.11.3 Kayakalp Initiative

In order to recognise the efforts of ensuring Quality Assurance at Government Health Facilities, the Government of India has launched a National Initiative to give Awards under 'Kayakalp' (Rejuvenating Public Health Care Facilities) initiative in the year 2015 to the Government Health Facilities that demonstrate high levels of cleanliness, hygiene and infection control.

[21] Issued by the National Health Mission, Ministry of Health and Family Welfare Services, New Delhi.

It is seen that though the Kayakalp Initiative was launched during 2015-16, only seven out of 134 health institutions (5.22 *per cent*) had received the award and certification from GoI during the period 2016-22. Thus, the HCFs need to enhance their cleanliness and infection control practices and get certified.

## 3.12 Patient rights and grievance redressal

NHM Assessor's Guidebook prescribes the requirement to display the Citizen's Charter at a suitable place in the hospitals towards facilitating patients *vis-à-vis* their rights. Audit observed that Citizen's Charter were not displayed in GH, Puducherry, GH, Karaikal and RGAMCH, Mahe.

Further, for effective redressal of grievances of patients, NHM Assessor's Guidebook envisaged a mechanism for receipt, registration and disposal of complaints, noting of action taken in respect of complaints in a register, periodic monitoring of system of disposals and follow-up by superior authorities as necessary.

The records of grievance redressal, however, were not maintained in any of the test-checked hospitals.

**It is pertinent to mention that out of 176 outpatients surveyed, 90 patients responded that complaint box was not available in the HCFs test-checked.**

Thus, in the absence of such records, it could not be ensured whether these hospitals properly attended to the complaints of the patients.

Government stated (November 2023) that District Hospitals are instructed to adhere to the grievance redressal mechanism and to display the Citizen Charter at a suitable place in the Hospitals.

## 3.13 Mortuary Services

As per IPHS norms and NHM Assessor's Guide Book, Mortuary facility should be provided in the HCFs for keeping of dead bodies and conducting autopsy. The details of mortuary services in the test-checked GHs are given in **Table 3.41**.

**Table 3.41: Mortuary Services in test-checked DHs**

| Particulars | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|
| Availability of mortuary facility in the hospital 24x7 | A | A | A | A | A |
| Stainless steel autopsy table with sink, a sink with running water for specimen washing and cleaning and cup-board for keeping instruments in post-mortem room | NA | A | NA | NA | A |
| Availability of separate room for body storage provided with at least 2 deep freezers for preserving the body | A | A | A | A | NA |
| Mortuary van | A | A | A | NA | A |
| Availability of facility for pathological post mortem | NA | A | A | NA | NA |
| System to categorize the dead bodies before preservation | NA | A | NA | NA | A |
| System to provide identification tag/wrist band for each stored dead body | A | A | A | A | A |
| System for storage of unclaimed body for fixed duration | A | A | A | A | A |
| Copy of death certificate accompanied with bodies sent to mortuary | A | A | A | A | A |
| Facility of high level disinfection by boiling or chemical done as per protocol at mortuary | A | A | A | A | A |

A - Available-Green colour, NA- Not Available-Red colour
(Source: Details furnished by the hospitals)

It could be seen from **Table 3.41** that facility for pathological post mortem was not available in GH, Puducherry, Mahe and Yanam. GH, Puducherry, Karaikal and Mahe did not have a system to categorise the dead bodies before preservation. Required number of two deep freezers for preserving the body was not available in GH, Yanam. Out of five test-checked tertiary care hospitals, GH, Mahe did not have a mortuary van. Medical Superintendent, GH, Puducherry stated (February 2023) that the Department of Forensic Medicine was shifted to IGMCRI, Puducherry in the year 2014 and hence post mortem and preservation of dead bodies was not done. IGMCRI, Puducherry had all the facilties to provide mortuary service.

Government stated (November 2023) that pathologist post mortem facilities in GH, Mahe and Yanam would be made available after provision of infrastructure facilities.

## 3.14 Conclusion

The UT Government did not prepare any Health Policy to ensure that the challenges relating to health sector are adequately addressed so that objective of providing quality and improved healthcare services is attained. The average number of patients attended to by a doctor in PHCs were higher leading to lesser consultation time. Some of the essential services like Accident and Trauma Ward, Burn ward, Dialysis, full range of Radiology and Pathology services were not available in test-checked HCFs. Patients, doctors, hospital workers were not provided with all types of linen as prescribed in IPHS norms which may lead to infection. The GHs, Yanam and Mahe were lagging behind in the delivery of most of the health care services. As the time of arrival of Ambulance driver at the scene was not recorded by the call centre coupled with non-availability of the patients at the scene, the possibility of patients making their own arrangements to reach the hospitals could not be ruled out.

## 3.15 Recommendations

- The UT Government should ensure that all essential services as per norms are provided in HCFs through availability of required infrastructure.
- The UT Government should ensure procurement of required radiology equipment and availability of proper pathology services at all HCFs to improve the level of diagnostic services as per IPHS norms for providing evidence based treatment.
- The UT Government should study the feasibility of implementing a fully automated GPS enabled monitoring system for ambulance service or to explore the possibility of outsourcing the ambulance services.





# CHAPTER 4

# AVAILABILITY OF DRUGS, MEDICINES AND EQUIPMENT



# CHAPTER 4: AVAILABILITY OF DRUGS, MEDICINES AND EQUIPMENT

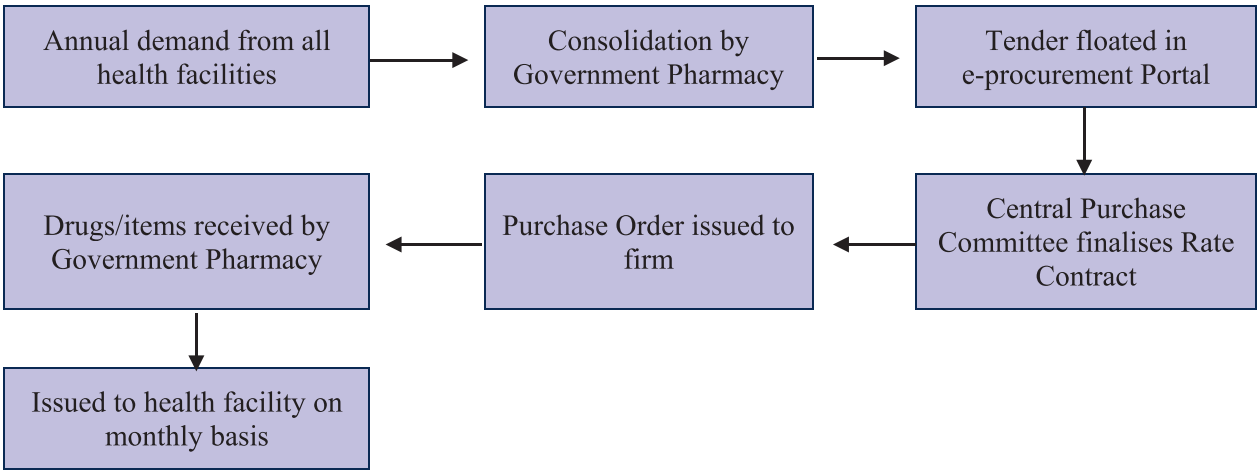
**The savings under procurement of drugs during 2020-21 and 2021-22 were 49 and 38 *per cent* respectively. Non-utilisation of the entire budget provision led to non-availability of essential drugs in the HCFs in the range of 13 to 54 *per cent* as per the essential drugs list. Medicines having shelf life less than 18 months were purchased, which subsequently got expired. No action was taken to get it replaced before the expiry, thus, resulting in a loss of ₹ 3.65 crore. Equipment for physiotherapy and occupational therapy were lying idle. Non-availability of laboratory equipment affected the patient care offered by the hospitals. Mammography unit at Women and Children Hospital, Puducherry was not functioning since December 2020 and as a result, 712 cases were screened in private diagnostic centres.**

## 4.1 Drugs and Medicines

### 4.1.1 Procurement of Drugs

The Government Pharmacy (GP), Puducherry is functioning under the control of Directorate of Health and Family Welfare Services (DHFWS) and is headed by Chief of Government Pharmacy (CGP).

**Procurement and distribution of drugs by Government Pharmacy, Puducherry**




GP is purchasing drugs and medicines, Surgical items, etc., through the Central Purchase Committee (CPC) Rate Contract and Government of India Undertaking Firms (GIUF) and distribute them to HCFs. The procurement of drugs and medicines by GP during the period 2016 to 2022 are detailed in **Table 4.1**.

**Table 4.1: Procurement of drugs and medicines during 2016-22**

**(₹ in crore)**

| Financial Year | Budget Estimate | Revised Estimate | Expenditure | Savings | Percentage of savings |
|---|---|---|---|---|---|
| 2016-17 | 7.65 | 9.15 | 7.44 | 1.71 | 19 |
| 2017-18 | 8.95 | 7.65 | 7.62 | 0.03 | 1 |
| 2018-19 | 7.47 | 12.40 | 12.40 | 0.00 | -- |
| 2019-20 | 7.60 | 16.53 | 16.53 | 0.00 | -- |
| 2020-21 | 40.86 | 41.26 | 20.96 | 20.30 | 49 |
| 2021-22 | 37.00 | 39.99 | 24.70 | 15.29 | 38 |

(Source: Details furnished by CGP)

It could be seen that the savings during 2020-21 and 2021-22 was 49 and 38 *per cent* respectively. The savings could have been utilised for the procurement of essential drugs. The non-availability of essential drugs in the HCFs has been commented in **Para 4.1.2**.

### *4.1.1.1 Not of Standard Quality (NSQ) medicines*

Para 8 of Quality Issues under Tender Conditions stipulates that if the quality of the items supplied was found to be NSQ and any written complaints received from the Departments regarding the quality and quantity, the items will be rejected, order will be placed with next lowest tenderer. No payment will be made even for the consumed quantity and the tenderer will be blacklisted for three years.

The following Medicines and Surgical items which have been collected, analysed and declared as Not of Standard Quality (NSQ) by the Drug Inspector and Medical Device Officer, Central Drugs Standard Control Organisation, South Zone, Chennai based on the Report of Test Analysis performed in the Central Drugs Laboratory, GoI, Kolkata have been returned. The details are indicated in **Table 4.2**.

**Table 4.2: Details of NSQ medicines**

| Name of the item | Batch No. | Manufacturing Date | Expiry Date | Quantity |
|---|---|---|---|---|
| Compound Benzoin Tincture I.P. 500 ml | W-02 | 05/2021 | 04/2023 | 1,496 Bottles |
| Absorbent Cotton Wool I.P. 500 gm | A/2105 | 05/2021 | 04/2026 | 1,757 Rolls |
| Doxycycline Capsules IP 100 mg (Gatoline – 100) | CC - 200140 | 12/2020 | 11/2022 | 12,120 Numbers |
| Multivitamin Tablets (Vitamin A, Vitamin D3, Thiamine Mononitrate, Riboflavin, Pyridoxine Hydrochloride, Calcium Pantothanate, Niacinamide, Vitamin C and Folic Acid) | GMB 21 | 03/2021 | 08/2022 | 1,50,000 Numbers |

(Source: Details furnished by CGP)

Hence, the distribution of above said batch of products have been stopped and withdrawn by GP and put into quarantine. In this connection, necessary explanations were called for from the suppliers in May 2022. However, no action was taken by the Department as per the tender conditions.

#### *4.1.1.2 Loss due to non-replacement of expired medicines*

The tender conditions for the purchase of medicines stipulated that the shelf life should be 18 months. It further stipulated that the expired medicines should be replaced by the supplier if returned one month before the expiry date. Audit noticed that medicines which were having shelf life less than 18 months were purchased between June 2021 and October 2021 which could not be utilised before its expiry and they were allowed to expire. However, no action was taken to get it replaced before the expiry. This resulted in loss of ₹ 3.65 crore.

Government stated (November 2023) that action would be taken to sort out the issue.

#### *4.1.1.3 Drugs not sent for quality analysis*

The drugs/medicine received by GP are to be tested for its quality. Audit noticed that there was no mandate for quantum of sample to be sent for testing. However, samples were sent for testing on random basis by the GP to Drug Testing Laboratory (DTL), Puducherry. The DTL also collects samples for analysis from GP. Audit further noticed that the GP insisted (April 2022) the Pharmacists to ensure that certificate of analysis be obtained from approved Drug Testing Laboratories with each batch of the supply. Thus, the quality of drugs supplied till April 2022 was not ensured by the GP since only random testing of samples was followed.

Government stated (November 2023) that at present the certificate of analysis from approved Drug Testing Laboratories were obtained for all batch of supply instead of random testing of samples. The fact, however, remained that there were shortfall in testing of drugs by GP.

### 4.1.2 Non-availability of essential drugs in the HCFs

IPHS prescribes essential drugs to be available in the HCFs for delivery of minimum assured services as listed in **Table 4.3**.

**Table 4.3: Number of essential drugs to be available in the HCFs**

| Healthcare Facility | Number of drugs |
|---|---|
| Primary Health Centres | 151 |
| Community Health Centres | 160 |
| District Hospitals | 448 |

(Source: IPHS norms)

Audit noticed that based on the recommendations of the Essential Drugs Review Committee (EDRC), the Government accorded (October 2015) administrative approval for 149 essential medicines to be stocked in all pharmacies of HCFs. The position regarding the availability of drugs with reference to EDRC recommendations in the test-checked HCFs as of March 2022 is given in **Appendix 4.1**.

The details given in the **Appendix 4.1** revealed non-availability of essential drugs in the OPDs of GHs ranging from 13 *per cent* to 35 *per cent*. Similarly, in respect of CHCs, the shortage of medicines ranged from 27 *per cent* to 38 *per cent* and in PHCs, essential drugs not available ranged from 30 *per cent* to 54 *per cent*.

Further, it was found that GP, which was centralised supply agency of medicine to all the HCFs, did not have 18 number of medicines as of March 2022.

Due to non-procurement of full range of drugs as per Essential Drugs List (EDL), the HCFs could provide only restricted delivery of health services subject to medicines available. Thus, out of pocket expenditure on account of purchase of medicines from market by the patients could not be ruled out.

**It was confirmed from the patient survey that out of 320 patients surveyed, 49 patients stated that either the medicines were not available or partially available.**

Government stated (November 2023) that the Draft Essential Drug List (EDL) based on the National List of Essential Medicines-2022 (NLEM-2022) for UT of Puducherry was being created by the Government Pharmacy and draft EDL would be presented by DHFWS.

### 4.1.3 Drugs and Medicines in ISMH Units

#### *4.1.3.1 Non-availability of Essential Drugs*

Essential Drugs List prescribed by GoI has 277 Ayurveda and 302 Siddha medicines which should be available with the dispensaries at all times in adequate quantities. During 2016-22, the Directorate purchased only 131 Ayurveda and 156 Siddha medicines listed in the EDL for supply to the dispensaries.

EDL for homeopathic medicines requires the dispensaries to have 559 medicines out of which the Directorate purchased only 371 medicines indicating shortfall of 34 *per cent*.

Audit noticed that even the essential drugs purchased by the Directorate were not available in the selected dispensaries for periods ranging from one month to 72 months during 2016-22. Out of 658 essential drugs purchased by the Directorate, 35 *per cent* medicines were not available in the test-checked dispensaries.

**During survey, inpatients in RGAMCH stated that they had to spend out of pocket to buy medicines which are not available in HCF.**

Government stated (November 2023) that the available medicines were sufficient enough and there was no referral to any other hospitals for want of medicines. The reply was not acceptable as the essential drugs prescribed by GoI was not maintained which was also confirmed in the survey.

### 4.1.4 Essential drugs for Operation Theatres

NHM Assessor's Guidebook for Quality Assurance in District Hospitals, 2013 specifies 23 types of essential drugs that are to be available in Operation Theatres (OTs). Test-check of drugs maintained in the OTs by three District Hospitals revealed that out of 23 drugs, 14, 17 and 15 drugs were not available on all test-checked days during the years 2016-22 in GHs at Karaikal, Mahe and Yanam respectively as detailed in **Appendix 4.2** which would force purchase of medicine from other sources.

Government stated (November 2023) that some of the drugs were banned and in some cases alternative and safer drugs were used in OT instead of the drugs which were mentioned in the list of 23 drugs and in respect of GH, Mahe, the availability of essential drugs would be ensured. The fact, however, remained that the essential drugs as per NHM Assessor's Guidebook were not maintained in the DHs.

### 4.1.5 Availability of drugs in Medical College Hospital

The NLEM stipulated that 376 essential drugs should be made available in a MCH. Scrutiny of the records of the Indira Gandhi Medical College Hospital and Research Institute (IGMCRI) pertaining to the period 2021-22 revealed that out of 376 essential drugs, 228 drugs were used by the hospital during 2021-22 and 148 (39 *per cent*) drugs were not used. However, out of the 228 drugs, 58 drugs (25 *per cent*) were found to be out of stock in the hospital during the period 2016-22 for a period of more than 90 days.

Government stated (November 2023) that Medical College Hospital has been included under centralised purchase procedure and it would be ensured that essential drugs would be made available in future.

### 4.1.6 Insufficient space for storage of medicines

It is essential that the drugs should be stored properly for its efficacy. The deficiencies noticed in the storage of drugs and medicines are discussed below.

During joint inspection with hospital authorities, Audit noticed that

- In three[1] HCFs, the drugs and consumables were stored on the floor in the pharmacy stores due to insufficient space.
- In seven[2] test-checked AYUSH dispensaries, there was no separate room for storage of medicines. The medicines were stored in the doctors consulting room itself.
- Separate racks were not provided for storage of medicines in the main store room in two Ayush dispensaries[3]. Medicine boxes were kept in open space in the floor.
- In six hospitals[4] the pharmacies were not air-conditioned.
- Storing medicines in open space may lead to wastage and damage due to exposure to moisture. As the medicines were stored in floor, the possibility of reduced efficacy of medicines due to moisture, etc., could not be ruled out.

**Pictures 4.1** to **4.4** depicts the incorrect storages of medicines



**Picture 4.1: Consumables stored on the floor at CHC, Karayambuthur**



**Picture 4.2: Medicines stored on floor at PHC, Villianur**

1 CHC-Palloor, PHC-Karayambuthur and Villianur.

2 Katterikuppam, Mannadipet, Karayambuthur, Muthialpet, Thirunallar, Kovilpathu and Palloor.

3 Pandakkal and Karaikal.

4 GHs at Karaikal, Mahe, Yanam, Puducherry, IGMCRI and WCH, Puducherry.




**Pictures 4.3 and 4.4: Drugs and consumables stacked on floor in CHC, Palloor**

The **Pictures 4.1** to **4.4** indicate the indifferent attitude by the authorities concerned in proper storage of medicines to ensure their efficacy.

Government stated (November 2023) that as there was no separate room available in the PHCs, the consulting room was utilised for storage of medicines and that separate racks were provided. The reply is not acceptable as the Department should ensure availability sufficient space for storage of medicines to ensure their efficacy.

## 4.2 Equipment

The DHFWS receives proposals from the health institutions for procurement of machineries and equipment. A consolidated proposal is sent to the Government for obtaining administrative approval after which e-Tender is floated through e-procurement platform. Financial bids are opened after obtaining the technical evaluation reports from Head of the Departments of health institutions concerned. Thereafter, rate approval and sanction order for purchase of machineries and equipment is accorded by the Government based on which the health institutions proceed to purchase machineries and equipment from the budget allocation.

### 4.2.1 (i) Availability of equipment as per IPHS

IPHS for district hospitals prescribes equipment norm for 100-200 bedded, 201-300 bedded and 301 to 500 bedded hospitals. Equipment norms have been arrived at keeping in mind the assured services to be provided based on bed strength. The details of availability of equipment for providing various health related services is given in **Table 4.4**.

**Table 4.4: Availability of equipment as per IPHS**

| Sl. No. | Name of the Equipment | Number of types required as per IPHS, 2012 | | | Equipment available | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 101-200 bedded | 201-300 bedded | 301-500 bedded | 101-200 bedded | 201-300 bedded | 301-500 bedded | 301-500 bedded | 301-500 bedded |
| | | GH, Yanam | GH, Mahe | GH, Puducherry, WCH, Puducherry, GH, Karaikal | GH, Yanam | GH, Mahe | GH, Karaikal | GH, Puducherry | WCH, Puducherry |
| 1. | Imaging equipment | 10 | 11 | 12 | 4 | 3 | 6 | 8 | 6 |
| 2. | X-Ray Room Accessories | 08 | 08 | 08 | 4 | 2 | 1 | 8 | 6 |
| 3. | Cardiopulmonary Equipment | 16 | 16 | 16 | 5 | 0 | 12 | 11 | & |
| 4. | Labour ward, Neo Natal and Special New born Care Unit (SNCU) Equipment | 27 | 27 | 28 | 7 | 20 | 26 | NA* | 26 |
| | Equipment for Eclampsia Room (for 300-500 Bedded Hospital) | ** | ** | 14 | ** | ** | 12 | NA* | 14 |
| | **Equipment List for Special New born Care Unit (SNCU)** | | | | | | | | |
| | A. General equipment for SNCU | 12 | 12 | 12 | 0 | 0 | 8 | NA* | 11 |
| | B. Equipment for disinfection of SNCU | 13 | 13 | 13 | 0 | 0 | 3 | NA* | 8 |
| | C. Equipment for individual patient care in the SNCU | 17 | 17 | 17 | 0 | 0 | 12 | NA* | 15 |
| 5. | Immunisation Equipment | 16 | 16 | 16 | 10 | 14 | 11 | NA* | 14 |
| 6. | Ear Nose Throat Equipment | 21 | 22 | 23 | 8 | 6 | 19 | 16 | & |
| 7. | Eye Equipment | 27 | 27 | 27 | 14 | 19 | 22 | 20 | & |
| 8. | Dental Equipment | 17 | 17 | 17 | 11 | 8 | 10 | 13 | & |
| 9. | Operation Theatre Equipment | 22 | 23 | 22 | 4 | 10 | 14 | 12 | 18 |
| 10. | Laboratory Equipment | 54 | 54 | 60 | 2 | 29 | 33 | 46 | 50 |
| 11. | Surgical Equipment Sets | 45 | 53 | 53 | 0 | 17 | 40 | 25 | 26 |
| 12. | PMR Equipment | 30 | 30 | 30 | 3 | 10 | 6 | 19 | & |
| 13. | Endoscopy Equipment | 07 | 07 | 08 | 0 | 0 | 7 | 2 | 3 |
| 14. | Anaesthesia Equipment | 15 | 16 | 15 | 4 | 11 | 13 | 13 | 13 |

| Sl. No. | Name of the Equipment | Number of types required as per IPHS, 2012 | | | Equipment available | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 101-200 bedded | 201-300 bedded | 301-500 bedded | 101-200 bedded | 201-300 bedded | 301-500 bedded | 301-500 bedded | 301-500 bedded |
| | | GH, Yanam | GH, Mahe | GH, Puducherry, WCH, Puducherry, GH, Karaikal | GH, Yanam | GH, Mahe | GH, Karaikal | GH, Puducherry | WCH, Puducherry |
| 15. | Postmortem Equipment | 08 | 08 | 08 | 2 | 5 | 3 | # | & |
| 16. | Radiotherapy | 10 | 10 | 10 | 0 | 0 | 0 | $ | & |
| 17. | Intensive Care Unit (ICU) | 10 | 10 | 10 | 0 | 9 | 8 | NA@ | 8 |

* Services related to Maternity and Childcare provided by WCH, Puducherry
** Eclampsia room not available
# Post Mortem services provided in IGMCRI, Puducherry
$ Anti-cancer services are provided by Department of Radiation Oncology, JIPMER
@ Information not provided
& Department not available in WCH, Puducherry
(Source: Information furnished by the respective HCFs)

Audit noticed that there was shortfall in availability of equipment of all types in all the hospitals, particularly in GH, Yanam. All the hospitals lacked in availability of all types of operation theatre equipment. GH, Karaikal, GH, Mahe and GH, Yanam were not equipped with required types of post-mortem and radiotherapy equipment. GH, Mahe and GH, Yanam had no endoscopy equipment. The Government should ensure that all essential equipment are made available in the district hospitals.

### (ii) Non-availability of equipment for Operation Theatre

IPHS norms prescribes various types of essential equipment required for OTs for District Hospitals. Audit noticed that in the District Hospitals, the non-availability of essential equipment ranged between 8 and 15 and the details of which are given in **Appendix 4.3**. Non-availability of essential equipment in OT would impact the treatment and service delivery to the patients.

Government stated (November 2023) that alternative equipment were being used and that action would be initiated to procure the equipment which are not available. The reply is not acceptable as usage of alternative equipment than that prescribed in IPHS may impact the quality of treatment. The fact, however, also remained that the equipment as per IPHS norms were lacking.

### 4.2.2 Equipment for Physiotherapy and Occupational Therapy lying idle

During joint inspection of Physical Medicine and Rehabilitation Centre (PMRC), GH, Puducherry, it was noticed that the hospital had purchased (June 2019 to August 2019) equipment *viz*., Multi Gym equipment[5], Unweighing system[6], Patient hoist[7] and Neuro Muscular Coordination Therapy Board[8] costing ₹ 26.56 lakh, which were lying unutilised/unpacked condition, due to insufficient space. These deprived facilities to the patients who require physio and occupational therapy.

Government stated (November 2023) that the Medical Superintendent, GH, Puducherry has been instructed to utilize the unpacked equipment in the Physiotherapy Unit.

### 4.2.3 Non-availability of laboratory equipment

IPHS prescribes essential equipment required for laboratory in the district hospitals. Audit observed that various critical equipment were not available in the test-checked hospitals as given in the **Table 4.5**.

**Table 4.5: Equipment not available in the laboratories**

| Name of the hospital | Name of the equipment |
|---|---|
| GH, Puducherry | Semi Auto Analyser, Histopathology Equipment, Cyto Spin |
| GH, Karaikal | Automatic Blood Gas Analyser, Histopathology Equipment, Cyto Spin |
| GH, Mahe | Fully Automated Auto Analyser, ELISA reader, Blood Gas Analyser, Histopathology Equipment, Cyto Spin |
| GH, Yanam | Electrolyte Analyser, Hot Air Oven, Binocular Microscope |
| WCH, Puducherry | Chemical balance, PH meter, Blood Gas Analyser, Paediatric Glucometer/Bilirubinometer, Glucometer |

(Source: Details furnished by the hospitals)

Thus, the test-checked hospitals did not have the prescribed laboratory equipment which would affect the quality of patient care offered by these hospitals.

Government stated (November 2023) that action would be initiated to rectify the deficiencies and procure the equipment in future.

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5 For functional and co-ordinated exercise training, exercise training for muscle groups and individual muscles.

6 For functional gait training, rehabilitation of neurological patients.

7 For transferring patients from bed and other treatment aids.

8 For coordination and balance training for spinal injury patients and other neurological conditions.

### 4.2.4 Shortfall in equipment in IGMCRI

Schedule III of MCI norms recommends minimum requirements to serve as a guide to the institutions with regard to the equipment required for various departments in the College and Hospitals. Audit test-checked five out of 12 departments of IGMCRI for availability of equipment as per MCI norms, which revealed the following as shown in **Table 4.6**.

**Table 4.6: Shortfall in equipment at IGMCRI**

**(in numbers)**

| Department | Equipment required as per MCI norms | Equipment not available | Percentage of shortfall |
|---|---|---|---|
| General Medicine | 54 | 25 | 46 |
| Tuberculosis and Chest Diseases | 13 | 3 | 23 |
| Psychiatry | 13 | 12 | 92 |
| Surgery | 42 | 18 | 43 |
| Orthopedic | 25 | 10 | 40 |

(Source: Details furnished by IGMCRI)

Shortfall in equipment ranged from 23 *per cent* in Tuberculosis and Chest Diseases Department to 92 *per cent* in Psychiatry Department. The hospital has to ensure availability of all equipment in the departments to ensure adequate delivery of healthcare to patients.

Government stated (November 2023) that all efforts was being taken for procurement of necessary equipment and the shortfall would be rectified in future.

### 4.2.5 Non-functioning of Mammography unit

The Mammography[9] unit in WCH, Puducherry was purchased (September 2013) at a cost of ₹ 93.91 lakh, which was non-functional since December 2020. Due to the non-availability of the Mammography unit, screening for breast cancer remains inaccessible to the patients consequent upon which, the patients were forced to avail the service from outside facilities. It was also observed that this unit was not covered under AMC. The Mammography unit should have been either covered under AMC or a decision should have been taken to replace it with a newer one so that the treatment facilities are extended to the patients. It is pertinent to mention that a total of 712 cases were screened during 2017 to 2020 through outside sources.

[9] Mammography is the process of using low-energy X-rays to examine the human breast for early detection of breast cancer.

Government stated (November 2023) that even though the mammography unit was not functional, other alternative examination were carried out for screening of breast cancer patients and action was being taken for purchase of a new mammography unit. The fact remains that the Mammography unit was non-functional in WCH, Puducherry, which had forced patients to take up the test from outside sources.

### 4.2.6 Non-availability of MRI scanner

MRI scanner[10] in the Department of Radiology and Imaging Services, GH, Puducherry which was purchased and installed in December 2001 was not functioning from December 2015. Thereafter, the hospital signed an MoU with M/s. East Coast Hospital in January 2016, which provided the MRI scan facility up to October 2019 and the expenses were borne by the Government. After a new MRI scanner was installed in IGMCRI in October 2019, the patients were referred to IGMCRI, which was about 6 Kms. away. It was noticed that on an average, 8 to 10 patients required MRI scan facility in GH, Puducherry. The Head of the Department, Radiology and Imaging Sciences admitted (December 2021) that only stable patients could be shifted and very sick patients could not be shifted.

Government stated (November 2023) that the Health Department had included the purchase of MRI Scanner in the indent for procurement of equipment.

### 4.2.7 Non-availability of essential equipment and diagnostic kits in PHCs

IPHS norms prescribes 47 essential equipment and diagnostic kits that are to be available in all PHCs. The number of equipment, diagnostic kits that were not available in the test-checked PHCs are given in **Table 4.7**.

**Table 4.7: Equipment, diagnostic kits not available**

| Sl. No. | Name of the PHC | No. of equipment and diagnostic kits not available | Percentage of non-availability |
|---|---|---|---|
| 1 | Karayambuthur | 13 | 28 |
| 2 | Katterikuppam | 8 | 17 |
| 3 | Muthialpet | 14 | 30 |
| 4 | Villianur | 15 | 32 |

[10] It is an equipment used for diagnosing problems relating to brain, spine, thorax and abdomen and is useful for imaging all the joints and soft tissue lesions.

| Sl. No. | Name of the PHC | No. of equipment and diagnostic kits not available | Percentage of non-availability |
|---|---|---|---|
| 5 | Ambagarathur | 22 | 47 |
| 6 | Kovilpathu | 15 | 32 |
| 7 | Pandakkal | 17 | 36 |

(Source: Details furnished by the PHCs)

From **Table 4.7**, it could be seen that non-availability of equipment and diagnostic kits ranged from 17 *per cent* to 47 *per cent*. H2S Strip test bottles used in water quality testing kit for bacterial contamination and Minilap kits used for female sterilisation were not available in all the PHCs. Thus, non-availability of essential equipment and diagnostic kits in PHCs would impact the treatment and service delivery to the patients.

Government stated (November 2023) that the concerned Deputy Directors were instructed to make available the required equipment and diagnostic kits in the PHCs.

### 4.2.8 Equipment kept idle in ISMH Hospitals

In the test-checked ISMH units, several equipment were lying under disuse/ repair as detailed in **Table 4.8**.

**Table 4.8: Equipment lying under disuse/repair**

| Sl. No. | Name of the Hospital | Equipment | Remarks |
|---|---|---|---|
| 1 | Panchakarma dispensary at the ISMH, Karaikal | Dharapathy with massage table, Sirodhara stand, one Nasyer stand and steam box | MO had not sent any request to the Directorate for repairing of the equipment. |
| 2 | Naturopathy dispensary at the ISMH, Karaikal | Hip Bath Tub and Spinal Bath Tub | Lying idle in the veranda. MO stated that the equipment could not be put to use till date due to non-provision of separate room (for male and female patients) with electricity and water supply connection. |
| 3 | Lifestyle Modification and Yoga Centre, Puducherry | Two massage tables with foot rest and two Enema tables with foot rest | MO stated that due to non-posting of male and female masseur and therapists, treatment could not be given to the patients. |
| 4 | Panchakarma dispensary at ISMH Unit, Pandakkal | Two steam bath, two Dharapathy Stand and two Sirodhara Stand | Not in working conditions and kept upstairs for want of separate room. |

(Source: Information furnished by test-checked ISMH dispensaries)

The **Pictures 4.5** and **4.6** depict the idle equipment.



**Picture 4.5: ISMH Unit, Karaikal - Hip Bath Tub and one Spinal Bath Tub lying idle**



**Picture 4.6: ISMH Unit, Pandakkal - Dharapathy Stand kept in upstairs**

Thus, the objective of providing holistic treatment in the above test-checked ISMH hospitals remained unachieved.

Government stated (November 2023) that in ISMH Unit, Karaikal the building was highly damaged and the Naturopathy OPD could not function in such a dilapidated condition and also there was no water facility to operate the equipment and that the equipment would be used only after shifting to new building.

## 4.3 Conclusion

The savings under procurement of drugs during 2020-21 and 2021-22 were 49 and 38 *per cent* respectively. Non-utilisation of the entire budget provision led to non-availability of essential drugs in the HCFs in the range of 13 to 54 *per cent* as per the essential drugs list. Medicines having shelf life less than 18 months were purchased, which subsequently got expired. No action was taken to get it replaced before the expiry, thus, resulting in a loss of ₹ 3.65 crore. There was non-availability of essential equipment in OTs. Equipment for physiotherapy and occupational therapy were lying idle. Non-availability of laboratory equipment affected the patient care offered by the hospitals. Mammography unit at Women and Children Hospital, Puducherry was not functioning since December 2020 and as a result, 712 cases were screened in private diagnostic centres.

## 4.4 Recommendations

- The UT Government should ensure availability of essential drugs, medicines and equipment in HCFs, as prescribed in the IPHS norms and a monitoring mechanism should be put in place to ascertain that the entire budget provision for procurement of essential drugs is utilised so that the HCFs do not run out of the essential drugs.
- The UT Government should ensure that the equipment procured meets the actual requirement and sufficient infrastructure facilities are available to install/commission them. Further, the UT Government should also ensure that the equipment are covered under Annual Maintenance Contract.




# CHAPTER 5

# HEALTHCARE INFRASTRUCTURE



# CHAPTER 5: HEALTHCARE INFRASTRUCTURE

## AVAILABILITY OF HEALTH INFRASTRUCTURE

**Primary and Secondary healthcare suffered for want of adequate number of PHCs/CHCs. As against the requirement of 53 PHCs and 14 CHCs, there were only 44 PHCs and 4 CHCs respectively. The sub-optimal working conditions of HCFs was a greater cause for concern. The construction works of the Integrated Ayush Hospitals in Villianur and Yanam were not yet completed and as a result, the units were functioning from private buildings, which had resulted in avoidable rent payment of ₹ 7.64 lakh. PHCs were functioning in dilapidated buildings. There was insufficient space in HCFs, lack of residential accommodation, non-provision of lift/ramp, inadequate fire safety measures.**

## 5.1 Availability of healthcare infrastructure

### 5.1.1 Availability of hospitals and PHCs

The number of Government Healthcare Facilities (HCFs) available in the UT of Puducherry is given in **Table 5.1**.

**Table 5.1: Government healthcare facilities in the UT of Puducherry**

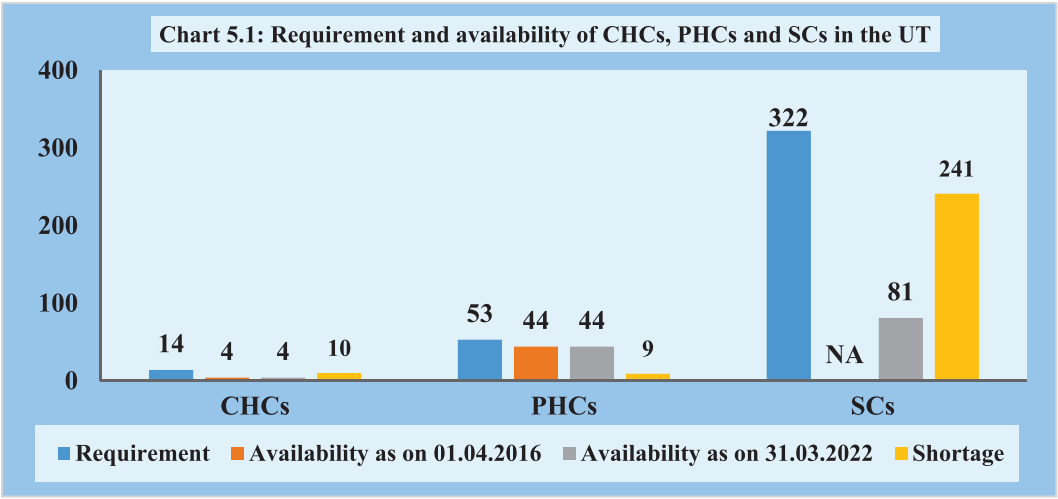
| Type | Number available | Bed strength |
|---|---|---|
| Primary Health Centres * | 44 | 212 |
| Community Health Centres | 4 | 120 |
| District (General) Hospitals | 4 | 1,371 |
| Medical College Hospitals | 2 | 745 |
| Other Speciality Hospitals | 4 | 693 |
| Ayush Centres | 49 | NA |
| **Total** | **107** | **3,141** |

* All the PHCs have been upgraded as Health and Wellness Centres
(Source: Details furnished by DHFWS)

### 5.1.2 Shortage of PHCs, CHCs and SCs

As per the "Population projections for India and States" published by National Commission on Population, Ministry of Health and Family Welfare, the projected population for UT of Puducherry for the year 2022 was 16.09 lakh. As per IPHS norms, one PHC should cover a population of 30,000. Further,

each CHC should cater to a population of 1,20,000 and there shall be one Sub-centre (SC) established for every 5,000 population. The requirement and availability of PHCs, CHCs and SCs in the UT are depicted in **Chart 5.1**.




(Source: Information furnished by DHFWS)

Audit noticed that as against the requirement of 53 PHCs in the UT, only 44 PHCs were available as of March 2022, leaving a shortfall of 17 *per cent*. Similarly, as against the requirement of 14 CHCs in the UT, only 4 CHCs were available as of March 2022, leaving a shortfall of 71 *per cent*. Further, in respect of SCs, as against the requirement of 322, only 81 SCs were available leaving a shortfall of 75 *per cent*. Thus, the availability of CHCs and SCs was very poor and was not commensurate with IPHS norms.

The geographical maps below depicts the spread of GHs, CHCs and PHCs in the four regions of the UT.

**Exhibit 5.1: HCFs at Puducherry Region**

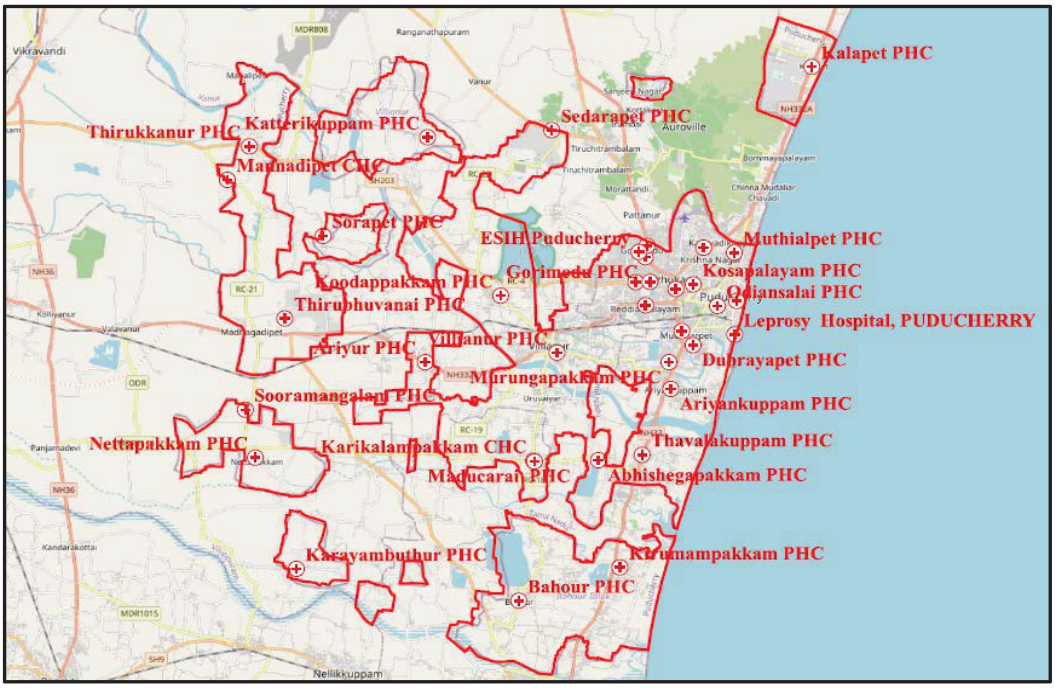


**Exhibit 5.2: HCFs at Karaikal Region**

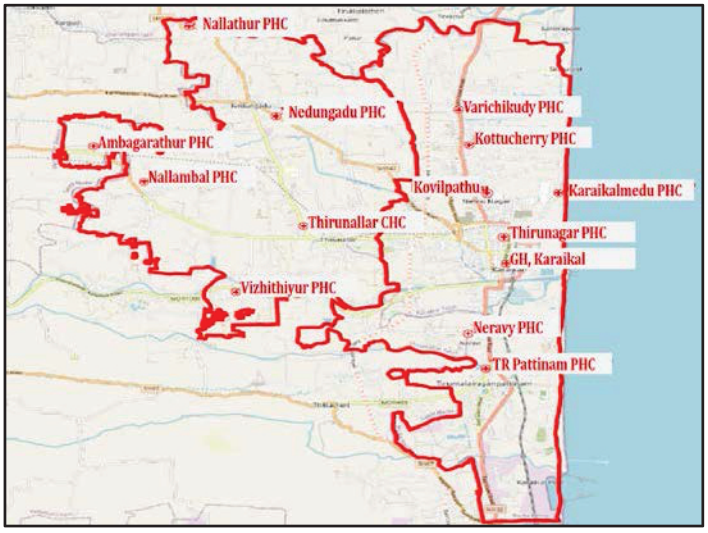



**Exhibit 5.3: HCFs at Yanam Region**

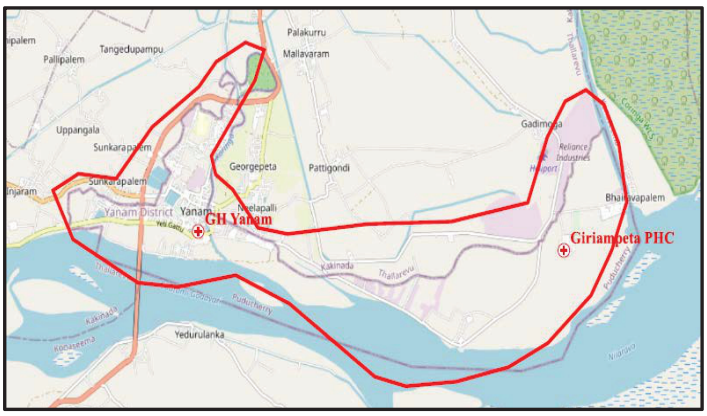



**Exhibit 5.4: HCFs at Mahe Region**

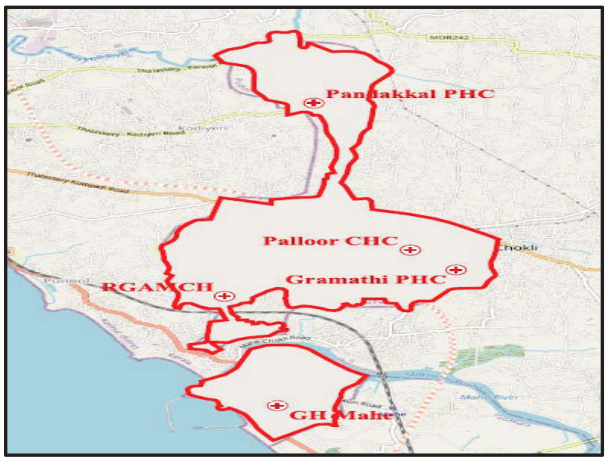



**Table 5.2** indicates the region-wise requirement and availability of CHCs, PHCs and SCs as per IPHS norms. **Table 5.3** shows the region-wise population and number of persons per CHC, PHC and SC.

**Table 5.2: Region-wise requirement and availability of CHCs, PHCs and SCs**

| Sl. No. | Region | Requirement | | | Availability | | | Shortage (-)/Excess (+) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CHCs | PHCs | SCs | CHCs | PHCs | SCs | CHCs | PHCs | SCs |
| 1 | Puducherry | 10 | 41 | 246 | 2 | 29 | 55 | (-) 8 | (-) 12 | (-) 191 |
| 2 | Karaikal | 2 | 8 | 47 | 1 | 12 | 17 | (-) 1 | 4 | (-) 30 |
| 3 | Mahe | 1 | 1 | 9 | 1 | 2 | 5 | -- | 1 | (-) 4 |
| 4 | Yanam | 1 | 3 | 20 | 0 | 1 | 4 | (-) 1 | (-) 2 | (-) 16 |
| **Total** | | **14** | **53** | **322** | **4** | **44** | **81** | **(-) 10** | **(-) 9** | **(-) 241** |

(Source: Details furnished by DHFWS)

It could be seen from **Table 5.2** that though there was shortfall of PHCs in Puducherry and Yanam regions, there was excess in respect of Karaikal Region indicating that there was uneven distribution of PHCs. However, in respect of CHCs, there was shortfall in all the regions except Mahe.

**Table 5.3: Region-wise population and number of persons per CHC/PHC/SC**

| Region Name | Projected Population for 2022 | No. of PHCs | No. of persons per PHC | No. of CHCs | No. of persons per CHC | No. of SCs | No. of persons per SC |
|---|---|---|---|---|---|---|---|
| Puducherry | 12,28,082 | 29 | 42,348 | 02 | 4,75,145 | 55 | 22,329 |
| Karaikal | 2,34,725 | 12 | 19,560 | 01 | 2,00,222 | 17 | 13,807 |
| Yanam | 98,562 | 1 | 98,562 | -- | -- | 5 | 9,496 |
| Mahe | 47,480 | 2 | 23,740 | 01 | 41,816 | 4 | 24,641 |
| **Total** | **16,08,849** | **44** | | **04** | | **81** | |

(Source: Details furnished by DHFWS)

It is also evident from **Table 5.3** that the healthcare services in UT of Puducherry is fraught with an adverse impact due to short availability of PHCs and CHCs. Audit observed that the number of CHCs remained the same since 2011-12 though the projected population for 2022 was 16.09 lakh. The shortfall in respect of SCs was very high at 75 *per cent*. These inadequacies had an impact on the existing CHCs/PHCs in terms of average number of patients attended by a doctor as discussed in paragraph 3.2.3.

Government stated (November 2023) that additional CHCs/PHCs/Sub-centres would be established in a phased manner.

## 5.2 Infrastructure availability

To ensure delivery of adequate and safe healthcare services to the public, maintenance of building infrastructure is of utmost importance. Scrutiny of records and joint inspections conducted by audit revealed inadequacies and deficiencies in the availability and maintenance of building infrastructure for the hospitals which are discussed in the succeeding paragraphs:

### 5.2.1 Delay in construction of 50 bedded Integrated Ayush Hospitals in Villianur and Yanam

Ministry of Ayush, Government of India (GoI) approved (May 2018) the setting up of 50 bedded Integrated Ayush hospitals at Villianur and Yanam at a cost of ₹ 21.82 crore. An amount of ₹ 9.08 crore was received by the Directorate and released to PWD as of March 2022. Though the construction should have been completed in June 2020 as per the agreement with the contractor, only 60 and 41 *per cent* of the works were completed in Villianur and Yanam respectively due to slow progress of work by the contractors, COVID-19 pandemic and non-receipt of funds from GoI. Further, it was noticed that at present both Villianur and Yanam ISMH Units were functioning in private buildings and the Department has been paying monthly rent of ₹ 11,184 and ₹ 25,200 respectively. This resulted in avoidable rent payment of ₹ 7.64 lakh (with effect from July 2020 to March 2022).

Government stated (November 2023) that the hospital at Villianur was inaugurated (August 2023) and 80 *per cent* of the work completed in respect of hospital at Yanam. The fact, however, remained that there was avoidable payment of rent due to delayed completion.

### 5.2.2 Delay in construction of Trauma Care Centre at Government General Hospital, Mahe

The work of construction of Trauma Care Centre at Government General Hospital, Mahe was awarded (February 2010) for ₹ 7.77 crore for completion in 18 months. However, allied works of lift, operation theatre, air conditioning, etc., was belatedly sanctioned by Government in January 2015. The Contractor suspended the work between May 2012 and January 2015 due to delay in sanction of revised estimate. The total value of work done by the contractor till the stoppage of work was ₹ 6.27 crore.

Audit observed that the Trauma Care Centre was yet to be completed even after 12 years of commencement as sufficient funds were not provided in the subsequent years. Thus, the delay in construction had resulted in deprival of emergency healthcare facilities to the people of Mahe Region.

Government stated (November 2023) that action was being taken to complete the balance work by floating fresh tender.

### 5.2.3 Hospitals functioning in dilapidated buildings

In order to ensure clean environment and safety of patients and staff of the hospitals, it is necessary that the hospital buildings are maintained properly. It

was noticed during joint inspection that hospitals/PHCs were functioning in dilapidated buildings, amid risk of occurrence of accidents and endangering the life of patients and staff passing through the buildings. The deficiencies noticed in the test-checked HCFs are detailed in **Appendix 5.1**. The **Pictures 5.1** and **5.2** depict the HCF buildings in dilapidated conditions.



**Picture 5.1: Damaged ceiling of Laboratory at CHC, Thirunallar**



**Picture 5.2: Seepage of rain water on the walls of PHC, Katterikuppam**

The **pictures 5.1** and **5.2** indicate that adequate attention was not accorded towards maintenance of the buildings housing the healthcare facilities. Government should continuously monitor and take measures to maintain all the existing building infrastructure in order to ensure safety of patients and staff and to provide a good experience of the healthcare system.

Government stated (November 2023) that action would be taken to carry out the repair works of the dilapidated buildings.

### 5.2.4 Insufficient space in the hospitals

IPHS norms prescribes the standards for building infrastructure keeping in view the functional requirements of HCFs. The norms also prescribe that each PHC should have 375 to 450 square metres and each CHC should have 1,503 square metres of functional space availability and separate ward should be earmarked for male and female patients and separate office rooms are to be provided in the PHCs. Audit noticed that one PHC[1] and two CHCs[2] do not meet the functional space requirement.

The deficiencies noticed during joint inspection of availability of adequate building infrastructure in the selected hospitals/PHCs are detailed in **Appendix 5.2**. The **Pictures 5.3** and **5.4** depict the hospital buildings with insufficient space.

[1] Katterikuppam.

[2] CHC -Mannadipet and Palloor.



**Picture 5.3: Asthma patient administered nebuliser in the corridor at Villianur PHC**



**Picture 5.4: Bed for emergency patients in the corridor of Villianur PHC**

As per NAM Operational Guidelines for AYUSH services, one Doctor's room and one Pharmacy-cum-store is required for providing quality AYUSH healthcare facilities at PHC level. Further, for AYUSH services, separate Yoga Hall (1,200 sq.ft.) shall be provided in Yoga and Naturopathy Therapy Centre. **Pictures 5.5** and **5.6** depicts the insufficient space in the test-checked AYUSH dispensaries.



**Picture 5.5: Muthialpet PHC - Homeopathy and Siddha dispensaries functioning in one room**



**Picture 5.6: ISMH Main Unit, Karaikal - Yoga hall in the veranda**

It was noticed that eight[3] of the selected dispensaries were functioning in a single room accommodating both doctor's consultation and pharmacy-cum-store**.** In ISMH unit co-located at Muthialpet PHC, both the Homeopathy and Siddha dispensaries were functioning in one room.

Government stated (November 2023) that action was being taken for expansion of space for the PHCs in a phased manner based on the availability of funds.

## 5.2.5 Residential accommodation

### *5.2.5.1 Non-availability and non-maintenance of residential accommodation*

IPHS requires that decent residential accommodation with all amenities should be available for doctors, nurses/paramedical staff, ward boys and drivers. The status of availability of residential accommodation in test-checked HCFs is given in **Appendix 5.3**.

[3] Katterikuppam, Mannadipet, Karayamputhur, Muthialpet, Thirunnallar, Kovilpathu, GH, Mahe and Palloor.

It could be seen that out of 17 HCFs, residential accommodation was not available for doctors and other staff members in nine HCFs. In total, 19 quarters were in damaged conditions and not fit for occupation. Only one quarters was available for GH, Karaikal and PHC, Ambagarathur, which was also vacant and unfit for occupation. In GH, Mahe, two quarters were not available for hospital staff since pharmacy stores was accommodated in them. Since staying near the HCF would ensure that the health workers are available 24x7 in case of need, the Government should provide sufficient number of residential accommodations in the vicinity of HCFs and also renovate all the damaged quarters early.

Audit noticed that the residential quarters in the following test-checked PHCs were in dilapidated condition and hence not occupied by the medical/para medical staff. The deficiencies noticed in the residential accommodation are given in **Table 5.4**.

**Table 5.4: Deficiencies noticed in residential quarters**

| Name of the PHC | Deficiency noticed |
|---|---|
| PHC, Katterikuppam | 12 staff quarters are in dilapidated condition and unoccupied. The Medical Officer has addressed DD (Public Health) in December 2021 for demolition of these quarters. However, the quarters are not yet repaired/renovated. |
| PHC, Karayambuthur | All the six quarters were in dilapidated condition. All of them are unoccupied. The Medical Officer has addressed DD (Public Health) in October 2021 for the demolition of these quarters. However, the quarters are not yet repaired/renovated. |
| PHC, Ambagarathur | Staff quarters was not occupied and needs to be renovated. |

(Source: Details furnished by PHCs)

The **pictures 5.7** and **5.8** depicts the dilapidated condition of the staff quarters.



**Picture 5.7: Staff quarters in dilapidated condition at PHC, Katterikuppam**



**Picture 5.8: Staff quarters in dilapidated condition at PHC, Karayambuthur**

Government stated (November 2023) that the Deputy Director (Public Health) has been advised to repair/renovate the staff quarters at PHC, Katterikuppam and PHC, Karayamputhur.

### 5.2.6 Building without ramp and lift facility

As per IPHS norms and NHM Assessor's Guide Book, ramp facility should be provided in the HCFs for easy access to the aged and physically challenged

patients. Further, lifts are essential for movement of patients, patient beds, equipment and medical staff. It was noticed that ramp/lift facilities were not provided in the ISMH Main Centre, Puducherry, which was functioning on the first floor of the Chest Clinic, Puducherry due to which patients were forced to use the staircase. Further, the only bed lift available in GH, Mahe was out of order since April 2020. The Senior Nursing Officer (Casualty) informed (September 2020) the Deputy Director, GH, Mahe that the patients and staff were facing difficulty without the lift.

Government stated (November 2023) that the TB Control Officer, Chest Clinic will be advised to ensure the building is user friendly for both physically challenged and elderly people. Further, it has been proposed to construct ramp in all health facilities and action would be taken to ensure the proper working of lifts in GH, Mahe.

## 5.3 Functioning of Ayush Health and Wellness Centres

As per the Operational Guidelines for Ayush Health and Wellness Centres (HWC) under Ayushman Bharat, the services of all Ayush system would be made available in different areas based on their use and acceptability. There were some essential requirements[4] contemplated for strengthening a facility to serve as HWC.

Under the above scheme, four Ayush dispensaries were upgraded to Ayush HWCs as given in **Table 5.5**.

**Table 5.5: AYUSH dispensaries upgraded to Ayush Health and Wellness Centre**

| Sl. No. | Dispensary | Facility | Month of upgradation |
|---|---|---|---|
| 1 | Villianur | Ayurveda | July 2020 |
| 2 | Karaikal | Siddha | July 2020 |
| 3 | Mahe | Ayurveda | July 2020 |
| 4 | Yanam | Homeopathy | November 2021 |

(Source: Details furnished by Directorate of ISMH)

It was noticed that in all the three HWCs upgraded during July 2020 had regular OPD functioning. As the HWCs were not provided with required facilities such as separate room for Community Health Officer, storage space for medicines, separate male and female toilets, power backup facilities, Yoga Instructors, space for yoga hall and laboratory facilities, the objective of the scheme to provide comprehensive healthcare through Ayush was not achieved till date.

[4] Clinic room, office space, storage space for medicines, diagnostic laboratory, toilets, patients waiting area, space for yoga, etc.

Government stated (November 2023) that necessary arrangements have been made to engage Yoga Instructors and requisite facilities for Ayush HWCs are under process.

## 5.4 Fire safety measures

IPHS norms contemplate that firefighting equipment should be available and maintained in the District Hospitals/PHCs and the staff should be trained in using firefighting equipment.

Ministry of Health and Family Welfare, GoI advised (October 2016) all States/UTs to conduct special drives to ensure that all HCFs conform to fire safety norms. It was also emphasised that fire safety norms as per the National Building Code and obtaining No Objection Certificate (NOC) from Fire Department must be complied with. The deficiencies noticed in this regard are narrated in the succeeding paragraphs.

### 5.4.1 Hospitals functioning without fire-fighting equipment

The status of availability fire-fighting equipment in the test-checked hospitals are given in **Table 5.6**.

**Table 5.6: Availability of Fire-fighting equipment in test checked Health Institutions**

| Name of Region | Name of health institution | Fire hydrant | Smoke detector | Fire extinguisher | Sand buckets | Fire alarm |
|---|---|---|---|---|---|---|
| Puducherry | GH, Puducherry | NA | NA | A* | NA | NA |
| | WCH, Puducherry | A# | A | A@ | NA | NA |
| | IGMCRI, Puducherry | NA | NA | A** | NA | NA |
| Karaikal | GH, Karaikal | NA | NA | A | A | NA |
| Mahe | GH, Mahe | NA | NA | A | NA | NA |
| | RGAMCH | NA | NA | A | A | NA |
| Yanam | GH, Yanam | NA | NA | A | NA | NA |

* 24 out of 58 in condemned condition # 13 Nos. in condemned condition
@ 94 numbers available but not refilled
** 24 out of 58 fire extinguishers are in condemned condition
(Source: Details extracted from Joint Inspection Report)

The status of installation of fire-fighting equipment are detailed in **Appendix 5.4**. Further, fire extinguishers were not provided/not recharged in the following CHC/PHCs/ISMH units.

- Proposal sent by CHC, Palloor to the Directorate (February 2021) for provision of required fire safety measures is pending approval.

- ISMH Units in Villianur, Karaikal, Pandakkal and Yanam were not provided with fire safety equipment.
- During the joint inspection of the seven test-checked hospitals, audit observed that evacuation plan routes for fire exits were not displayed in four[5] hospitals.
- Mock drills were not conducted in GH, Mahe with the Fire Service Unit during 2016-22 except during 2016-17 wherein 30 staff participated.

Government stated (November 2023) that action was being taken to procure Fire Fighting Equipment in the hospital buildings, displaying of evacuation routes for Fire Exits and to conduct mock drill at GH, Mahe.

### 5.4.2 Hospitals/PHCs functioning without No Objection Certificate

Audit noticed that NOC from the Fire Services Department was not obtained by the following test-checked hospitals/PHCs as given in **Table 5.7**.

**Table 5.7: Details of Hospitals not obtained NOC**

| Region | Name of Hospital | Name of PHC | ISMH Units |
|---|---|---|---|
| Puducherry | GH, Puducherry<br>WCH, Puducherry<br>CHC, Mannadipet | Katterikuppam,<br>Karayambuthur,<br>Muthialpet,<br>Villianur | -- |
| Karaikal | GH, Karaikal<br>CHC, Thirunallar | Ambagarathur,<br>Kovilpathu | Karaikal,<br>Villianur |
| Mahe | GH, Mahe<br>RGAMCH, Mahe<br>CHC, Palloor | Pandakkal | Pandakkal |
| Yanam | GH, Yanam | -- | Yanam |

(Source: Details furnished by the hospitals)

Government stated (November 2023) that District Hospitals will be instructed to obtain No Objection Certificate from the Fire Services Department.

## 5.5 Availability of Medical Colleges in the UT

In Puducherry, GoI established Jawaharlal Institute of Postgraduate Medical Education and Research in the year 1964. The UT Government established Medical Colleges in Puducherry (Indira Gandhi Medical College and Research Institute) and Mahe (Rajiv Gandhi Ayurveda Medical College and Hospital) only in the year 2010 whereas seven Medical Colleges in Private sector were

[5] GH, Karaikal, GH, Mahe, GH, Yanam and RGAMCH, Mahe.

established earlier during the period 1996 to 2006. No new medical colleges were established in the UT since 2010 either under Government/Private sector.

Government stated (November 2023) that proposal for starting of separate Directorate for Medical Education is under process for starting new Medical College in outlying regions.

## 5.6 Conclusion

There was shortage in the number of PHCs/CHCs/SCs as against the norms stipulated in IPHS. The sub-optimal working conditions of HCFs was a greater cause for concern. There were grave issues like primary health centres functioning in dilapidated buildings and residential quarters were unfit for occupation. The construction works of the Integrated Ayush Hospitals in Villianur and Yanam were not yet completed and as a result the units were functioning from private buildings which had resulted in avoidable rent payment of ₹ 7.64 lakh. ISMH Main Centre, Puducherry was functioning without ramp and lift. Fire safety measures were not adequate.

## 5.7 Recommendations

- The UT Government should provide an optimal level of quality healthcare by enlarging the primary and secondary healthcare network and upgrade the facilities to meet the IPHS norms to cater to the needs of the population.
- The UT Government should ensure close monitoring on execution of infrastructure projects and also ascertain that supervision on maintenance of HCF buildings are carried out periodically.





# CHAPTER 6

# ADEQUACY OF FUNDS FOR THE HEALTHCARE SECTOR

# CHAPTER 6: ADEQUACY OF FUNDS FOR THE HEALTHCARE SECTOR

**The expenditure on healthcare in the Union Territory of Puducherry fell short of the allocation by 2 to 16 *per cent* during 2016-22. Except during 2019-20, the Capital expenditure constituted just 0.82 *per cent* to 2.96 *per cent* of the total expenditure on healthcare of the UT and the savings in Capital expenditure ranged between 6 and 92 *per cent* during the same period indicating that lesser priority was given for healthcare infrastructure creation that includes advanced machines procurement for the healthcare facilities.**

## 6.1 Budget allocation and expenditure on Health Sector

The budget allocation and expenditure under health sector during 2016-22, out of grants/funds allocated by the GoI and the UT Government are given in **Table 6.1**.

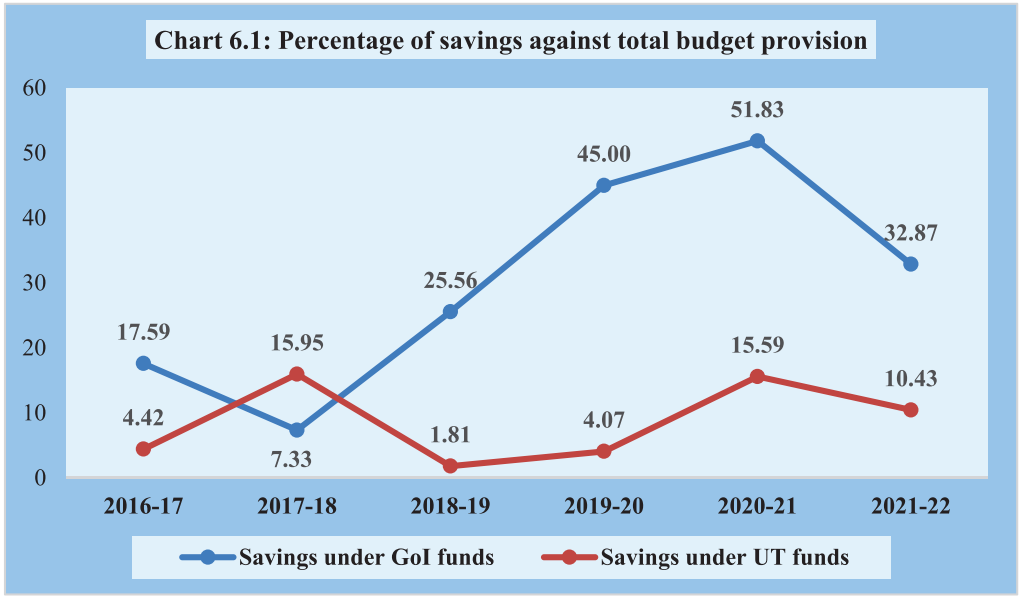
**Table 6.1: Budget allocation and expenditure on Health Sector (GoI and UT Government)**

**(₹ in crore)**

| Year | Government of India | | | Government of UT of Puducherry | | |
|---|---|---|---|---|---|---|
| | Total Budget Provision | Expenditure | Savings | Total Budget Provision | Expenditure | Savings |
| 2016-17 | 37.23 | 30.68 | 6.55 | 513.05 | 490.38 | 22.67 |
| 2017-18 | 35.19 | 32.61 | 2.58 | 599.95 | 504.26 | 95.69 |
| 2018-19 | 49.30 | 36.70 | 12.60 | 590.13 | 579.47 | 10.66 |
| 2019-20 | 73.83 | 40.61 | 33.22 | 763.05 | 731.97 | 31.08 |
| 2020-21 | 103.06 | 49.64 | 53.42 | 729.05 | 615.39 | 113.66 |
| 2021-22 | 96.82 | 65.00 | 31.82 | 814.85 | 729.84 | 85.01 |

(Source: Data furnished by DHFWS, Puducherry State Health Society, Puducherry AIDS Control Society and State Health Agency)

The percentage of savings against the total budget provision is given in **Chart 6.1**.




## 6.2 Budget allocation and expenditure on Health and Family Welfare

The Budget allotment and expenditure for Health and Family Welfare during 2016-22 is shown in **Table 6.2**.

**Table 6.2: Budget allotment and expenditure for Health and Family Welfare during 2016-22**

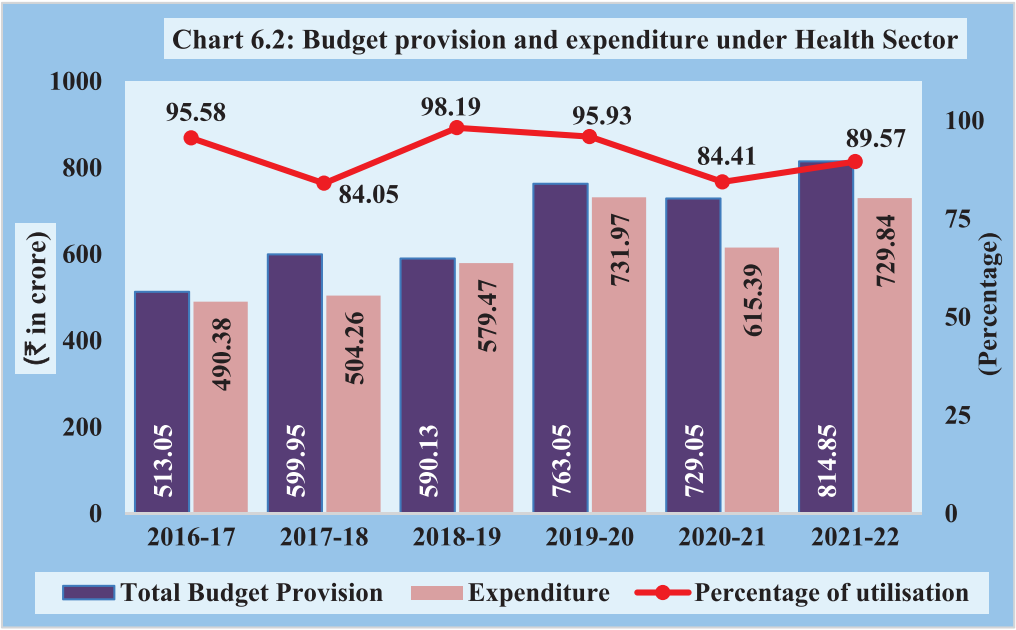
**(₹ in crore)**

| Year | Budget Allotment | | | Actual Expenditure | | |
|---|---|---|---|---|---|---|
| | Total Budget of the UT | Budget for H&FW | H&FW budget as a percentage of the total budget of the UT | Total expenditure of the UT | Expenditure on H&FW | H&FW expenditure as a percentage of the total expenditure of the UT |
| 2016-17 | 6,910.14 | 513.05 | 7.42 | 6,144.49 | 490.38 | 7.98 |
| 2017-18 | 7,589.01 | 599.95 | 7.91 | 6,799.94 | 504.26 | 7.42 |
| 2018-19 | 7,962.68 | 590.13 | 7.41 | 7,423.20 | 579.47 | 7.81 |
| 2019-20 | 8,888.26 | 763.05 | 8.58 | 7,939.74 | 731.97 | 9.22 |
| 2020-21 | 9,256.04 | 729.05 | 7.88 | 8,361.93 | 615.39 | 7.36 |
| 2021-22 | 10,530.69 | 814.85 | 7.74 | 9,807.50 | 729.84 | 7.44 |

(Source: Finance Accounts of the respective years)

National Health Policy (NHP) stipulated that more than 8 *per cent* of the UT's budget allocation has to be earmarked for Health Sector by the year 2020. Though, UT had achieved the target during 2019-20, it could not maintain the same during the subsequent years 2020-22. The utilisation of funds provided in

the budget for Health Sector was in the range of 84.05 *per cent* to 98.19 *per cent* during 2016-22 which is depicted in **Chart 6.2**.




(Source: Appropriation Accounts of the respective years)

## 6.3 Expenditure on Health Sector by the UT *vis-a-vis* National Health Policy norms

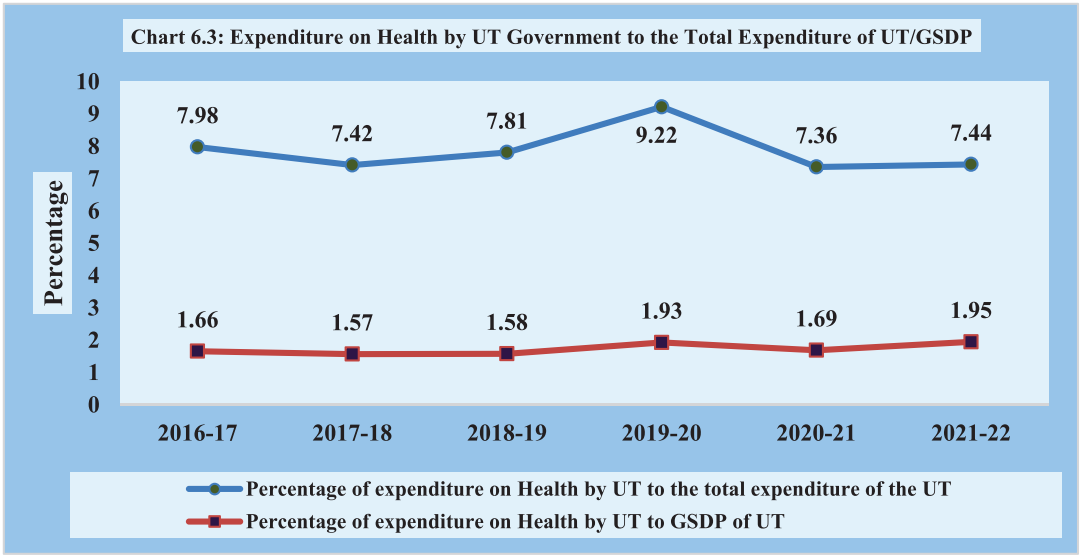
The NHP advocates the expenditure on health by the Government shall be increased as a percentage of GDP from the existing 1.15 *per cent* to 2.5 *per cent* by 2025. The expenditure on health with respect to GSDP of UT of Puducherry for the period 2016-17 to 2021-22 is presented in **Table 6.3**.

**Table 6.3: Funding on healthcare as a percentage of GSDP**

**(₹ in crore)**

| Year | Expenditure on healthcare | GSDP of UT of Puducherry | Funding as percentage of GSDP |
|---|---|---|---|
| 2016-17 | 490.38 | 29,573 | 1.66 |
| 2017-18 | 504.26 | 32,129 | 1.57 |
| 2018-19 | 579.47 | 36,555 | 1.58 |
| 2019-20 | 731.97 | 37,959 | 1.93 |
| 2020-21 | 615.39 | 36,402 | 1.69 |
| 2021-22 | 729.84 | 37,485 | 1.95 |

(Source: Finance Accounts of the respective years and Statistical Data of Directorate of Economics and Statistics, Puducherry)



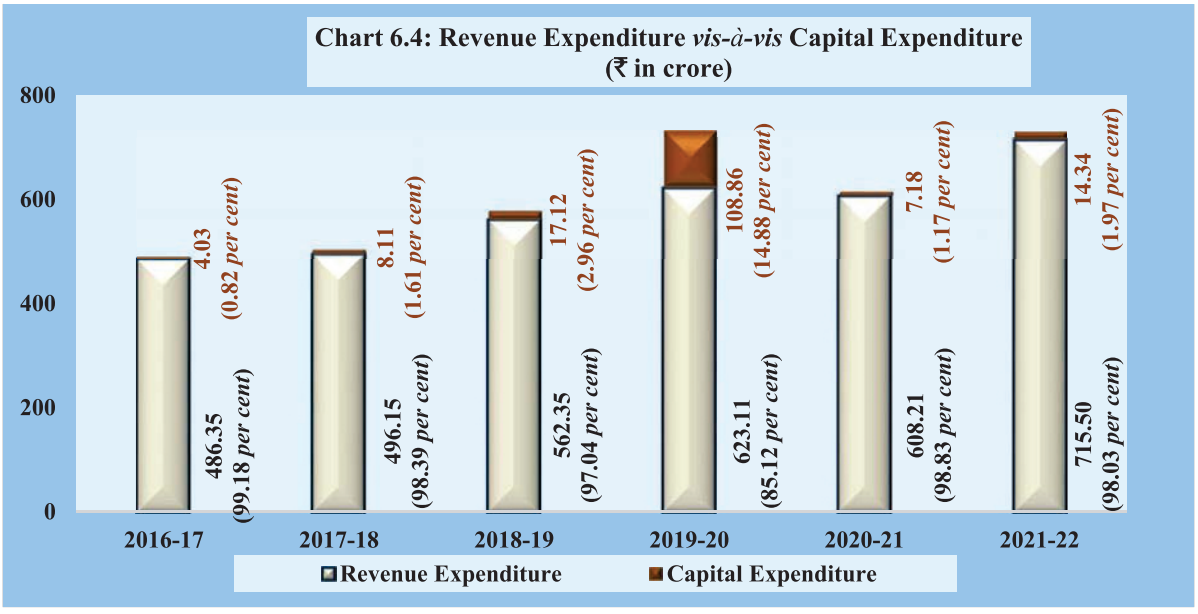

(Source: Finance Accounts of the respective years and Statistical Data of Directorate of Economics and Statistics, Puducherry)

It could be seen from **Chart 6.3** that the funding for healthcare as a percentage of GSDP had increased from 1.66 in 2016-17 to 1.95 only during 2021-22. Hence, the UT Government has to go a long way to achieve the target of 2.5 by 2025.

Government stated (November 2023) that action would be taken to achieve the target of 2.5 *per cent* of GSDP.

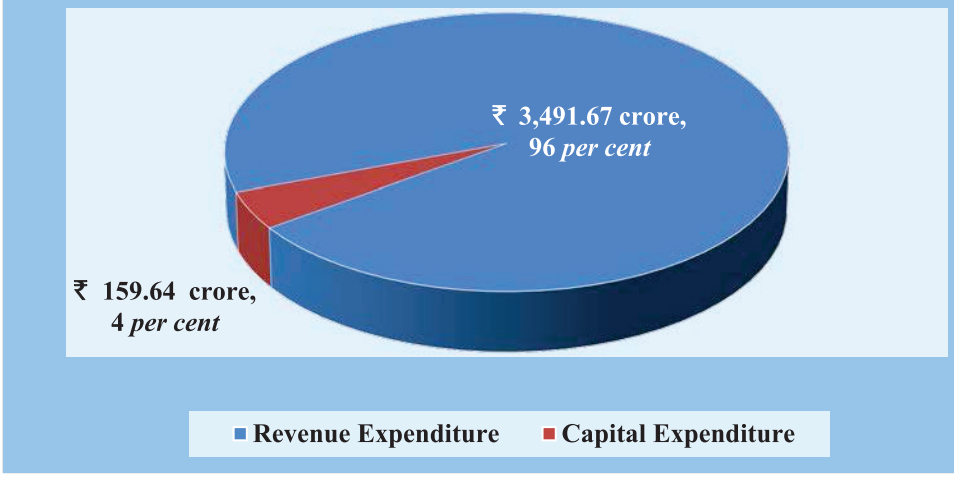
## 6.4 Revenue and Capital Expenditure

The Revenue expenditure *vis-à-vis* Capital expenditure on Healthcare during 2016-22 is shown in **Charts 6.4** and **6.5**.




(Source: Finance Accounts of the respective years)

**Chart 6.5: Capital Expenditure *vis-à-vis* Revenue Expenditure (2016-17 to 2021-22)**




(Source: Finance Accounts of the respective years)

Except during 2019-20, the capital expenditure as a percentage of total expenditure ranged between 0.82 and 2.96 *per cent* during 2016-17 to 2021-22. The higher capital expenditure during 2019-20 was due to settlement of compensation of ₹ 85.54 crore for acquisition of land for Rajiv Gandhi Women and Children Hospital, Puducherry. Excluding the compensation paid, the capital expenditure was only 3.61 *per cent* in 2019-20.

**Table 6.4** indicates the budget provision and expenditure incurred under capital heads during 2016-22.

**Table 6.4: Budget allocation and expenditure under Capital**

**(₹ in crore)**

| Year | Budget Estimate | Revised Estimate | Actuals | Savings (in *per cent*) |
|---|---|---|---|---|
| 2016-17 | 22.08 | 5.23 | 4.03 | 23 |
| 2017-18 | 17.48 | 98.13 | 8.11 | 92 |
| 2018-19 | 9.61 | 19.15 | 17.12 | 11 |
| 2019-20 | 106.68 | 115.49 | 108.86 | 6 |
| 2020-21 | 38.09 | 26.25 | 7.18 | 73 |
| 2021-22 | 34.70 | 35.57 | 14.34 | 60 |

(Source: Budget documents and Finance Accounts of the respective years)

It could be seen that the savings in capital expenditure ranged from 6 to 92 *per cent* during 2016-22. The huge savings during 2017-18 was due to non-utilisation of provision for settlement of enhanced land acquisition

compensation. The savings during 2020-21 and 2021-22 was due to non-utilisation of provision made for upgradation of food testing laboratory.

The lesser expenditure under capital head was indicative of the fact that low priority was given for infrastructure creation including procurement of equipment for the healthcare facilties.

Government stated (November 2023) that an amount of ₹ 21.71 crore has been earmarked under capital outlay for the Health Department and an amount of ₹ 90 crore has been apportioned under Negotiated Loan for procurement of equipment to the Health Institutions so there will be increase in the capital expenditure in the financial year 2023-24.

## 6.5 Funding for Indian Systems of Medicine and Homeopathy

### 6.5.1 Budget allocation and expenditure

Budget allocation and expenditure for the Directorate of Indian Systems of Medicine and Homeopathy (ISMH) during 2016-22 is shown in **Table 6.5**.

**Table 6.5: Budget allocation and expenditure during 2016-22**

**(₹ in crore)**

| Year | Budget Estimate | Revised Estimate | Actuals | Savings |
|---|---|---|---|---|
| 2016-17 | 17.10 | 18.46 | 18.46 | -- |
| 2017-18 | 20.03 | 18.41 | 12.64 | 5.77 |
| 2018-19 | 14.45 | 16.85 | 16.57 | 0.28 |
| 2019-20 | 16.14 | 20.46 | 12.93 | 7.53 |
| 2020-21 | 19.32 | 17.51 | 7.59 | 9.92 |
| 2021-22 | 17.35 | 23.57 | 22.00 | 1.57 |

(Source: Details furnished by the Directorate of ISMH)

The above expenditure includes ₹ 11.27 crore under the Centrally Sponsored Scheme of National Ayush Mission (NAM). The reasons for savings during 2017-22 were non-filling up of vacant posts, short release of grant from GoI and non-purchase of medicines.

## 6.6 Receipts and expenditure of National Health Mission

The details of receipts and expenditure under National Health Mission for the period 2016-22 are given in the **Table 6.6**.

**Table 6.6: Details of receipts and expenditure under National Health Mission during 2016-22**

**(₹ in crore)**

| Year | Opening balance | Interest earned | Receipt during the year | Expenditure | Refund to GoI | Closing balance |
|---|---|---|---|---|---|---|
| 2016-17 | 4.16 | 0.18 | 28.53 | 26.80 | 0.00 | 6.07 |
| 2017-18 | 6.07 | 0.17 | 25.03 | 28.83 | 0.74 | 1.70 |
| 2018-19 | 1.70 | 0.16 | 43.36 | 32.89 | 0.00 | 12.33 |
| 2019-20 | 12.33 | 0.46 | 56.03 | 36.61 | 0.90 | 31.31 |
| 2020-21 | 31.31 | 1.03 | 62.98 | 43.70 | 0.00 | 51.62 |
| 2021-22 | 51.62 | 0.86 | 36.41 | 59.89 | 1.03 | 27.96 |
| **Total** | | **2.86** | **252.34** | **228.72** | **2.67** | |

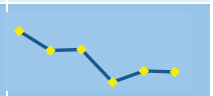
(Source: Details furnished by the Puducherry State Health Society)

As seen from **Table 6.6**, 91 *per cent* of the funds available under NHM were utilised during 2016-22 (excluding refund to GoI). The closing balance was on the increasing trend which was indicative of the inability of the UT Government to spend the amount in a time bound manner.

The budget allocation and expenditure on certain important components under NHM in the UT are given in **Table 6.7**.

**Table 6.7: Budget and expenditure on important components under NHM**

**(₹ in lakh)**

| Name of scheme | Total Budget for 2017-22 | Total expenditure for 2017-22 | Percentage of total expenditure to budget | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | Sparkline for six years from 2016-17 to 2021-22 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mission Flexible Pool and Additionalities | 13,133.69 | 11,382.69 | 87 | 91 | 99 | 89 | 94 | 69 | 88 |  |
| RCH Phase-II Flexible Pool | 5,659.11 | 2,501.12 | 44 | 77 | 94 | 91 | 25 | 23 | 23 |  |
| National Vector Borne Disease Control Programme | 1,215.29 | 272.81 | 22 | 69 | 31 | 92 | 10 | 11 | 8 |  |
| National Tuberculosis Elimination Programme | 1,078.06 | 1,021.56 | 95 | 173 | 99 | 94 | 94 | 92 | 59 |  |
| National Blindness Control Programme | 491.10 | 377.45 | 77 | 104 | 97 | 96 | 46 | 63 | 71 |  |
| National Mental Health Programme | 328.30 | 43.72 | 13 | 19 | 78 | 41 | 1 | 9 | 21 |  |
| National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke | 288.81 | 199.93 | 69 | 91 | 72 | 73 | 41 | 52 | 51 |  |
| Immunization Strengthening Programme | 254.62 | 141.79 | 56 | 31 | 92 | 77 | 44 | 64 | 69 |  |
| National Programme for Health Care of Elderly | 194.88 | 91.21 | 47 | 62 | 120 | 0 | 22 | 1 | 28 |  |

(Source: Puducherry State Health Society)

Government stated (November 2023) that the Health Department has been facing difficulties in utilisation of funds due to release of funds in the fag end of the year. Further, it was also stated that GoI has issued instructions for release of funds from the Treasury account to Single Nodal Account of the Puducherry State Health Society.

### 6.6.1 Non-functioning of State Medicinal Plant Board

Government of Puducherry constituted (April 2007) State Medicinal Plant Board (SMPB) to create awareness on use and importance of medicinal plants in Indian Systems of Medicine, development, cultivation and conservation of medicinal plants and setting up of Herbal garden in Government departments/Institutions. In the first meeting (December 2009), a Working Committee was constituted to discuss and advice about the items of works to be taken up under the Medicinal Plants Scheme in Puducherry. Thereafter no meeting was held.

The Board had received an amount of ₹ 38.03 lakh (May 2018: ₹ 24.43 lakh and January 2022: ₹ 13.60 lakh) from GoI. Out of ₹ 24.43 lakh received during 2018-19, expenditure of ₹ 13.77 lakh was incurred and balance amount of ₹ 12.27 lakh (including interest accrued ₹ 1.61 lakh) was refunded (July 2021) to GoI. No expenditure was incurred for the receipt of ₹ 13.60 lakh received in January 2022. Further, the SMPB was formed in 2007, the Consultants and supporting staff were not engaged till April 2022. Thus, despite availability of fund, the UT Government did not spend the money for the purpose for which it was released and therefore, the objective of cultivation and conservation of medicinal plants remained unachieved.

Government stated (November 2023) that various activities like workshops, school camps, awareness on cultivation and conservation of medicinal plants were being carried out.

## 6.7 Conclusion

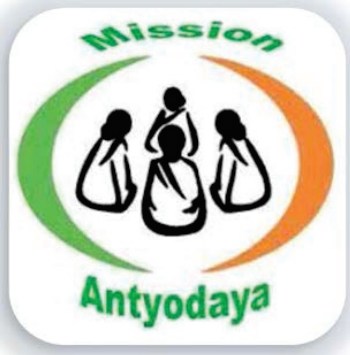
The budget allocation ranged between 7.41 and 8.58 *per cent* against the NHP norm of more than 8 *per* cent. The expenditure on healthcare fell short of the allocation by 2 to 16 *per cent*. Except during 2019-20, the Capital expenditure constituted 0.82 *per cent* to 2.96 *per cent* of the total expenditure on healthcare of the UT of Puducherry and the savings ranged between 6 and 92 *per cent* during 2016-22, which was indicative of the fact that low priority was attached towards healthcare infrastructure creation.

## 6.8 Recommendation

- The UT Government should strive to utilise the budget allotment in full, especially funds provided for capital creation to improve the infrastructure and advanced equipment procurement for HCFs, as a suitable physical environment is the crucial factor for providing better service delivery to the patients.

# CHAPTER 7

# IMPLEMENTATION OF CENTRALLY SPONSORED SCHEMES









# CHAPTER 7: IMPLEMENTATION OF CENTRALLY SPONSORED SCHEMES

**Government of India provides assistance to UT Government to strengthen its healthcare network in the UT.**

**The institutional deliveries were more than 25,000 per annum during the period 2016-17 to 2021-22, but the coverage of beneficiaries under "Janani Shishu Suraksha Karyakram" was less than 10 *per cent*, which indicates that the scheme was not implemented effectively. There was shortfall of 37 *per cent* in coverage of beneficiaries under AB-PMJAY. Out of ₹ 308.17 lakh received from State Health Authority, only ₹ 75.20 lakh was utilised by the Hospitals. Due to non-enhancement of budget provision, higher compensation was denied to the eligible beneficiaries under Family Planning Indemnity Scheme. There were shortfalls in the provision of benefits to the women beneficiaries under 'Janani Suraksha Yojana' and 'Janani Shishu Suraksha Karyakram' despite availability of funds.**

## 7.1 National Health Mission

The National Health Mission (NHM) launched by the Government of India (GoI) in 2005, envisaged achievement of universal access to equitable, affordable and quality healthcare services that are accountable and responsive to people's needs by strengthening of health systems, institutions and capabilities of the States. The NHM programme is implemented in UT of Puducherry through the Puducherry State Health Society (PSHS), headed by its Mission Director. The funding pattern in respect of NHM between the Union and State governments/UT's is in the ratio of 60:40. The implementation of selected schemes in the UT is discussed in succeeding paragraphs.

### 7.1.1 Non-enhancement of Family Planning Indemnity amount

Family Planning Indemnity Scheme (FPIS) was launched by GoI in April 2013, to provide compensation in case of death following sterilisation and failure of sterilisation. Compensation of ₹ 2 lakh has to be paid for claims arising out of death at hospital or death within seven days of discharge. For failure of sterilisation, compensation of ₹ 30,000 has to be paid. A sum of ₹ 5 lakh per year was allotted to GoP under this scheme by National Health Mission to meet the claims arising out of sterilisation operation and the balance to be met out of the State funds.

The Ministry of Health and Family Welfare (MoHFW), GoI, had directed (October 2016) all the States to double the compensation amount paid under FPIS from January 2017.

Audit noticed that the GoP had not doubled the compensation amount. The details of compensation paid during 2016-17 to 2021-22 are given in **Table 7.1**.

**Table 7.1: Details of compensation paid during 2016-22**

| Year | Failure of sterilisation (in numbers) | Death after sterilisation (in numbers) | Compensation paid (₹ in lakh) |
|---|---|---|---|
| 2016-17* | 38 | - | 11.40 |
| 2017-18 | 39 | 1 | 13.70 |
| 2018-19 | 37 | - | 11.10 |
| 2019-20 | 49 | - | 14.70 |
| 2020-21 | 21 | - | 6.30 |
| 2021-22 | 32 | - | 9.60 |
| **Total** | **216** | **1** | **66.80** |

* From September 2016

(Source: Details furnished by the Directorate)

Audit observed that though the proposal was submitted by the Director, DHFWS (February 2022) to GoP to enhance the quantum of compensation, GoP had not approved the revised compensation amount (November 2022). Thus, due to non-enhancement of budget provision in tune with directions of the MoHFW, GoI, 217 persons were denied higher compensation amounting to ₹ 66.80 lakh.

The Government stated (November 2023) that payment of enhanced compensation to the beneficiaries was under process.

### 7.1.2 Janani Shishu Suraksha Karyakram

Janani Shishu Suraksha Karyakram (JSSK) scheme aims to benefit pregnant women by reducing the 'Out-of-pocket expenditure' on healthcare. JSSK guarantees zero expense deliveries, by providing free transport to access the healthcare facilities for delivery.

Accordingly, an amount of ₹ 1.00 crore was allotted to cover 20,000 beneficiaries. The amount utilised out of the allotment made during 2016-22 are given in **Table 7.2**.

**Table 7.2: Utilisation of amount out of the allotment made under JSSK during 2016-22**

**(₹ in lakh)**

| Year | Total number of institutional births | No. of beneficiaries of JSSK (percentage of coverage) | Amount allotted | Amount utilised | Percentage of funds utilised | Reason for savings over the amount allotted |
|---|---|---|---|---|---|---|
| 2016-17 | 40,319 | 1,108 (3) | 100.00 | 32.88 | 33 | Nil |
| 2017-18 | 42,862 | 2,727 (6) | 100.00 | 16.23 | 16 | Nil |
| 2018-19 | 43,970 | 2,050 (5) | 100.00 | 10.92 | 11 | Nil |
| 2019-20 | 43,175 | 2,107 (5) | 100.00 | 10.66 | 11 | COVID pandemic |
| 2020-21 | 26,252 | 1,165 (4) | 100.00 | 5.84 | 6 | COVID pandemic |
| 2021-22 | 31,656 | 2,769 (9) | 100.00 | 13.85 | 14 | COVID pandemic |

(Source: Details furnished by the PSHM)

Audit observed that though institutional deliveries was more than 40,000 *per annum* till 2019-20 and was more than 25,000 in the subsequent two years, the coverage of beneficiaries under the scheme was found to be less than 10 *per cent* throughout the six years period ending 2021-22. It could be seen that only 6 to 33 *per cent* of funds allotted were utilised indicating that the scheme was not implemented effectively in UT of Puducherry.

### 7.1.3 Janani Suraksha Yojana

Under the Janani Suraksha Yojana (JSY), pregnant women belonging to Below Poverty Line (BPL) households are eligible for cash assistance of ₹ 700 (urban areas)/₹ 600 (rural areas), to promote institutional deliveries. The details of funds allotted and utilised under the scheme during 2016-22 are given in **Table 7.3**.

**Table 7.3: Details of funds allotted and utilised during 2016-22**

**(₹ in lakh)**

| Year | Number of beneficiaries | Funds allotted | | | Funds utilised | Reason for excess/ savings over the amount allotted |
|---|---|---|---|---|---|---|
| | | Central share | State share | Total | | |
| 2016-17 | 4,214 | 15.82 | 10.54 | 26.36 | 27.37 | NA |
| 2017-18 | 3,137 | 17.66 | 11.77 | 29.43 | 20.48 | NA |
| 2018-19 | 2,872 | 19.09 | 12.73 | 31.82 | 18.70 | NA |
| 2019-20 | 2,486 | 19.09 | 12.73 | 31.82 | 16.12 | Covid pandemic |
| 2020-21 | 1,768 | 19.09 | 12.73 | 31.82 | 11.53 | Covid pandemic |
| 2021-22 | 2,398 | 19.09 | 12.73 | 31.82 | 15.68 | Covid pandemic |

(Source: Details furnished by the PSHM)

Audit observed that lack of awareness was the main reason for the shortfall in implementing the Scheme.

Government stated (November 2023) that initially less number of applications was received from the beneficiaries and that at present as the applications were received through ASHA from the door step of the beneficiaries there had been increase in number of beneficiaries. However, no details were furnished by the Government in support of this statement to substantiate this claim.

### 7.1.4 National Mental Health Programme (NMHP)

GoI launched the National Mental Health Programme (NMHP) in 1982, with the following objectives: (i) To ensure the availability and accessibility of minimum mental healthcare for all, particularly to the most vulnerable and underprivileged; (ii) To encourage the application of mental health knowledge; and (iii) To promote community participation in the mental health service development.

#### *7.1.4.1 Utilisation of funds under NMHP*

The details of funds released and expenditure incurred for NMHP are given in **Table 7.4**.

**Table 7.4: Funds released and expenditure under NMHP in UT of Puducherry**

**(₹ in lakh)**

| Sl. No. | Year | Budget | Expenditure | Percentage of utilisation |
|---|---|---|---|---|
| 1 | 2016-17 | 129.83 | 24.63 | 18.97 |
| 2 | 2017-18 | 6.93 | 5.38 | 77.63 |
| 3 | 2018-19 | 8.75 | 3.61 | 41.26 |
| 4 | 2019-20 | 121.86 | 1.33 | 1.09 |
| 5 | 2020-21 | 31.54 | 2.69 | 8.53 |
| 6 | 2021-22 | 29.39 | 6.08 | 20.69 |

(Source: Information furnished by PSHS)

The under-utilisation of funds had resulted in psychiatric patients being deprived of inpatient services for emergency psychiatry illnesses. Further, there was non-availability of drugs for various mental health conditions in DHs and CHCs which are detailed in the succeeding paragraphs.

### *7.1.4.2 Implementation of NMHP in UT of Puducherry*

The extent of availability of mental health services under the NMHP in the test checked hospitals and CHCs is as given in **Table 7.5**.

**Table 7.5: Availability of mental health services in test-checked health institutions**

| Sl. No. | Particulars | GHs (04) | IGMCRI (01) | CHCs (3) |
|---|---|---|---|---|
| 1 | Whether provisions of Outpatient services for walk-in-patient and patients referred by the PHC is provided by MO. | A | A | NA |
| 2 | Whether early identification, diagnosis and treatment of common mental disorders (anxiety, depression, psychosis, schizophrenia, Manic Depressive Psychosis) are available. | A | A | A |
| 3 | Whether In-patient services are available for emergency psychiatry illnesses. | NA | A | NA |
| 4 | Whether counseling services provided by the Clinical Psychologist/Trained Psychologist. | A | A | NA |
| 5 | Whether continuing care and support to persons with Severe Mental Disorder (SMD) provided to the patients. (This includes referral to district hospital for SMD patients and follow-up based on treatment plan drawn up by the Psychiatrist at the district hospital.) | A | A | A |

(Source: Details furnished by Puducherry State Health Society, Puducherry)

It could be seen from **Table 7.5**, all the hospitals except the IGMCRI, Puducherry do not provide in-patient services for emergency psychiatry illnesses. Further, counselling service by a Psychologist was not available in any of the test-checked CHCs. Evidently, the objectives of the NMHP was not achieved since in-patient services were not provided in any of the GHs to address emergency psychiatry illnesses and the manner of implementation of the programme needs to be revisited by the UT Government.

### *7.1.4.3 Availability of Mental Health Programme drugs in test-checked HCFs*

Government of India, Ministry of Health and Family Welfare had in May 2018 communicated to the Principal Secretaries (HFW)/Mission Directors (NHM)/ State Nodal Officers (NMHP) of all States and UTs, the list of drugs that should be available at District hospitals/CHC/PHC level to treat various mental health conditions *viz*., Psychotic disorders, Depressive disorders, Bipolar disorders, Generalised Anxiety and Sleep disorders, Obsessive Compulsive Disorders and Panic Attacks, Epilepsy and Extra Pyramidal Symptoms. The list prescribes 20 and 14 drugs that are to be available in District Hospitals and CHCs/PHCs respectively.

The status of availability of these drugs in the GHs, CHCs and PHCs are given in **Appendix 7.1**. It could be seen that the non-availability of drugs ranged between 15 and 100 *per cent*.

According to the National Crime Records Bureau (NCRB) report, the rate of suicides in UT of Puducherry ranged between 26.3 and 40.1 per one lakh population during 2017-23 as against the national average of 9.9 and 12.4. In absolute terms, the UT has the second highest number of reported suicides among Union Territories in the last five years.

Audit observed that the allocation and utilisation of funds under NMHP was poor and there was an unspent balance of ₹ 23.31 lakh as of March 2022.

### 7.1.5 Sterilisation services

The UT of Puducherry follows a target-free approach to family planning and hence no targets are fixed for sterilisation and spacing methods. The details of sterilisation acceptors and the achievements on Sterilisation methods during the period 2016-22 are given in **Appendix 7.2 (a) and (b)**.

Ministry of Health and Family Welfare Services observed (September 2007) that the performance in the sterilisation services showed a declining trend in spite of the fact that GoI was providing sterilisation services free of cost at all public health facilities. The Mission Steering Group of National Rural Health Mission revised the compensation to acceptors of sterilisation to ₹ 600 (for BPL and SC/ST) and ₹ 250 to others in the UT of Puducherry. The details of number of beneficiaries, amount allotted for payment of compensation and amount utilised during 2016-17 to 2021-22 are given in **Table 7.6**.

**Table 7.6: Number of beneficiaries, amount allotted for compensation and utilisation during 2016-22**

**(₹ in lakh)**

| Year | Number of beneficiaries | Amount allotted | Amount utilised | Percentage of utilisation |
|---|---|---|---|---|
| 2016-17 | 4,043 | 54.78 | 48.13 | 88 |
| 2017-18 | 2,169 | 54.78 | 36.70 | 67 |
| 2018-19 | 2,953 | 54.78 | 26.93 | 49 |
| 2019-20 | 2,675 | 54.78 | 21.64 | 40 |
| 2020-21 | 1,264 | 39.45 | 11.22 | 28 |
| 2021-22 | 1,869 | 45.65 | 12.00 | 26 |

(Source: Details furnished by the PSHM)

It could be seen that there was substantial decrease in the number of beneficiaries who availed the sterilisation services from 4,043 in 2016-17 to 1,869 in 2021-22. The percentage of utilisation of fund allotted also decreased drastically from 88 *per cent* in 2016-17 to 26 *per cent* in 2021-22. This indicated that there

was no sufficient awareness created to increase number of potential acceptors to undergo sterilisation.

Government stated (November 2023) that steps have been taken to create awareness for undergoing sterilisation through IEC activities.

### 7.1.6 Status of Outreach Sessions held in test-checked districts

The Operational guidelines for Conducting Outreach Sessions in Urban Areas (2015) issued by Ministry of Health and Family Welfare requires special outreach services to be organised for identified slum and vulnerable population pockets periodically as per the specific local healthcare. The status of outreach services provided under National Urban Health Mission in UT of Puducherry during the years 2016-17 to 2021-22 are indicated in **Table 7.7**.

**Table 7.7: Status of outreach sessions conducted during 2016-22**

| Year | Target | Achievement | Shortfall | Shortfall (in *per cent*) |
|---|---|---|---|---|
| 2016-17 | 6 | 4 | 2 | 33 |
| 2017-18 | 3 | 1 | 2 | 67 |
| 2018-19 | 3 | 0 | 3 | 100 |
| 2019-20 | 4 | 0 | 4 | 100 |
| 2020-21 | 4 | 1 | 3 | 75 |
| 2021-22 | 4 | 0 | 4 | 100 |
| **Total** | **24** | **6** | **18** | |

(Source: Information furnished by PSHM)

It is seen from **Table 7.7** that the shortfall in conduct of outreach sessions which was 33 *per cent* in 2016-17 had increased to 100 *per cent* during 2021-22. Audit observed that inadequate conduct of outreach sessions has the impact of denying adequate healthcare service to the urban poor.

## 7.2 Pradhan Mantri Jan Arogya Yojana (PMJAY)

GoI launched (September 2018) Pradhan Mantri Jan Arogya Yojana (PMJAY) which is a health assurance scheme, with the primary objective to reduce out of pocket hospitalisation expenses, fulfil unmet needs and improve access of identified families to quality in-patient care and day care surgeries. It provides an insurance cover of rupees 5 lakh per family per year to the poor and vulnerable entitled families for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India. PMJAY provides cashless access to healthcare services by the hospital for the beneficiaries. The scheme is funded by GoI and States/UT in the ratio of 60:40. The deficiencies noticed in the implementation of PMJAY are discussed in the succeeding paragraphs.

### 7.2.1 Beneficiary Identification - Issue of e-cards to beneficiaries

The Socio Economic Caste Census, 2011, had projected the population falling under the categories in Below Poverty Line (BPL) and Antyodaya Anna Yojana (AAY). These beneficiaries are eligible for benefits under various schemes including PMJAY. As of November 2022, out of 6,30,500 eligible beneficiaries, only 3,98,941 (63 *per cent*) were registered. The details of region-wise availability of eligible beneficiaries and number of registered beneficiaries under the scheme are given in **Table 7.8**.

**Table 7.8: Details of region-wise number of eligible and registered beneficiaries**

| Name of the Region | No. of eligible beneficiaries | | No. of beneficiaries covered | |
|---|---|---|---|---|
| | Households | Individuals | Households | Individuals |
| Puducherry | 1,35,384 | 4,91,817 | 1,20,083 | 2,82,639 |
| Karaikal | 30,619 | 99,239 | 33,793 | 81,133 |
| Mahe | 188 | 658 | 1,266 | 4,993 |
| Yanam | 11,542 | 38,786 | 11,782 | 30,176 |
| **Total** | **1,77,733** | **6,30,500** | **1,66,924 (94 *per cent*)** | **3,98,941 (63 *per cent*)** |

(Source: Details furnished by the State Health Agency)

Audit noticed that though the total beneficiaries covered were less than the eligible beneficiaries, the households registered in Karaikal, Mahe and Yanam were more than the target, which was attributable to the inclusion of yellow card holders which as per the Socio Economic Caste Census, 2011 were also considered as beneficiaries of Government schemes like BPL and AAY card holders.

### 7.2.2 Utilisation of claim amounts by Public/Government Hospitals

The public hospitals empanelled under PMJAY will be reimbursed by the State Health Authority (SHA) for the services rendered by them to the beneficiaries as per package rates fixed under PMJAY. As per NHA guidelines, the claim amount earned by public hospitals under PMJAY shall be mainly utilised for improvement of the infrastructure and services in the hospital besides using for (i) remuneration to Ayushman Mitra and (ii) Local purchase of consumables, medicines, etc.

There were 12 Public/Government Hospitals empanelled under PMJAY. The details of amount received by the following public hospitals and the utilisation of the same for infrastructure creation during the period from 2019-20 to 2021-22 (upto November 2022) are given in **Table 7.9**.

**Table 7.9: Details of amount received from SHA and utilisation during 2019-22**

**(₹ in lakh)**

| Sl. No. | Name of the hospital | Amount received by hospitals from SHA | Amount utilised | Percentage of utilisation |
|---|---|---|---|---|
| 1 | Indira Gandhi Government Hospital and Post Graduate Institute, Puducherry | 183.38 | 46.34 | 25.27 |
| 2 | Rajiv Gandhi Government Women and Children Hospital, Puducherry | 62.41 | 25.19 | 40.36 |
| 3 | Government General Hospital, Karaikal | 62.38 | 3.67 | 5.88 |
| **Total** | | **308.17** | **75.20** | |

(Source: Details furnished by the hospitals)

Medical Superintendent, WCH, Puducherry stated (December 2022) that non-issuance of guidelines by SHA based on the NHA guidelines, non-issuance of Government order/instructions by SHA for utilisation of funds, delay in obtaining sanction from Rogi Kalyan Samiti (RKS) for incurring expenditure as per the NHA guidelines were the reasons for under-utilisation of funds. It was further stated that the funds would be expended after obtaining the sanction on the proposals from the competent authority *viz*., Hospital Management Committee for AB-PMJAY and/or RKS Governing Body.

Though the guidelines of NHA provided for formation of State specific guidelines for utilisation of the amount, the same was not done even after a lapse of more than four years from the commencement of the scheme and an amount of ₹ 2.33 crore was kept idle by these hospitals.

Government stated (November 2023) that Hospital Management Committees are advised to send proposals for utilisation of funds for the development of hospitals.

### 7.2.3 Inadequate staff strength in State Health Authority

To strengthen the institutional and human resources for effective implementation of PMJAY, Capacity Building Guidelines was issued by the NHA, Ministry of Health and Family Welfare, GoI. As required under the Guidelines, SHA is responsible for all key functions under the scheme. Accordingly, the Chief Executive Officer (CEO)/Co-ordinator of SHA will look after all the operational aspects of the implementation of the scheme and shall be supported by a core team consisting of 17 personnel under 12 categories as detailed in **Appendix 7.3**.

The SHA was constituted in September 2018. The services of a Medical Officer were placed at the disposal of SHA from November 2019 as State Co-ordinator of SHA. The post of one Finance Manager which was filled up in November 2020 fell vacant in June 2022. Audit noticed that due to non-filling up of vacancy, the SHA was managed by a single Medical Officer without the requisite support team.

Government stated (November 2023) that two posts of Finance Manager were filled up. The reply is silent about the vacancies in respect of other posts.

### 7.2.4 Beneficiary satisfaction and monitoring

During a survey (conducted between July 2021 and January 2022) of 157 beneficiaries in Puducherry and Karaikal districts, who were eligible for availing the benefits under the Scheme, Audit noticed that 113 of them were not aware of the scheme benefits. It was, however, replied by the Director (December 2022) that the beneficiaries were aware of the scheme, but also added that beneficiary satisfaction would be taken more seriously from now onwards.

The "Memorandum of Association, Rules and Regulations and Bye-Laws" which contemplated monitoring of the AB-PMJAY programme by State Health Agency was notified by the UT Government only in June 2023.

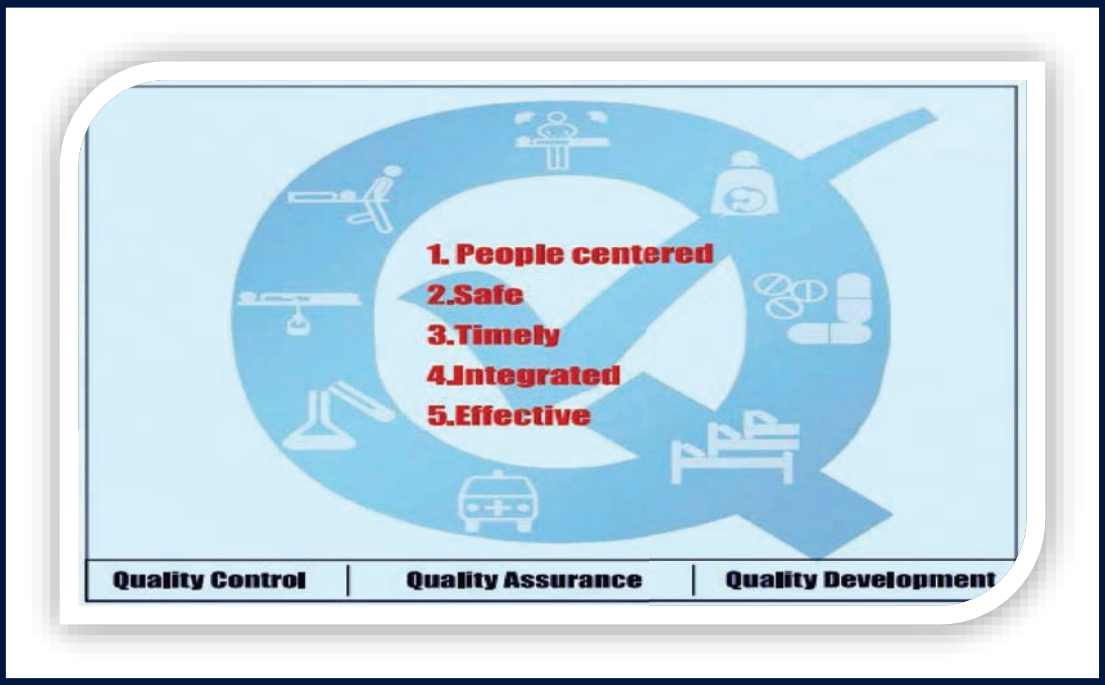
Government stated (November 2023) that Puducherry State Health Agency would be advised to extend the IEC activities to reach all sections of the people.

## 7.3 Conclusion

Due to non-enhancement of the quantum of compensation in tune with directions of the MoHFW, beneficiaries of "Family Planning Indemnity Scheme" were denied higher compensation. Though institutional deliveries were more than 25,000 per annum throughout the six years period ending 2021-22, the coverage of beneficiaries under "Janani Shishu Suraksha Karyakram" was less than 10 *per cent* which indicates that the scheme was not implemented effectively. Inadequate coverage of beneficiaries and the lack of awareness about "Janani Suraksha Yojana" was the reason for the shortfall in implementing the Scheme. There was no sufficient awareness created to increase number of potential acceptors to undergo sterilisation. There was shortfall of 37 *per cent* in coverage of beneficiaries under AB-PMJAY. Out of ₹ 308.17 lakh received from State Health Authority, only ₹ 75.20 lakh were utilised under PMJAY.

## 7.4 Recommendation

- The UT Government should ensure that adequate awareness is created to ensure that scheme benefits reach all the eligible women under 'Janani Suraksha Yojana' and 'Janani Shishu Suraksha Karyakram' so as to reduce their out of pocket expenditure on healthcare.




# CHAPTER 8

# ADEQUACY AND EFFECTIVENESS OF REGULATORY MECHANISMS



# CHAPTER 8: ADEQUACY AND EFFECTIVENESS OF REGULATORY MECHANISMS

**The Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 was not being enforced effectively and there was no monitoring mechanism available in the Department to ensure timely registration and renewal of clinical establishments. None of the hospitals in the UT had applied for accreditation by NABH. Records relating to radiation exposure of patients and staff were not maintained. Bio-medical wastes were handled/disposed off in violation of rules.**

## 8.1 Clinical Establishments (Registration and Regulation) Act

Clinical Establishments (Registration and Regulation) Act (Act) was enacted in August 2010 for the registration and regulation of clinical establishments in the country and for matters connected therewith or incidental thereto. Under this Act, Puducherry Clinical Establishments (CE) (Registration and Regulation) Rules, 2014 was framed, which came into effect from 05 March 2014 and is applicable to all the CEs in the UT of Puducherry. As per the Act, no person shall carry on with a clinical establishment unless it is duly registered under the Act and Rules and a certificate of registration has to be granted by the competent authority[1], which is valid for one year and to be renewed every year.

### 8.1.1 Non-registration of clinical establishments in the UT

The Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 stipulates that the Clinical Establishments (CEs) should apply for renewal of provisional registration thirty days before the expiry of the validity of the certificate of provisional registration.

Audit noticed from the records furnished by Deputy Director (Public Health), Puducherry for the period ended October 2021 that out of 667 active CEs identified (as per the 2018-19 census undertaken by the Department), validity of provisional registration had expired in respect of 487 CEs (73 *per cent*) and were yet to be renewed as detailed in **Table 8.1**.

**Table 8.1: Details of CEs without renewal of registration**

| Year of issue of registration by Registering Authority | 2020 | 2019 | 2018 | 2017 | 2016 | Total |
|---|---|---|---|---|---|---|
| Number of CEs which did not renew the registration | 137 | 160 | 99 | 88 | 3 | 487 |

(Source: Details furnished by District Registering Authority, Puducherry)

[1] District Registering Authority for registration of CEs in the Union Territory of Puducherry.

On this being pointed out, the Deputy Director (Public Health) stated (February 2022) that notice has been issued to 126 CEs. Out of this, 20 CEs applied for renewal and their licences were renewed. Thus, the fact remained that more than 400 CEs were allowed to operate without valid registrations since no monitoring mechanism available in the Department to ensure timely follow-up of registration of the CEs after due verification process.

Audit further noticed that the survey of CEs was done annually till 2018-19, but no survey was done thereafter and hence the details of all the CEs functioning in the UT as of March 2022 was not available with the Department.

Government stated (November 2023) that the Nodal Officer, Clinical Establishments has been instructed for engagement of additional staff for monitoring the verification process.

## 8.2 Blood Bank

### 8.2.1 Accommodation for Blood Bank

Drugs and Cosmetics Rules, 1945 stipulates that the laboratory for blood group serology and laboratory for blood transmissible diseases like Hepatitis, Syphilis, Malaria, HIV-antibodies shall be air-conditioned. Audit noticed during the joint inspection of the Blood Bank at GH, Puducherry that both these laboratories were not air-conditioned in violation of the rules.

Government stated (November 2023) that steps are being taken by the Department of Pathology and Blood Bank to provide air-condition in laboratory.

## 8.3 Accreditation and Certification of hospitals

Indian Public Health Standards, 2012 requires that the District Hospitals should try to get certification/accreditation against prevalent standards like National Accreditation Board for Hospitals and Healthcare Providers (NABH), National Quality Assurance Standards (NQAS)[2] etc. The status of obtaining certification/accreditation of the District Hospitals are as follows:

- NABH is a constituent board of Quality Council of India, an autonomous body, for accreditation of healthcare organisations. The accreditation standard for hospitals focuses on patient safety and quality of delivery of services by the hospitals. But none of the hospitals in UT of Puducherry had applied for accreditation by NABH.

[2] NQAS are primarily meant for health service providers to assess their own quality, for improvement through pre-defined standards and to bring up their facilities for certification.

- Only Rajiv Gandhi Government Women and Children Hospital, Puducherry and Indira Gandhi Government General Hospital and Research Institute had completed internal assessment for NQAS certification, but external assessment is pending.

Government stated (November 2023) that Health Department has initiated action to strengthen the infrastructure facilities of the District Hospitals by procuring essential equipment. After installation of necessary equipment, steps would be taken for obtaining certification/accreditation.

## 8.4 Atomic Energy (Radiation Protection) Rules, 2004

### 8.4.1 Licences/Registration not obtained for Radiation Equipment

As per rule 7(e) of Atomic Energy (Radiation Protection) Rules, 2004, in order to obtain licence for operation of a radiation installation, appropriate dosimetry devices are to be available for radiation surveillance. Thermoluminescent dosimeters (TLD) are used for monitoring radiation doses in health workers.

It was noticed in audit that in none of the hospitals, the pocket dosimeters were available whereas, TLD badges were available only in GH, Puducherry and WCH, Puducherry. In the absence of dosimeters, the radiation level in health workers handling radiation equipment such as CT Scan and high radiation X-ray equipment went unnoticed putting the health of the workers at risk.

Rule 3(2) of Atomic Energy (Radiation Protection) Rules, 2004 provides that no person shall handle any radioactive material or operate any radiation generating equipment except in accordance with the terms and conditions of a licence. A licence shall be obtained from Atomic Energy Regulatory Board (AERB) for the operation of Computed Tomography (CT) Scan unit and medical diagnostic X-Ray equipment. Audit noticed that the four test-checked District Hospitals had not obtained licence in respect of two CT scan units and 12 X-Ray units as given in **Appendix 8.1**.

Thus, radiation safety of patients, occupational workers and members of public could be compromised if the radiation equipment do not undergo periodical tests and are not issued with registration certificate/licence by AERB.

Government stated (November 2023) that it would speed up the necessary process in getting the registration done and obtaining the licenses.

### 8.4.2 Non-maintenance of records of radiation doses administered

Atomic Energy (Radiation Protection) Rules, 2004 requires that the licensee carrying out the diagnostic or therapeutic work using radiation generating equipment shall, for optimising the medical exposure, maintain records of radiation doses received by patients as well as health surveillance records of workers who operate the radiation equipment.

Audit noticed that while GH, Puducherry maintained these records, GH, Karaikal and GH, Mahe did not maintain the same, thereby denying scope to monitor radiation doses administered in excess of regulatory norms and to take appropriate measures of rectification.

Government stated (November 2023) that instructions will be issued to Medical Superintendent, GH, Karaikal and Mahe to maintain the records of radiation doses.

## 8.5 Drug Control Administration

### 8.5.1 Human resource requirement

The Food and Drugs Administration in UT of Puducherry was functioning as one of the units of the Health Department upto February 2011, under the control of Director of Health and Family Welfare Services. Subsequently, this has been separated as three Departments *viz*., Drugs Control (DDC), Food Safety (DFS) and Food & Drugs Testing (DFDT) under the Control of Secretary to Government (Health). In order to effectively perform the statutory functions like enforcement of the Drugs and Cosmetics Act and to attend to complaints like adulterated drugs, non-quality drugs and expired drugs moving in the market, sufficient manpower is required. The status of manpower under the three departments are given in the **Appendix 8.2**.

It could be seen that in the absence of Controlling Authority/Licensing Authority (CA/LA) in the DDC, one Drug Inspector was notified (February 2022) by the GoP to carry out the functions of CA/LA from February 2022. Proposal sent by DDC to GoP as per the directions of Ministry of Health and Family Welfare, New Delhi (June 2017) for creation of nine regulatory posts (technical) in DDC *viz*., Drugs Controller (1), Assistant Drugs Controller (2) and Drugs Inspector (6) is pending approval. Further, to fill up the vacancies in DFS, the GoP notified (December 2013) one bio-chemist from DFDT as the Senior Food Safety Officer/Designated Officer and one Technical Assistant from DFDT as Food Safety Officer for the whole of UT of Puducherry.

However, no effective action has been taken by the Government to fill up the huge vacancies existing in all the three departments of the erstwhile Food and Drugs Administration, in order to effectively perform the functions envisaged.

### 8.5.2 Non-fixation of targets for inspection

The details of number of inspections conducted by the DDC in UT of Puducherry during the period 2016-17 to 2021-22 is given in **Table 8.2**.

**Table 8.2: Details of inspections conducted**

| Year | Number of inspections conducted |
|---|---|
| 2016-17 | 206 |
| 2017-18 | 228 |
| 2018-19 | 244 |
| 2019-20 | 204 |
| 2020-21 | 115 |
| 2021-22 | 167 |

(Source: Details furnished by Department of Drugs Control, Puducherry)

The number of drug licences issued to manufacturers and sellers of drugs and medicines in all the four regions of UT of Puducherry was 1,745. However, no targets were fixed for number of inspections to be conducted by DDC. Head of Office, DDC stated that inspections were conducted based on necessity and incidents. From the table above, it is noticed that less than ten *per cent* of the drug licensees were only inspected during the years 2020-21 and 2021-22. The Government should fix targets for the number of inspections to be conducted in each of the regions of the UT of Puducherry and ensure the quality of drugs supplied to the public.

## 8.6 Bio-Medical Waste

Bio-medical waste is generated during procedures related to diagnosis, treatment and immunisation in the hospitals and its management is an integral part of infection control within the hospital premises. Bio-Medical Waste Management Rules, 2016 (BWM Rules) *inter alia* stipulate the procedures for collection, handling, transportation, disposal and monitoring of the Bio-medical waste with clear roles for waste generators and Common Bio-Medical Waste Treatment Facility (CBMWTF). CBMWTFs are required to function in compliance with the standards notified under BWM Rules and the guidelines issued by Central Pollution Control Board (CPCB).

The availability of authorisation for handling of bio-medical waste, registration certificate under the Clinical Establishments (Registrations and Regulation) Act, availability of Waste Management Committee and availability of system for proper disposal of Bio-medical waste in the test-checked HCFs is given in **Appendix 8.3**. It was noticed that most of the test-checked HCFs did not follow one or more of the prescribed norms for bio-medical waste management.

### 8.6.1 Bio-medical waste management

The Puducherry Pollution Control Committee (PPCC) is the prescribed authority to ensure implementation of BWM Rules. Pondicherry Solid Waste Management Company Pvt Ltd., (PSWMPL) is the only CBMWTF authorised by PPCC to collect, handle, transport and dispose the Bio-medical waste in Puducherry and Karaikal regions. Audit noticed the following violations of the BWM Rules in the succeeding paragraphs.

#### *8.6.1.1 Unsafe storage of untreated Bio-medical waste*

Rule 5(a) of BWM Rules stipulates that it shall be the duty of every CBMWTF to ensure that the Bio-medical waste collected from the occupier[3] is transported, handled, stored, treated and disposed off without any adverse effect to the human health and the environment.

Audit observed that PPCC in their inspection reports had pointed out that the PSWMPL accumulated all type of Bio-medical waste in yellow, red and blue coloured bags, in a haphazard manner throughout their facility with obnoxious odour, in violation of the rules due to non-working of autoclave machine[4]. During joint inspection, Audit confirmed that the CBMWTF continued to violate the BWM Rules, with the bags containing the Bio-medical waste strewn all over the facility in open space and separate covered area was not provided for storage of the untreated waste and they were open to sunlight/rainfall. **Pictures 8.1** and **8.2** depicts the non-functional autoclave machine and untreated Bio-medical waste strewn around the facility.



**Picture 8.1: Autoclave machine in non-working condition**



**Picture 8.2: Untreated Bio-medical waste due to non-working of Autoclave machine**

[3] Rule 3(m) of BWM Rules defines "occupier" as a person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, pathological laboratory, blood bank, health care facility, etc irrespective of their system of medicine.

[4] Used to sterilise bio-medical waste before final disposal.

#### *8.6.1.2 Incineration ash stored in open area*

As per Central Pollution Control Board revised guidelines, incineration ash shall be stored safely in a separate area under the shed to avoid entry of rain water, prior to disposal through an authorised hazardous waste Treatment, Storage and Disposal Facility (TSDF). During joint inspection, Audit noticed that in contravention of the guidelines, heap of incineration ash was dumped in an open area, exposed to rain leading to adverse effect on the environment and was a source of spread of health hazard (**Picture 8.3**). Further, it shows that the hazardous ash was not removed periodically through TSDF.



**Picture 8.3: Incinerator ash stored in open area, without a shed**

### 8.6.2 Bio-medical waste management by Health Care Facilities

#### *8.6.2.1 Non-installation of Effluent Treatment Plant*

Effluent Treatment Plant is used for waste water treatment to release safe water for use. According to Rule 4(k) of the BWM Rules, every occupier, generating Bio-medical waste, should ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974.

Audit noticed that none of the test-checked GHs had established effluent treatment plant (ETPs) except WCH, Puducherry. In GH, Yanam the Bio-medical waste was disposed-off in public sewer.

Thus, in the absence of ETPs, proper treatment of effluents from the hospitals were not ensured, which has serious implications on environment and human health. Further, discharge of Bio-medical waste into the public sewage system is in violation of the provisions of Water Act.

Government stated (November 2023) proposals for installation of ETPs was under process.

#### *8.6.2.2 Non-implementation of Bar Code Management System for Bio-medical waste management*

As per Rule 4(i) of BWM Rules, Bar Code System has to be established for bags or containers containing Bio-medical waste to be sent out of the hospital premises. Audit observed that none of the GHs established Bar Code System, except GH, Yanam.

Government stated (November 2023) that necessary steps have been taken to establish the Bar Code System in the HCFs.

#### *8.6.2.3 Functioning of HCFs without valid authorisation for generation, collection and storage of bio-medical waste*

As per Bio-Medical Waste Management Rules, 2016, every occupier[5] handling bio-medical waste shall apply to the prescribed authority *viz*., State Pollution Control Board and Pollution Control Committee, as the case may be, for grant of authorisation[6]. The prescribed authority for grant of authorisation in UT of Puducherry is Puducherry Pollution Control Committee (PPCC). The rules entrust the Central or State Ministry of Health and Family Welfare with the duties of monitoring, refusal or cancellation of license for health care facilities for violations of conditions of authorisation or provisions under these rules.

It was noticed that out of the 17 test-checked HCFs, the following 13 HCFs had either not obtained or renewed the authorisation granted by PPCC (as of January 2024).

**Table 8.3: Details of HCF not obtained or renewed the authorisation**

| Sl. No. | Name of the HCF | Authorisation valid upto | Whether obtained/renewed the authorisation |
|---|---|---|---|
| 1 | GH, Puducherry | 31.05.2023 | Yet to be renewed |
| 2 | WCH, Puducherry | 31.03.2023 | Yet to be renewed |
| 3 | GH, Karaikal | 03.01.2013 | Yet to be renewed |
| 4 | GH, Mahe | 31.01.2006 | Yet to be renewed |
| 5 | GH, Yanam | 31.12.2022 | Yet to be renewed |
| 6 | RGAMCH, Mahe | - | Yet to obtain authorisation |
| 7 | CHC, Mannadipet | 31.12.2023 | Yet to be renewed |
| 8 | CHC, Palloor | 31.12.2003 | Yet to be renewed |
| 9 | CHC, Thirunallar | - | Yet to obtain authorisation |
| 10 | PHC, Muthialpet | - | Yet to obtain authorisation |
| 11 | PHC, Kovilpathu | 31.07.2016 | Yet to be renewed |
| 12 | PHC, Ambagarathur | 31.07.2016 | Yet to be renewed |
| 13 | PHC, Pandakkal | - | Yet to obtain authorisation |

(Source: Information furnished by PPCC)

From the above table, it is seen that nine HCFs had not renewed the authorisation granted and four HCFs were yet to obtain the authorisation from PPCC. Hence, the Department of Health and Family Welfare Services,

[5] a person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, nursing home, clinic, dispensary, etc.

[6] permission granted by the prescribed authority for the generation, collection, reception, storage, transportation, treatment, processing, disposal or any other form of handling of bio-medical waste in accordance with these rules and guidelines issued by the Central Government or Central Pollution Control Board, as the case may be.

Puducherry had failed to monitor whether all the HCFs applied and obtained the authorisation for generation, collection and storage of bio-medical waste, in accordance with the rules *ibid*.

## 8.7 Conclusion

The Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 was not being enforced effectively and there was no monitoring mechanism available in the Department to ensure timely registration and renewal of clinical establishments. None of the hospitals in the UT had applied for accreditation by NABH. Records relating to radiation exposure of patients and staff were not maintained. Bio-medical wastes were handled/disposed off in violation of rules.

## 8.8 Recommendations

- The UT Government should ensure that all clinical establishments (both public and private) in the UT are registered under the Puducherry Clinical Establishments (Registration and Regulation) Rules, 2014 and the DHFWS deploy adequate manpower to effectively enforce the Rules.
- The UT Government should ensure that NABH accreditation/NQAS certification is obtained to improve the credibility of hospitals.
- The UT Government should ensure enforcement of Bio-Medical Waste Management Rules, 2016 for avoiding its serious implication on environment and human health.

UNION TERRITORY OF PUDUCHERRY

SUSTAINABLE DEVELOPMENT GOALS (SDGs)

# CHAPTER 9

# SUSTAINABLE DEVELOPMENT GOAL - 3 (GOOD HEALTH AND WELL BEING)



# CHAPTER 9: SUSTAINABLE DEVELOPMENT GOAL - 3 (GOOD HEALTH AND WELL BEING)

**The UT Government has performed relatively well in achieving the SDG 3 targets. Two out of the 10 targets were achieved by the UT Government. Performance under Tuberculosis, HIV, suicide rate, road accidents and immunisation of children in the age group of 9 to 11 months were matters of concern.**

## 9.1 Sustainable Development Goals (SDG)

The SDGs are a comprehensive list of global goals integrating social, economic and environmental dimensions of development. India is committed to implementing SDGs. At the national level, the Ministry of Statistics and Programme Implementation (MoSPI) developed a National Indicator Framework (NIF) for measuring goal attainment.

In UT of Puducherry, a "State High Level Steering Committee (SHLSC) for Monitoring Framework and implementation of Sustainable Development Goals by 2030" headed by the Chief Secretary to Government was constituted in May 2018 to monitor the attainment of SDGs. Planning and Research Department, UT Government is the nodal agency for monitoring.

The SDG India Index and dashboard indicates the performance of the UT Government with reference to the indicators of SDG-3 which has been detailed in **Table 9.1**.

**Table 9.1: Performance of the UT Government with reference to the indicators of SDG - 3**

| Sl. No. | SDG No. | Indicator | All India | | Puducherry | |
|---|---|---|---|---|---|---|
| | | | Target | Achieve-ment | Target | Achieve-ment |
| 1 | 3.1 | Maternal Mortality Ratio (per 1,00,000 live births) | 70 | 113 | 70 | Null* |
| 2 | 3.2 | Under 5 mortality rate (per 1,000 live births) | 25 | 36 | 25 | Null* |
| 3 | 3.2 | Percentage of children in the age group 9-11 months fully immunised | 100 | 91 | 100 | 54 |
| 4 | 3.3 | Total case notification rate of Tuberculosis per 1,00,000 population | 242 | 177 | 242 | 314 |
| 5 | 3.3 | HIV incidence per 1,000 uninfected population | 0 | 0.05 | 0 | 0.16 |
| 6 | 3.4 | Suicide rate (per 1,00,000 population) | 3.5 | 10.4 | 3.5 | 32.5 |
| 7 | 3.6 | Death rate due to road traffic accidents (per 1,00,000 population) | 5.81 | 11.56 | 5.81 | 9.7 |
| 8 | 3.7 | Percentage of institutional deliveries out of the total deliveries reported | 100 | 94.4 | 100 | 100 |

| Sl. No. | SDG No. | Indicator | All India | | Puducherry | |
|---|---|---|---|---|---|---|
| | | | Target | Achieve-ment | Target | Achieve-ment |
| 9 | 3.8 | Monthly per capita out-of-pocket expenditure on health as a share of Monthly Per Capita Consumption Expenditure (MPCE) | 7.83 | 13 | 7.83 | 7.2 |
| 10 | 3.c | Total physicians, nurses and midwives per 10,000 population | 45 | 37 | 45 | Null* |

* Since data for a few States /UTs is not available for some indicators, while computing the Index, these missing values have not been given any weightage and are denoted by "Null" in the SDG India Index.

(Source: SDG India Index and Dashboard 2020-21)

It could be seen from **Table 9.1** that though the UT Government had achieved the target in respect of two indicators, it is lagging behind in respect of incidence of Tuberculosis, HIV, suicide rate, road accidents and immunisation of children in the age group of 9 to 11 months.

Audit further noticed the following deficiencies in the operationalisation of SDGs.

### 9.1.1 Non-constitution of SDG Cell and working group

The UT of Puducherry is yet to establish a unit for SDGs. In reply to an audit query, the Director, Planning and Research (P&R) Department confirmed (December 2021) that SDG cell was not formed in UT of Puducherry. Director, P&R Department further stated (December 2021) that Puducherry was yet to identify a partner agency for capacity building and other support services for implementation of SDGs. He also stated that working group was yet to be formed to assess the financial requirement, identification of gaps and to assess the timeframe required to achieve the SDGs.

### 9.1.2 Non-conducting of periodical meetings of SHLSC

The SHLSC was constituted to periodically examine the SDGs, National Indicators with reference to the UT of Puducherry for refinements and to include alternate/additional indicators, follow-up and review the progress made in implementing the goals and targets, review the data on indicators received from official statistical system before communicating the same to Ministry of Statistics and Programme Implementation.

The SHLSC must meet atleast once in three months or whenever the necessity arises. However, audit noticed that after the initial meeting (August 2016) with stake holding departments for preparation of State indicators of SDGs, no further meetings were conducted. The Director, P&R Department stated (December 2021) that due to administrative reasons, meetings were not conducted subsequently.

Thus, it was evident from the above that there were not enough efforts on the part of the Government in achieving the SDG targets.

## 9.2 Conclusion

The UT Government is yet to fully achieve the SDG-3 targets. The UT Government had achieved the target in respect of only two indicators and was lagging behind in respect of incidence of Tuberculosis, HIV, suicide rate, road accidents and immunisation of children in the age group of 9 to 11 months.

## 9.3 Recommendations

- The UT Government should ensure that Planning and Research Department forms a SDG Cell to assess the financial requirement, identification of gaps and to assess the timeframe required to achieve the SDG.
- The UT Government should ensure that periodical meetings of the State High Level Steering Committee are conducted to monitor the progress towards achievement of the SDG.



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Principal Accountant General (Audit-II),
Tamil Nadu and Puducherry

Chennai
The 25 October 2024

Countersigned



**(GIRISH CHANDRA MURMU)**
Comptroller and Auditor General of India

New Delhi
The 12 November 2024



# APPENDICES

## Appendix 1.1

## (Reference: Paragraph 1.8; Page 6)

## List of Healthcare Facilities

### (a) List of Primary Healthcare Facilities (PHCs)

| Sl. No. | Name of the facility | Sl. No. | Name of the facility |
|---|---|---|---|
| **PUDUCHERRY REGION** | | **PUDUCHERRY REGION** | |
| 1 | Abhishegapakkam | 25 | Thirubuvanai |
| 2 | Ariankuppam | 26 | Thirukkanur |
| 3 | Ariyur | 27 | Villianur |
| 4 | Bahour | 28 | Dubrayapet |
| 5 | Gorimedu | 29 | Avvai Nagar, Lawspet |
| 6 | Kalapet | **KARAIKAL REGION** | |
| 7 | Karayamputhur | 30 | Kovilpathu |
| 8 | Katterikuppam | 31 | Karaikalmedu |
| 9 | Kirumampakkam | 32 | Kottucherry |
| 10 | Koodapakkam | 33 | Varichikudy |
| 11 | Kosapalayam | 34 | Nedungadu |
| 12 | Lawspet | 35 | Nallathur |
| 13 | Maducarai | 36 | Ambagarathur |
| 14 | Mettupalayam | 37 | Nallambal |
| 15 | Mudaliarpet | 38 | Neravy |
| 16 | Murungapakkam | 39 | Vizhithiyur |
| 17 | Muthialpet | 40 | T.R. Pattinam |
| 18 | Nettapakkam | 41 | Thirunagar |
| 19 | Odiansalai | **MAHE REGION** | |
| 20 | Reddiarpalayam | 42 | Pandakkal |
| 21 | Sedarapet | 43 | Gramathi |
| 22 | Sooramangalam | **YANAM REGION** | |
| 23 | Sorapet | 44 | Giriampetta |
| 24 | Thavalakuppam | | |

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**(b) List of Secondary Healthcare facilities (CHCs)**

| Sl. No. | Region | Name of the facility |
|---|---|---|
| 1 | Puducherry | Karikalampakkam |
| 2 | Puducherry | Mannadipet |
| 3 | Karaikal | Thirunallar |
| 4 | Mahe | Palloor |

**(c) List of Tertiary Healthcare facilities (Hospitals/Medical Colleges)**

| Sl. No. | Name of the facility |
|---|---|
| 1 | Indira Gandhi Government General Hospital and Post Graduate Institute, Puducherry |
| 2 | Indira Gandhi Medical College and Research Institute, Puducherry |
| 3 | Rajiv Gandhi Government Women and Children Hospital, Puducherry |
| 4 | Government Hospital for Chest Diseases, Puducherry |
| 5 | Mahatma Gandhi Leprosy Hospital, Puducherry |
| 6 | Employees State Insurance Hospital, Puducherry |
| 7 | Government General Hospital, Karaikal |
| 8 | Government General Hospital, Mahe |
| 9 | Government General Hospital, Yanam |
| 10 | Rajiv Gandhi Ayurveda Medical College and Hospital, Mahe |

## (d) Details of Facilities available in UT of Puducherry

### Directorate of Indian system of Medicine and Homeopathy, Puducherry

| Region | Sl. No. | Centre | Facilities available (Dispensaries) | | | | |
|---|---|---|---|---|---|---|---|
| Puducherry | 1 | ISMH Puducherry | Siddha | Ayurveda | Homeopathy | Varmam & Thokkanam | |
| | 2 | Life Style Modification Health Centre (Yoga) | | | | | Yoga & Naturopathy |
| | 3 | CHC Manadipet | | Ayurveda | | | |
| | 4 | PHC Mettupalayam | | Ayurveda | | | |
| | 5 | PHC Lawspet | | Ayurveda | Homeopathy | | |
| | 6 | PHC Sedarapet | | Ayurveda | | | |
| | 7 | PHC Murungapakkam | | Ayurveda | | | |
| | 8 | PHC Villianur | Siddha | Ayurveda (HWC) | Homeopathy | | |
| | 9 | PHC Kosapalayam | | | Homeopathy | | |
| | 10 | ISMH, Kosapalayam | | Panchkarma Unit | | | |
| | I 1 | PHC Thirubuvanai | | Ayurveda | | | |
| | 12 | PHC Ariyur | | Ayurveda | | | |
| | 13 | PHC Bahour | | Ayurveda | Homeopathy | | |
| | 14 | PHC Ariyankuppam | | Ayurveda | Homeopathy | | |
| | 15 | CHC Karikalampakkam | Siddha | | Homeopathy | Varmam & Thokkanam unit | |
| | 16 | PHC Nettapakkam | Siddha | | | | |
| | 17 | PHC Madukkarai | Siddha | | | | |
| | 18 | PHC Reddiyarpalayam | Siddha | | | | |
| | 19 | PHC Kalapet | Siddha | Ayurveda | | | |
| | 20 | PHC Muthialpet | Siddha | | Homeopathy | | |
| | 21 | PHC Mudaliarpet | Siddha | | | | |
| | 22 | PHC Kirumampakkam | Siddha | | | | |
| | 23 | PHC Thavalakuppam | Siddha | | | | |
| | 24 | PHC Katterikuppam | Siddha | | | | |
| | 25 | PHC Koodapakkam | Siddha | | | | |
| | 26 | PHC Sorapet | | Ayurveda | | | |

| Region | Sl. No. | Centre | Facilities available (Dispensaries) | | | | |
|---|---|---|---|---|---|---|---|
| | 27 | PHC Abishegapakkam | | Ayurveda | | | |
| | 28 | PHC Karayambuthur | Siddha | | | | |
| | 29 | PHC Odiansalai | Siddha | | | | |
| | 30 | PHC Sooramangalam | Siddha | | | | |
| | 31 | PHC Gorimedu | | | Homeopathy | | |
| | 32 | PHC Thirukkanur | | | Homeopathy | | |
| Karaikal | 33 | ISMH Karaikal | Siddha (HWC) | Ayurveda Panchkarma unit | Homeopathy | | Yoga & Naturopathy |
| | 34 | PHC Neravy | | Ayurveda | | | |
| | 35 | PHC T R Pattinam | | Ayurveda | | | |
| | 36 | CHC Thirunallar | Siddha | | Homeopathy | | |
| | 37 | PHC Nedungadu | Siddha | Ayurveda | | | |
| | 38 | PHC Varichikudi | Siddha | | | | |
| | 39 | PHC Nallathoor | | Ayurveda | | | |
| | 40 | PHC Kottucherry | | Ayurveda | | | |
| | 41 | PHC Nallambal | | Ayurveda | | | |
| | 42 | PHC Ambagarathur | Siddha | | | | |
| | 43 | PHC Koilpathu | Siddha | | | | |
| | 44 | PHC Vizhithiyur | Siddha | | | | |
| | 45 | PHC Karaikalmedu | | | Homeopathy | | |
| Mahe | 46 | ISMH Mahe (PHC Pandakkal) | | Ayurveda (HWC) Panchkarma unit | Homeopathy | | Yoga & Naturopathy |
| | 47 | GH Mahe | | | Homeopathy | | |
| | 48 | CHC Palloor | Siddha | Ayurveda | | | |
| Yanam | 49 | ISMH Yanam | | Ayurveda Panchkarma unit | Homeopathy (HWC) | | Yoga and naturopathy |
| | | **Total** | **24** | **28** | **17** | **2** | **4** |
| | | **Grand Total** | **75** | | | | |

## Appendix 1.2

**(Reference: Paragraph 1.8; Page 6)**

**Hospitals and healthcare facilities selected for audit**

| Sl. No. | Name of the Hospital/Healthcare facility | Region | Healthcare provided |
|---|---|---|---|
| 1 | Indira Gandhi Government General Hospital and Post Graduate Institute | Puducherry | Tertiary |
| 2 | Government General Hospital, Karaikal | Karaikal | Tertiary |
| 3 | Government General Hospital, Mahe | Mahe | Tertiary |
| 4 | Government General Hospital, Yanam | Yanam | Tertiary |
| 5 | Indira Gandhi Medical College and Research Institute | Puducherry | Tertiary |
| 6 | Rajiv Gandhi Ayurveda Medical College and Hospital | Mahe | Tertiary |
| 7 | Rajiv Gandhi Government Women and Children Hospital | Puducherry | Tertiary |
| 8 | Community Health Centre, Mannadipet | Puducherry | Secondary |
| 9 | Community Health Centre, Thirunallar | Karaikal | Secondary |
| 10 | Community Health Centre, Palloor | Mahe | Secondary |
| 11 | Primary Health Centre, Muthialpet | Puducherry | Primary |
| 12 | Primary Health Centre, Katterikuppam | Puducherry | Primary |
| 13 | Primary Health Centre, Villianur | Puducherry | Primary |
| 14 | Primary Health Centre, Karayamputhur | Puducherry | Primary |
| 15 | Primary Health Centre, Ambagarathur | Karaikal | Primary |
| 16 | Primary Health Centre, Kovilpathu | Karaikal | Primary |
| 17 | Primary Health Centre, Pandakkal | Mahe | Primary |

## Appendix 1.3

**(Reference: Paragraph 1.8; Page 6)**

**Statement showing the ISMH units covered during the Performance Audit**

| Sl. No. | Units covered | Facilities Available | Number of dispensaries |
|---|---|---|---|
| 1 | ISMH Main Centre Puducherry | Ayurveda, Siddha, Homeopathy and Varmam and Thokkanam | 4 |
| 2 | ISMH Centre, Katterikuppam | Siddha | 1 |
| 3 | ISMH Centre, Mannadipet | Ayurveda | 1 |
| 4 | ISMH Centre, Karayamputhur | Siddha | 1 |
| 5 | ISMH Centre, Villianur | Ayurveda, Siddha and Homeopathy | 3 |
| 6 | ISMH Centre, Muthialpet | Homeopathy and Siddha | 2 |
| 7 | Lifestyle Modification and Yoga Centre, Puducherry | Yoga and Naturopathy | 1 |
| 8 | ISMH Main Centre, Karaikal | Ayurveda, Siddha, Panchakarma, Homeopathy and Yoga and Naturopathy | 5 |
| 9 | ISMH Centre, Thirunallar | Siddha and Homeopathy | 2 |
| 10 | ISMH Centre, Ambagarathur | Siddha | 1 |
| 11 | ISMH Centre, Kovilpathu | Siddha | 1 |
| 12 | ISMH Unit, Yanam | Ayurveda, Panchakarma, Homeopathy and Yoga and Naturopathy | 4 |
| 13 | ISMH Unit, Pandakkal, Mahe | Ayurveda, Panchakarma and Homeopathy | 3 |
| 14 | GH, Mahe | Homeopathy | 1 |
| 15 | ISMH Centre, Palloor | Ayurveda | 1 |
| **Total dispensaries covered** | | | **31** |

## Appendix 2.1

**(Reference: Paragraph 2.1.4; Page 14)**

**Statement showing the details of sanctioned strength *vis-à-vis* men-in-position in respect of Doctors, Nurses and Paramedics in all PHCs**

| Sl. No. | Name of PHC | Sanctioned | | | | Men-in-Position | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Doctors | Nurses | Paramedics | Others | Doctors | Nurses | Paramedics | Others |
| **PUDUCHERRY REGION** | | | | | | | | | |
| 1 | Abishegapakkam (R) | 1 | 3 | 5 | 1 | 1 | 3 | 3 | 1 |
| 2 | Ariyankuppam (U) | 2 | 5 | 11 | 2 | 2 | 4 | 9 | 1 |
| 3 | Ariyur (R) | 1 | 5 | 13 | 1 | 1 | 5 | 10 | 0 |
| 4 | Avvai Nagar, Lawspet | NA | NA | NA | NA | 1 | 2 | 1 | 3 |
| 5 | Bahour (R) | 2 | 6 | 16 | 1 | 1 | 6 | 11 | 1 |
| 6 | Dubrayapet | NA | NA | NA | NA | 1 | 2 | 1 | 3 |
| 7 | Gorimedu (U) | 1 | 2 | 5 | 1 | 1 | 2 | 5 | 1 |
| 8 | Kalapet (U) | 1 | 5 | 15 | 1 | 1 | 5 | 10 | 0 |
| 9 | Karayamputhur (R) | 2 | 5 | 5 | 2 | 2 | 5 | 5 | 1 |
| 10 | Katterikuppam (R) | 1 | 5 | 13 | 2 | 1 | 5 | 10 | 1 |
| 11 | Kirumampakkam (R) | 1 | 6 | 17 | 1 | 1 | 6 | 14 | 1 |
| 12 | Koodapakkam (R) | 1 | 3 | 7 | 1 | 1 | 3 | 5 | 0 |
| 13 | Kosapalayam (U) | 1 | 4 | 11 | 1 | 1 | 4 | 10 | 1 |
| 14 | Lawspet (U) | 2 | 6 | 13 | 1 | 2 | 4 | 12 | 1 |
| 15 | Maducarai (R) | 2 | 3 | 11 | 1 | 2 | 3 | 8 | 0 |
| 16 | Mettupalayam (U) | 1 | 6 | 16 | 1 | 1 | 6 | 15 | 1 |
| 17 | Mudaliarpet (U) | 1 | 5 | 13 | 1 | 1 | 5 | 11 | 1 |
| 18 | Murungapakkam (U) | 0 | 1 | 4 | 1 | 0 | 1 | 4 | 1 |
| 19 | Muthialpet (U) | 1 | 5 | 10 | 1 | 0 | 4 | 9 | 1 |
| 20 | Nettapakkam (R) | 1 | 6 | 10 | 2 | 1 | 6 | 8 | 2 |
| 21 | Odiansalai (U) | 1 | 3 | 6 | 1 | 1 | 3 | 4 | 1 |
| 23 | Reddiarpalayam (U) | 2 | 5 | 11 | 2 | 2 | 4 | 9 | 1 |
| 22 | Sedarapet (R) | 1 | 2 | 5 | 1 | 1 | 2 | 2 | 0 |
| 24 | Sooramangalam (R) | 1 | 3 | 6 | 1 | 1 | 3 | 5 | 1 |

| Sl. No. | Name of PHC | Sanctioned | | | | Men-in-Position | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Doctors | Nurses | Paramedics | Others | Doctors | Nurses | Paramedics | Others |
| 25 | Sorapet (R) | 1 | 3 | 8 | 1 | 1 | 3 | 5 | 1 |
| 26 | Thavalakuppam (R) | 1 | 6 | 13 | 1 | 1 | 5 | 11 | 0 |
| 27 | Thirubuvanai (R) | 2 | 5 | 12 | 1 | 0 | 5 | 10 | 0 |
| 28 | Tirukkanur (R) | 1 | 3 | 7 | 1 | 1 | 3 | 4 | 1 |
| 29 | Villianur (U) | 5 | 8 | 24 | 4 | 5 | 8 | 23 | 3 |
| | **TOTAL** | **37** | **119** | **287** | **35** | **35** | **117** | **234** | **29** |
| **KARAIKAL REGION** | | | | | | | | | |
| 30 | Ambagarathur | 3 | 5 | 11 | 12 | 2 | 5 | 9 | 8 |
| 31 | Karaikalmedu | 2 | 5 | 8 | 10 | 2 | 5 | 4 | 7 |
| 32 | Kottucherry | 3 | 5 | 8 | 12 | 3 | 5 | 8 | 7 |
| 33 | Kovilpathu | 1 | 1 | 8 | 7 | 1 | 1 | 5 | 7 |
| 34 | Nallambal | 3 | 1 | 12 | 11 | 3 | 1 | 3 | 2 |
| 35 | Nallathur | 3 | 1 | 4 | 4 | 3 | 1 | 3 | 2 |
| 36 | Nedungadu | 8 | 8 | 22 | 14 | 8 | 8 | 18 | 12 |
| 37 | Neravy | 3 | 5 | 25 | 11 | 3 | 5 | 21 | 10 |
| 38 | T.R.Pattinam | 4 | 5 | 17 | 14 | 4 | 5 | 9 | 10 |
| 39 | Thirunagar | NA | NA | NA | NA | 1 | 1 | 1 | 0 |
| 40 | Varichikudy | 7 | 5 | 9 | 13 | 3 | 5 | 6 | 6 |
| 41 | Vizhidiyur | 3 | 5 | 9 | 9 | 3 | 4 | 6 | 7 |
| | **TOTAL** | **40** | **46** | **133** | **117** | **36** | **46** | **93** | **78** |
| **MAHE REGION** | | | | | | | | | |
| 42 | Gramathi | NA | NA | NA | NA | 0 | 1 | 0 | 1 |
| 43 | Pandakkal | 3 | 1 | 4 | 4 | 3 | 1 | 4 | 4 |
| | **TOTAL** | **3** | **1** | **4** | **4** | **3** | **2** | **4** | **5** |
| **YANAM REGION** | | | | | | | | | |
| 44 | Giriampetta | NA | NA | NA | NA | 1 | 2 | 0 | 0 |
| | **TOTAL** | **0** | **0** | **0** | **0** | **1** | **2** | **0** | **0** |
| | **GRAND TOTAL** | **80** | **166** | **424** | **156** | **74** | **167** | **335** | **112** |

NA : Not Available

## Appendix 2.2

**(Reference: Paragraph 2.1.7; Page 16)**

**Details of sanctioned strength and men-in-position (Doctors, Nurses and Paramedics) in test-checked HCFs as of March 2022**

| HCF | Sanctioned strength | Men in Position | Vacancy | Percentage of Vacancy |
|---|---|---|---|---|
| **Primary Health Centres** | | | | |
| Doctors | 17 | 15 | 2 | 12 |
| Nurses | 30 | 29 | 1 | 3 |
| Paramedical | 20 | 17 | 3 | 15 |
| **Community Health Centres** | | | | |
| Doctors | 21 | 15 | 6 | 29 |
| Nurses | 36 | 32 | 4 | 11 |
| Paramedical | 21 | 15 | 6 | 29 |
| **General Hospitals** | | | | |
| Doctors | 326 | 265 | 61 | 19 |
| Nurses | 919 | 823 | 96 | 10 |
| Paramedical | 367 | 234 | 133 | 36 |





| | | |
|---|---|---|
| High (> 25 *per cent*) | Moderate (10 to 25 *per cent*) | Fair (<10 *per cent*) |

## Appendix 3.1

**(Reference: Paragraph 3.2.5; Page 27)**

**Non-availability of seating arrangement, toilet facility, etc., in test-checked hospitals, MCHs, CHCs and PHCs**

| Sl. No. | Name of the service | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | CHC, Mannadipet | PHC, Villianur | PHC, Muthialpet | PHC, Karayambuthur | PHC, Katterikuppam | GH, Karaikal | CHC, Thirunallar | PHC, Kovilpathu | PHC, Ambagarathur | GH, Mahe | RGAMCH, Mahe | CHC, Palloor | PHC, Pandakkal | GH, Yanam |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Display of florescent fire exit sign | NA | NA | A | A | A | A | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2 | Enquiry/ May I Help Desk with staff fluent in local language | A | A | NA | A | A | A | A | NA | NA | NA | NA | A | NA | A | A | NA | NA |
| 3 | Directional signage for Emergency, Departments and Utilities | A | A | A | A | A | A | A | A | NA | NA | A | A | A | A | A | NA | NA |
| 4 | Display of safety, hazard and caution signs at prominent places | A | A | A | A | A | A | A | NA | A | NA | NA | A | NA | A | A | NA | NA |
| 5 | Details of important contacts like higher medical centres, blood banks, and fire department, police and ambulance services were displayed | NA | NA | A | A | A | A | A | NA | A | NA | A | NA | NA | A | NA | NA | NA |
| 6 | Mandatory information (under RTI Act, PNDT Act, etc.) was displayed | A | A | A | A | A | A | A | A | A | NA | A | NA | NA | A | NA | NA | A |
| 7 | Adequate seating facility | A | A | A | A | A | A | A | A | A | NA | A | A | A | A | A | A | A |
| 8 | Patient Calling System (Digitalisation) | A | NA | A | NA | A | A | A | NA | NA | NA | NA | NA | A | A | A | NA | NA |
| 9 | Separate toilets for male and female | A | A | A | A | A | A | A | NA | A | A | A | A | A | A | A | A | A |

## Appendix 3.2

**(Reference: Paragraph 3.4.3; Page 41 and 42)**

**Average number of surgeries per surgeon**

| Name of the Hospital | Year | General | | | ENT | | | Ortho | | | Eye | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries |
| GH, Puducherry | 2016-17 | 15 | 5,266 | 351 | 7 | 742 | 106 | 11 | 5,723 | 520 | 8 | 3,563 | 445 |
| | 2017-18 | 15 | 5,550 | 370 | 6 | 771 | 129 | 10 | 5,729 | 573 | 8 | 4,034 | 504 |
| | 2018-19 | 15 | 5,645 | 376 | 7 | 636 | 91 | 9 | 4,117 | 457 | 8 | 4,262 | 533 |
| | 2019-20 | 15 | 5,296 | 353 | 4 | 663 | 166 | 10 | 2,227 | 223 | 8 | 3,869 | 484 |
| | 2020-21 | 16 | 3,963 | 248 | 5 | 398 | 80 | 11 | 1,010 | 92 | 7 | 1,556 | 222 |
| | 2021-22 | 16 | 4,559 | 285 | 5 | 481 | 96 | 10 | 1,335 | 134 | 7 | 2,926 | 418 |
| GH, Karaikal | 2016-17 | 2 | 472 | 236 | 1 | 746 | 746 | 1 | 314 | 314 | 2 | 2,510 | 1,255 |
| | 2017-18 | 3 | 531 | 177 | 1 | 106 | 106 | 1 | 300 | 300 | 2 | 3,516 | 1,758 |
| | 2018-19 | 2 | 367 | 184 | 2 | 324 | 162 | 1 | 223 | 223 | 2 | 3,609 | 1,805 |
| | 2019-20 | 2 | 388 | 194 | 3 | 297 | 99 | 1 | 206 | 206 | 5 | 4,240 | 848 |
| | 2020-21 | 2 | 104 | 52 | 3 | 48 | 16 | 1 | 26 | 26 | 5 | 1,071 | 214 |
| | 2021-22 | 2 | 247 | 124 | 3 | 124 | 41 | 2 | 9 | 5 | 5 | 57 | 11 |
| GH, Mahe | 2016-17 | 1 | 647 | 647 | 1 | 146 | 146 | 1 | 98 | 98 | 1 | 344 | 344 |
| | 2017-18 | 1 | 626 | 626 | 1 | 137 | 137 | 1 | 89 | 89 | 1 | 327 | 327 |
| | 2018-19 | 1 | 514 | 514 | 1 | 141 | 141 | 1 | 83 | 83 | 1 | 285 | 285 |
| | 2019-20 | 1 | 530 | 530 | 1 | 125 | 125 | 1 | 79 | 79 | 1 | 306 | 306 |

| Name of the Hospital | Year | General | | | ENT | | | Ortho | | | Eye | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries | No. of Surgeons | Total Surgeries | Avg. No. of Surgeries |
| | 2020-21 | 1 | 96 | 96 | 1 | 7 | 7 | 1 | 2 | 2 | 1 | 0 | 0 |
| | 2021-22 | 1 | 436 | 436 | 1 | 44 | 44 | 1 | 0 | 0 | 1 | 146 | 146 |
| GH, Yanam | 2016-17 | 1 | 545 | 545 | 1 | 76 | 76 | 1 | 0 | 0 | 4 | 181 | 45 |
| | 2017-18 | 1 | 591 | 591 | 1 | 85 | 85 | 1 | 0 | 0 | 4 | 181 | 45 |
| | 2018-19 | 2 | 765 | 383 | 1 | 112 | 112 | 1 | 0 | 0 | 4 | 230 | 58 |
| | 2019-20 | 2 | 588 | 294 | 1 | 75 | 75 | 1 | 0 | 0 | 4 | 222 | 56 |
| | 2020-21 | 1 | 354 | 354 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 5 | 5 |
| | 2021-22 | 1 | 461 | 461 | 1 | 12 | 12 | 1 | 0 | 0 | 1 | 6 | 6 |
| IGMCRI | 2016-17 | 10 | 4,571 | 457 | 3 | 223 | 74 | 4 | 3,451 | 862 | 2 | 458 | 229 |
| | 2017-18 | 10 | 4,673 | 467 | 3 | 185 | 61 | 4 | 3,706 | 926 | 2 | 571 | 285 |
| | 2018-19 | 10 | 4,461 | 446 | 3 | 229 | 76 | 4 | 3,755 | 938 | 2 | 524 | 262 |
| | 2019-20 | 10 | 888 | 89 | 3 | 34 | 11 | 4 | 883 | 220 | 3 | 91 | 30 |
| | 2020-21 | 10 | 728 | 73 | 3 | 47 | 15 | 4 | 1,111 | 277 | 3 | 12 | 4 |
| | 2021-22 | 10 | 1,099 | 110 | 3 | 256 | 85 | 4 | 870 | 217 | 3 | 516 | 172 |

(Source: Details furnished by the hospitals and IGMCRI)

## Appendix 3.3

**(Reference: Paragraph 3.4.6; Page 46)**

**Outcome Indicators for Special New Born Care Units (SNCU) in District Hospitals**

| Year | Total admissions in SNCU | Referral to other/ higher institutions | | LAMA | | Absconded | | Neonatal deaths | |
|---|---|---|---|---|---|---|---|---|---|
| | | No. of cases referred | Referral Rate | No. of LAMA cases | LAMA Rate | No. of cases absconded | Abscond-ing Rate | No. of Neonatal deaths | Neonatal death rate |
| **(1) WCH, Puducherry** | | | | | | | | | |
| 2016-17 | 2,034 | 20 | 0.98 | 14 | 0.69 | 0 | 0 | 60 | 2.95 |
| 2017-18 | 2,087 | 20 | 0.96 | 15 | 0.72 | 0 | 0 | 53 | 2.54 |
| 2018-19 | 1,870 | 31 | 1.66 | 12 | 0.64 | 0 | 0 | 58 | 3.10 |
| 2019-20 | 1,313 | 15 | 1.14 | 15 | 1.14 | 0 | 0 | 47 | 3.58 |
| 2020-21 | 814 | 13 | 1.60 | 13 | 1.60 | 0 | 0 | 36 | 4.42 |
| 2021-22 | 1,066 | 26 | 2.44 | 6 | 0.56 | 0 | 0 | 44 | 4.13 |
| **Total** | **9,184** | **125** | **1.36** | **75** | **0.82** | **0** | **0** | **298** | **3.24** |
| **(2) GH, Karaikal** | | | | | | | | | |
| 2016-17 | 591 | 14 | 2.36 | 3 | 0.5 | | | 16 | 6.38 |
| 2017-18 | 596 | 13 | 2.18 | 3 | 0.5 | | | 24 | 10.1 |
| 2018-19 | 477 | 35 | 7.23 | 6 | 1.25 | Nil | Nil | 15 | 7.05 |
| 2019-20 | 392 | 9 | 2.03 | 5 | 1.27 | | | 13 | 6.66 |
| 2020-21 | 331 | 7 | 2.11 | 0 | Nil | | | 13 | 8.51 |
| 2021-22 | 391 | 18 | 4.60 | 6 | 1.53 | | | 8 | 5.27 |
| **Total** | **2,778** | **96** | **3.55** | **23** | **0.83** | | | **89** | **7.41** |
| **(3) GH, Mahe** | | | | | | | | | |
| 2016-17 | Not applicable - Special New born Care Units (SNCU) is not available | | | | | | | | |
| 2017-18 | | | | | | | | | |
| 2018-19 | | | | | | | | | |
| 2019-20 | | | | | | | | | |
| 2020-21 | | | | | | | | | |
| 2021-22 | | | | | | | | | |
| **(4) GH, Yanam** | | | | | | | | | |
| 2016-17 | Not applicable - Special New born Care Units (SNCU) is not available | | | | | | | | |
| 2017-18 | | | | | | | | | |
| 2018-19 | | | | | | | | | |
| 2019-20 | | | | | | | | | |
| 2020-21 | | | | | | | | | |
| 2021-22 | | | | | | | | | |

## Appendix 3.4

## (Reference: Paragraph 3.4.6; Page 46)

## Average ROR/LAMA/AR in test-checked District Hospitals

| Year | Total IPD in Maternity | Average Referral Out Rate | | Average LAMA | | Average Absconding | |
|---|---|---|---|---|---|---|---|
| | | No. of Cases | Referral Rate | No. of Cases | LAMA Rate | No. of Cases | Absconding Rate |
| **(1) WCH, Puducherry** | | | | | | | |
| 2016-17 | 25,248 | * | - | 231 | 0.91 | 172 | 0.68 |
| 2017-18 | 27,582 | * | - | 327 | 1.18 | 250 | 0.91 |
| 2018-19 | 24,943 | * | - | 614 | 2.46 | 148 | 0.59 |
| 2019-20 | 26,104 | 91 | 0.35 | 457 | 1.75 | 194 | 0.74 |
| 2020-21 | 16,223 | 367 | 2.26 | 115 | 0.71 | 19 | 0.12 |
| 2021-22 | 20,443 | 114 | 0.56 | 111 | 0.54 | 38 | 0.18 |
| **Total** | **1,40,543** | **572** | **0.41** | **1,855** | **1.32** | **821** | **0.58** |
| **(2) GH, Karaikal** | | | | | | | |
| 2016-17 | 4,556 | 19 | 0.42 | 109 | 2.39 | 51 | 1.12 |
| 2017-18 | 4,491 | 33 | 0.73 | 119 | 2.65 | 46 | 1.02 |
| 2018-19 | 4,086 | 49 | 1.20 | 124 | 3.03 | 39 | 0.95 |
| 2019-20 | 3,732 | 30 | 0.80 | 113 | 3.03 | 30 | 0.80 |
| 2020-21 | 2,294 | 24 | 1.05 | 72 | 3.14 | 10 | 0.44 |
| 2021-22 | 2,590 | 31 | 1.20 | 75 | 2.90 | 11 | 0.42 |
| **Total** | **21,749** | **186** | **0.86** | **612** | **2.81** | **187** | **0.86** |
| **(3) GH, Mahe** | | | | | | | |
| 2016-17 | 1,143 | 47 | 4.11 | 54 | 4.72 | 0 | - |
| 2017-18 | 1,399 | 58 | 4.14 | 107 | 7.64 | 0 | - |
| 2018-19 | 923 | 42 | 4.55 | 72 | 7.80 | 0 | - |
| 2019-20 | 865 | 29 | 3.35 | 106 | 12.25 | 0 | - |
| 2020-21 | 297 | 19 | 6.39 | 31 | 10.43 | 0 | - |
| 2021-22 | 377 | 18 | 4.77 | 28 | 7.43 | 0 | - |
| **Total** | **5,004** | **213** | **4.26** | **398** | **7.95** | **0** | **-** |

| Year | Total IPD in Maternity | Average Referral Out Rate | | Average LAMA | | Average Absconding | |
|---|---|---|---|---|---|---|---|
| | | No. of Cases | Referral Rate | No. of Cases | LAMA Rate | No. of Cases | Absconding Rate |
| **(4) GH, Yanam** | | | | | | | |
| 2016-17 | 680 | 115 | 16.9 | 2 | 0.29 | 1 | 0.147 |
| 2017-18 | 532 | 66 | 12.4 | 6 | 1.12 | 1 | 0.187 |
| 2018-19 | 428 | 64 | 14.9 | 4 | 0.934 | 2 | 0.467 |
| 2019-20 | 752 | 75 | 9.9 | 4 | 0.53 | 2 | 0.265 |
| 2020-21 | 552 | 41 | 7.4 | 0 | 0 | - | - |
| 2021-22 | 526 | 71 | 13.4 | 1 | 0 | - | - |
| **Total** | **3,470** | **432** | **12.45** | **17** | **0.49** | **6** | **0.17** |

* No Record

## Appendix 3.5

**(Reference: Paragraph 3.5.2; Page 47)**

### (a) Release of funds and expenditure for COVID-19

**(₹ in crore)**

| Details | Year | Opening Balance | Released | | Total | Expenditure incurred | Balance |
|---|---|---|---|---|---|---|---|
| | | | GoI | GoP | | | |
| ECRP-I | 2019-20 | 0 | 0.74 | 0 | 0.74 | 0 | 0.74 |
| | 2020-21 | 0.74 | 23.35 | 0 | 24.09 | 6.10 | 17.99 |
| | 2021-22 | 17.99 | 1.20 | 0 | 19.19 | 17.99 | 1.20 |
| ECRP-II | 2021-22 | 0 | 5.42 | 1.81 | 7.23 | 2.77 | 4.46 |
| **Total** | | | **30.71** | **1.81** | **32.52** | **26.86** | |

ECRP: Emergency COVID-19 Response Plan

### (b) GoP funds for COVID-19

**(₹ in crore)**

| Year | Budget Estimate | RE | Expenditure | Savings |
|---|---|---|---|---|
| 2020-21 | | 35.00 | 10.88 | 24.12 |
| 2021-22 | 30.04 | 28.53 | 15.32 | 13.21 |
| **Total** | | **63.53** | **26.20** | **37.33** |

## Appendix 3.6

**(Reference: Paragraph 3.5.3; Page 48)**

**Availability of Ventilators**

| Sl. No. | Name of Hospital/MCH | Make of the Ventilator | Received from whom | No. of Ventilators received | Date of receipt in the hospital | Delay in installation (in days) |
|---|---|---|---|---|---|---|
| 1 | GH, Puducherry | Macquet Servo | - | 28 | 2009 | No delay |
| | | CV-200 | PM Cares | 26 | June 2021 | No delay |
| | | AGVA | - | 6 | June 2021 | No delay |
| | | Shangrila | - | 2 | June 2021 | No delay |
| | | Skanray Respro | - | 3 | June 2021 | No delay |
| | | Bipap Resmed (NIV) | - | 3 | June 2021 | No delay |
| 2 | WCH, Puducherry | Skanray Respro | CGP | 4 | 16-06-2020 | 9 to 16 |
| 3 | IGMCRI, Puducherry | Skanray CV-200 | CGP | 24 | June 2020 and August 2020 | 2 |
| | | AGVA | CGP | 11 | August 2020 | 3 |
| | | Shangrila (TATA) | CGP | 4 | October 2020 | 2 |
| | | DHL, PB980 | India Medtronic, GoI | 15 | May 2021 | 12 |
| | | Philips | CGP | 22 | June 2021 | 44 |
| | | Skan Respiro + | Trimline medical -CSR | 2 | July 2021 | No delay |
| 4 | GH, Karaikal | Hamilton | Collectorate, Karaikal | 1 | 14-05-2022 | 1 |
| | | Magnet | -do- | 2 | 18-05-2020 | 1 |
| | | CV 200 | -do- | 4 | 08-09-2020 | 4 |
| | | Ovjan-G | -do- | 1 | 01-07-2021 | 1 |
| | | Philips | -do- | 1 | 20-09-2021 | 1 |
| | | Philips | -do- | 1 | 30-09-2022 | 1 |
| | | Mobile | -do- | 1 | 29-03-2023 | 1 |
| | | Trimline | -do- | 3 | 30-04-2020 | 2 |

| Sl. No. | Name of Hospital/MCH | Make of the Ventilator | Received from whom | No. of Ventilators received | Date of receipt in the hospital | Delay in installation (in days) |
|---|---|---|---|---|---|---|
| 5 | GH, Mahe | - | - | 2 | 16-04-2020 | 87 |
| | | Philips | - | 1 | 24-06-2020 | 48 |
| | | Philips | - | 1 | 24-06-2020 | 93 |
| 6 | GH, Yanam | AGVA | Faber Sindoori Management Services | 2 | 21-09-2020 | No delay |
| | | MINDRAY | -do- | 2 | 21-09-2020 | No delay |
| | | SKANRAY | -do- | 7 | 21-09-2020 | No delay |

(Source : Details furnished by respective health institutions)

## Appendix 3.7

**(Reference: Paragraph 3.5.3; Page 48)**

**Availability of Oxygen Concentrators**

| Sl. No. | Particulars | GH, Puducherry | WCH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|---|
| 1 | No. of OCs received in the health institution | 80 | 32 | 372 | 125 | 24 | 35 |
| 2 | No. of OCs actually installed in the institution | 80 | 32 | 272* | 116 | 24 | 35 |
| 3 | Number of OCs which are functioning | 78 | 32 | 272 | 30 + 36** | 24 | 26 |
| 4 | Number of OCs which are not functioning now | 2 | 0 | 0 | 50 | Nil | 9 |
| 5 | No. of OCs which are connected to Mobile application | Nil | Nil | Nil | Nil | Nil | Nil |

* Remaining 100 OCs distributed to other HCFs

** Excess transferred to DD (Immunisation), Karaikal

(Source : Details furnished by respective health institutions)

## Appendix 3.8

**(Reference: Paragraph 3.5.4; Page 48)**

**Availability of COVID-19 drugs, protective equipment, consumables and disposables**

| Sl. No. | Name of the item | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|
| 1 | INJ. CASIRIVIMAB-120 mg/ml & IMDEVIMAB-120 mg/ml | NA | A | NA | NA | NA |
| 2 | INJ. DEXAMETHASONE-4 mg/ml | A | A | A | NA | A |
| 3 | INJ. ENOXAPARIN SODIUM (LMWH)-60 mg/0.6 ml | A | A | A | A | A |
| 4 | INJ. HUMAN NORMAL IMMUNOGLOBULIN-5 gm (IVIG) | A | NA | A | NA | NA |
| 5 | INJ. LIPOSOMAL AMPHOTERICIN B-50 mg | NA | A | NA | NA | NA |
| 6 | INJ. METHYL PREDNISOLONE SODIUM-1 gm | A | NA | A | NA | A |
| 7 | INJ. POSACONAZOLE-300 mg | NA | NA | NA | NA | NA |
| 8 | INJ. REMDESIVIR-100 MG | NA | A | A | NA | A |
| 9 | INJ. TOCILIZUMAB-80 mg/4ml | NA | NA | NA | NA | NA |
| 10 | TAB. HYDROXY CHLOROQUINE-200 mg | A | A | NA | A | A |
| 11 | BODY BAG-ADULT (HDPE) | A | NA | NA | A | A |
| 12 | CENTRIFUGE TUBES - 1.5 ML - POLYPROPYLENE SNAP CAP | A | A | NA | NA | NA |
| 13 | CENTRIFUGE TUBES 50 ml | NA | A | NA | NA | NA |
| 14 | CHLOROFORM | NA | NA | NA | NA | NA |
| 15 | CRYO BOX - POLYLAB PROPPYLENE FREEZING/CRYO BOX | NA | A | NA | NA | NA |
| 16 | NASAL/ORAL SWAB STICKS FOR COVID-19 TESTING | A | A | NA | NA | A |
| 17 | NASAL OXYGEN CANNULA-ADULT | NA | A | NA | A | A |

| Sl. No. | Name of the item | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|
| 18 | NASAL OXYGEN CANNULA-PEDIATRIC | NA | A | A | NA | A |
| 19 | NIV MASK | A | A | A | NA | A |
| 20 | NRBM MASK | A | A | A | NA | A |
| 21 | PARAFILIM-PARAFIN TAPES | A | A | NA | NA | NA |
| 22 | RAPID ANTIGEN TEST KIT | A | A | NA | A | A |
| 23 | REAL TIME PCR TEST KIT | NA | A | NA | NA | NA |
| 24 | SERUM PLAIN VACUTAINER | A | NA | NA | NA | NA |
| 25 | 10 ML TP 1STEP MMX NO ROX KIT | NA | NA | NA | NA | NA |
| 26 | TAQPATH RTPCR COVID-19 KIT | NA | NA | NA | NA | NA |
| 27 | TRUNAT TM COVID-19 KIT | A | A | NA | A | A |
| 28 | VENTURI MASK-ADULT | A | A | A | NA | A |
| 29 | VENTURI MASK-PEDIATRIC | A | NA | A | NA | A |
| 30 | VIRAL RNA EXTRACTION KITS | NA | NA | NA | NA | NA |
| 31 | VIRAL TRANPORT MEDIA | A | NA | NA | A | A |
| 32 | VIRGIN POLYPROPYLENE SCREW CAP CENTRIGUGE TUBES | NA | NA | NA | NA | NA |
| 33 | N95 MASK | A | A | A | A | A |
| 34 | COVER ALL | A | NA | NA | NA | NA |
| 35 | GOGGLE | A | NA | A | A | NA |
| 36 | NITIRILE GLOVES 6.5 | A | NA | NA | NA | A |
| 37 | NITIRILE GLOVES 7 | A | NA | NA | NA | A |
| 38 | SHOE COVER | A | NA | NA | NA | A |
| 39 | TRIPLE LAYER MASK | A | A | A | A | A |
| 40 | DISP CAP | A | A | A | A | A |

| Sl. No. | Name of the item | GH, Puducherry | IGMCRI, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
|---|---|---|---|---|---|---|
| 41 | STERILE KIT (BED SHEET & PILLOW COVER) | NA | NA | NA | NA | A |
| 42 | UNSTERILE KIT (BED SHEET & PILLOW COVER) | NA | NA | A | NA | NA |
| 43 | SAFETY KIT | NA | NA | NA | NA | A |
| 44 | PPE KITS | A | NA | A | A | A |
| 45 | EXAMINATION GLOVES | A | A | NA | A | A |
| 46 | LATEX GLOVES MEDIUM | A | NA | NA | A | NA |
| 47 | LATEX GLOVES LARGE | A | NA | NA | A | NA |
| 48 | NITRILE GLOVES | A | NA | NA | NA | NA |
| 49 | FACE SHIELD | A | A | A | A | A |
| 50 | SODIUM HYPOCLORIDE | A | A | A | NA | A |
| 51 | SANITIZER 2 ML | NA | NA | NA | A | NA |
| 52 | SANITIZER 10 ML | NA | NA | A | A | NA |
| 53 | SANITIZER 500 ML | A | NA | A | A | A |
| 54 | SANITIZER 5 LIT | NA | NA | NA | NA | NA |
| 55 | SANITIZER 100 ML | NA | NA | NA | A | NA |
| 56 | SANITIZER 200 ML | A | A | A | NA | A |

## Appendix 3.9

## (Reference: Paragraph 3.5.5; Page 49)

## Oxygen services in test-checked hospitals

| Name of service | Name of the Hospital | | | |
|---|---|---|---|---|
| | GH, Puducherry | GH, Karaikal | GH, Mahe | GH, Yanam |
| Whether the requirement of oxygen in the hospital was assessed and infrastructure created accordingly? | A | A | A | NA |
| Whether the standard operating procedure for oxygen was available and was being followed? | A | A | A | NA |
| Whether agreements were executed for the supply of uninterrupted oxygen? | A | A | A | A |
| Whether Centralised oxygen supply system was installed in the hospital? | A | A | A | A |
| If the Centralised oxygen supply system was not installed whether adequacy of required oxygen cylinders was assessed? | -- | -- | -- | -- |
| In all such cases, whether required buffer stock was assessed and maintained all the time? | A | -- | A | -- |
| Whether records of serviceability and availability of oxygen cylinders were maintained as per guidelines? | A | A | A | A |
| Whether required number of Oxygen Supply (Central) are available in Eclampsia Room? | NA* | NA | NA* | NA* |
| Whether oxygen reservoir is available for each bed at Special New-born Care Unit? | NA* | A | NA* | NA* |
| Whether the health institution have Double Outlet Oxygen Concentrator at Special New-born Care Unit? | NA* | NA | NA* | NA* |

* Eclampsia room and SNCU not available

## Appendix 3.10

**(Reference: Paragraph 3.8.1; Page 59)**

**Availability of Ambulance services in test-checked Health Institutions**

| Region | Name of the health institution | Number of ambulances available in 'on road' condition | | | | | Availability of ambulance services 24x7 | Availability of demarcated parking space |
|---|---|---|---|---|---|---|---|---|
| | | BLS | ALS | 108 | Hearse | Patient transport | | |
| Puducherry | GH, Puducherry | 2 | 2 | 0 | 2 | 4 | A | A |
| | WCH, Puducherry | 1 | 1 | 1 | 0 | 4 | A | A |
| | IGMCRI | 1 | 1 | 0 | 1 | 3 | A | A |
| | CHC, Mannadipet | 1 | 0 | 0 | 0 | 1 | A | A |
| | PHC, Villianur | 1 | 0 | 0 | 0 | 1 | A | A |
| | PHC, Muthialpet | 1 | 0 | 0 | 0 | 1 | A | A |
| | PHC, Karyambuthur | 0 | 0 | 0 | 0 | 1 | NA | A |
| | PHC, Katterikuppam | 0 | 0 | 1 | 0 | 1 | NA | A |
| Karaikal | GH, Karaikal | 1 | 2 | 0 | 1 | 2 | A | A |
| | CHC, Thirunallar | 0 | 0 | 0 | 0 | 1 | A | A |
| | PHC, Kovilpathu | 0 | 0 | 1 | 0 | 0 | NA | A |
| | PHC, Ambagarathur | 0 | 0 | 0 | 0 | 1 | A | NA |
| Mahe | GH, Mahe | 1 | 0 | 0 | 0 | 3 | A | A |
| | CHC, Palloor | 0 | 0 | 0 | 0 | 1 | A | A |
| | PHC, Pandakkal | 0 | 0 | 0 | 0 | 0 | - | - |
| Yanam | GH, Yanam | 3 | 1 | 1 | 0 | 0 | A | A |

(Source : Details furnished by the respective health institutions)

## Appendix 4.1

**(Reference: Paragraph 4.1.2; Page 72)**

**Details of drugs and medicines in the test-checked HCFs**

| Region | Name of the HCF | Number of Essential Drugs not available as per EDL* | Shortfall in Percentage of Essential drugs |
|---|---|---|---|
| **Government Hospitals** | | | |
| Puducherry | Puducherry | 20 | 13 |
| Karaikal | Karaikal | 27 | 18 |
| Mahe | Mahe | 52 | 35 |
| Yanam | Yanam | 33 | 22 |
| **Community Health Centres** | | | |
| Puducherry | Mannadipet | 40 | 27 |
| Karaikal | Tirunallar | 43 | 29 |
| Mahe | Palloor | 56 | 38 |
| **Primary Health Centres** | | | |
| Puducherry | Katterikuppam | 47 | 32 |
| Puducherry | Villianur | 44 | 30 |
| Puducherry | Muthialpet | 49 | 33 |
| Puducherry | Karayambuthur | 59 | 40 |
| Karaikal | Kovilpathu | 67 | 45 |
| Karaikal | Ambagarathur | 65 | 44 |
| Mahe | Pandakkal | 80 | 54 |

* EDL: Essential Drug List which contains 149 items of drugs prescribed by the Expert Committee

## Appendix 4.2

**(Reference: Paragraph 4.1.4; Page 73)**

**Non-availability of essential drugs in Operation Theatres**

| Sl. No. | Name of the drug | Number of days not available, out of 42 days (6 weeks x 7 days) test-checked days in the District Hospitals | | |
|---|---|---|---|---|
| | | GH, Karaikal | GH, Mahe | GH, Yanam |
| 1 | Inj. Oxytocin | Available | 7 (17) | Available |
| 2 | Inj. Ampicillin | 42 (100) | 42 (100) | 42 (100) |
| 3 | Inj. Metronidazole (Flagyl) | 42 (100) | 42 (100) | 42(100) |
| 4 | Inj. Gentamycin | 42 (100) | 42 (100) | Available |
| 5 | Inj. Diclofenac Sodium (Voveran) | Available | 42 (100) | Available |
| 6 | Ringer Lactate | Available | Available | Available |
| 7 | Plasma expander (Hydroxyethyl Starch) | 42 (100) | 42 (100) | 42 (100) |
| 8 | I.V. Fluids | 42 (100) | 42 (100) | 42 (100) |
| 9 | Inj. Magsulf | 42 (100) | 42 (100) | 28 (67) |
| 10 | Inj. Calcium gluconate | 42 (100) | 8 (19) | 21(50) |
| 11 | Inj. Diazepam | Available | 42 (100) | 7 (17) |
| 12 | Inj. Pheniramine maleate | Available | Available | 7 (17) |
| 13 | Inj. Carboprost | Available | 21 (50) | Available |
| 14 | Inj. Fortwin | 7 (17) | 28 (67) | 42 (100) |
| 15 | Inj. Phenergan | 14 (33) | 7 (17) | 14 (33) |
| 16 | Inj. Hydralazine (Kenacort) | 42 (100) | 42 (100) | 42 (100) |
| 17 | Betamethasone (Betnesol) | 42 (100) | Available | 35 (83) |

| Sl. No. | Name of the drug | Number of days not available, out of 42 days (6 weeks x 7 days) test-checked days in the District Hospitals | | |
|---|---|---|---|---|
| | | GH, Karaikal | GH, Mahe | GH, Yanam |
| 18 | Methyldopa (Methyl Prednisolone) | 42 (100) | 42 (100) | 42 (100) |
| 19 | Normal Saline | Available | Available | Available |
| 20 | Ceftriaxone | 42 (100) | 42 (100) | 42 (100) |
| 21 | Nifedipine | 42 (100) | 42 (100) | 42 (100) |
| 22 | Inj. Dexamethasone | Available | Available | Available |
| 23 | Inj. Hydrocortisone | Available | Available | Available |

Test checked days: 1-7 May 2016, 1-7 July 2017, 1-7 September 2018, 1-7 January 2021, 1-7 March 2022. Two available: Inj. Dexamethasone and Inj. Hydrocortisone

Figures in brackets denote the percentage

## Appendix 4.3

**(Reference: Paragraph 4.2.1(ii); Page 77)**

**Non-availability of essential equipment as per IPHS norms**

| Sl. No. | Name of the Hospital | Number of essential equipment | Number of equipment available | Name of the equipment not available |
|---|---|---|---|---|
| 1. | GH, Puducherry | 19 | 14 | Operation Table Hydraulic Major, Autoclave Vertical single bin, Shadowless lamp ceiling type major, Shadowless lamp stand model, Diathermy Machine. |
| 2. | GH, Karaikal | 19 | 10 | Autoclave HP Vertical (2 bin), Operation Table Hydraulic Minor, Autoclave vertical single bin, Shadow less lamp ceiling type minor, Suction Apparatus-Foot operated, Dehumidifier, Ethylene Oxide sterilizer, Microwave sterilizer, Intense Pulse Light Machine. |
| 3. | GH, Mahe | 21 | 9 | Autoclave HP Vertical (2 bin), Operation Table Hydraulic Minor, Autoclave vertical single bin, Focus lamp ordinary, Sterilizer (Big instruments), Sterilizer (Small instruments), Bowl Sterilizer Big, Bowl Sterilizer Medium, Suction Apparatus-Foot operated, Dehumidifier, Ultra violet lamp Philips model 4 feet, Microwave sterilizer. |
| 4. | GH, Yanam | 21 | 8 | Autoclave HP Vertical (2 bin), Operation Table Hydraulic Minor, Operating Table non-hydraulic field type, Autoclave vertical single bin, Shadow less lamp stand model, Focus lamp ordinary, Sterilizer (Big instruments), Sterilizer (Small instruments), Bowl Sterilizer Big, Suction Apparatus-Foot operated, Dehumidifier, Ultra violet lamp Philips model 4 feet, Microwave sterilizer. |

## Appendix 5.1

**(Reference: Paragraph 5.2.3; Page 90)**

**Hospitals functioning in dilapidated buildings**

| Sl. No. | Region | Name of CHC/ PHC | Deficiency noticed |
|---|---|---|---|
| 1 | Puducherry | PHC, Villianur | Cracks on the ceiling and wall of the OPD Consultation room and Medical stores. Seepage of water on the wall and plaster peeling off the ceiling in the Laboratory. |
| 2 | Puducherry | PHC, Muthialpet | Walls of Laboratory and Dressing room damaged by seepage of rain water. |
| 3 | Puducherry | PHC, Katterikuppam | (1) Siddha dispensary functioning in old building with damaged roof. PWD authorities informed (October 2019) that the building was unfit for occupation and instructed to vacate the building.<br>(2) Walls of Labour room and Medical Officer's room damaged by seepage of rainwater. |
| 4 | Puducherry | PHC, Karayambuthur | Walls and ceiling of the Laboratory, Dressing room and Pharmacy Stores damaged by seepage of rainwater. |
| 5 | Puducherry | CHC, Mannadipet | Ceiling and walls of the hospital in the first and second floor have developed cracks and damaged by leakage of rainwater. |
| 6 | Karaikal | ISMH Main Unit | Siddha, Homeopathy, Ayurveda and Yoga & Naturopathy dispensaries functioning in an old building which has developed cracks on the roof and declared unfit for occupation by the Municipal Commissioner (November 2021). |
| 7 | Karaikal | CHC, Thirunallar | Ceiling and walls of wards, Laboratory, Kitchen and OPD were damaged, leading to leakage and seepage of water during rains. |
| 8 | Karaikal | PHC, Ambagarathur | Walls and Ceiling of Medical Officer's room, Female ward and Labour Room in damaged condition due to seepage of rainwater. Cracks had developed in the ceiling of the Corridor. |
| 9 | Mahe | CHC, Palloor | Roof made up of wooden beams and Mangalore-type tiles were rotted and damaged due to age, water logging, termites etc., posing danger to the in-patients. |

## Appendix 5.2

**(Reference: Paragraph 5.2.4; Page 90)**

**Insufficient space in the hospitals**

| Sl. No. | Region | Name of CHC/PHC | Deficiency noticed |
|---|---|---|---|
| 1 | Puducherry | Katterikuppam, Muthialpet and Villianur PHCs | Separate Office Room was not provided as required under IPHS norms. |
| 2 | Puducherry | Villianur | (1) Patients suffering from Asthma were administered nebuliser in the corridor of the PHC due to inadequate space.<br>(2) One bed each for male and female emergency patients were located in the corridor of PHC due to inadequate space.<br>(3) Separate room was not provided for storing Bio-medical waste, as stipulated in the IPHS norms. |
| 3 | Puducherry | Muthialpet PHC | (1) Dirty utility room for storage of dirty linen and used items as required under IPHS was not provided. The dirty linen were stored in the inpatient ward till they were sent to laundry.<br>(2) There was no moving space between the two beds in the male inpatient ward. Further, Filaria workers also shared the space inside the male inpatient ward. |
| 4 | Puducherry and Mahe | Katterikuppam, Karayamputhur, Villianur and Pandakkal PHCs | Separate wards were not earmarked for male and female patients as required under IPHS norms. Only common wards were available. |
| 5 | Puducherry, Karaikal and Mahe | Katterikuppam, Mannadipet, Karayamputhur, Muthialpet, Tirunallar, Kovilpattu, Mahe GH and Palloor dispensaries | It was noticed that in these eight out of the 31 selected dispensaries, Doctor's consultation and Pharmacy-cum-store were functioning in the same room. In ISMH Unit at Muthialpet PHC, both the Homeopathy and Siddha dispensaries were functioning in one room. |
| 6 | Puducherry and Karaikal | ISMH Main Units | No separate room was provided for female patients for Varmam & Thokkanam and Panchakarma treatment respectively. |
| 7 | Karaikal and Yanam | ISMH Main Units | In the Yoga and Naturopathy dispensary, Yoga classes were conducted in the veranda and no separate hall was provided. |

## Appendix 5.3

**(Reference: Paragraph 5.2.5.1; Page 91)**

**Availability of residential accommodation in test-checked health institutions**

| Name of Region | Name of the HCF | No. of quarters available | No. of quarters occupied | Status |
|---|---|---|---|---|
| Puducherry | GH, Puducherry | Nil | Nil | - |
| | WCH, Puducherry | Nil | Nil | - |
| | IGMCRI, Puducherry | Nil | Nil | - |
| | CHC, Mannadipet | 19 | 0 | All quarters are unoccupied |
| | PHC, Muthialpet | Nil | Nil | - |
| | PHC, Katterikuppam | 13 | 1 | 12 Nos. damaged and not fit for occupation |
| | PHC, Villianur | Nil | Nil | - |
| | PHC, Karayamputhur | 6 | Nil | Not fit for occupation |
| Karaikal | GH, Karaikal | 1 | 0 | Vacant |
| | CHC, Thirunallar | 18 | 3 | 3 quarters are occupied; 12 are under renovation; 3 are vacant and in good condition |
| | PHC, Ambagarathur | 1 | 0 | Damaged building not fit for occupation |
| | PHC, Kovilpathu | 0 | 0 | - |
| Mahe | GH, Mahe | 12 | 10 | Pharmacy stores is accommodated in two quarters |
| | Rajiv Gandhi Ayurveda Medical College and Hospital, Mahe | Nil | Nil | - |
| | CHC, Palloor | 13 | 5 | No applicants for vacant quarters |
| | PHC, Pandakkal | Nil | Nil | - |
| Yanam | GH, Yanam | Nil | Nil | - |

## Appendix 5.4

## (Reference: Paragraph 5.4.1; Page 94)

## Non-installation of modern fire-fighting equipment

| Region | Name of Hospital | Status of installation |
|---|---|---|
| Puducherry | GH, Puducherry | Proposal for implementation of the recommendations of the FSD to install modern firefighting equipment to Chief Secretariat, Puducherry (February 2020) for obtaining administrative approval and allocation of funds of ₹ 3.63 crore. As seen from the records of the hospital, the proposal is pending sanction. |
| | WCH, Puducherry | Fire Hydrant System and Sprinkler system were not commissioned and Smoke detectors were not in working condition. |
| Karaikal | GH, Karaikal | Medical Superintendent requested (December 2020 and January 2021) the Executive Engineer (B&R), Public Works Department, Karaikal to make necessary arrangements to send an estimation report and install the fire-fighting equipment as recommended (August 2020) by the Station Officer, Fire Prevention Wing, Puducherry. However, as seen from the records of GH, Karaikal, fire-fighting equipment were yet to be installed. |
| Mahe | GH, Mahe | Deputy Director, GH, Mahe stated (April 2022) that the hospital had written to Executive Engineer, PWD, Mahe requesting to install the equipment as recommended by FSD, Puducherry. |
| Yanam | GH, Yanam | Fire-fighting equipment were yet to be installed. |

## Appendix 7.1

**(Reference: Paragraph 7.1.4.3; Page 112)**

**Status of availability of MHP drugs in test-checked HCFs**

| Sl. No. | Name of the Hospital | Number of drugs not available | Shortfall (in *per cent*) |
|---|---|---|---|
| 1 | GH, Puducherry | 3 | 15 |
| 2 | GH, Karaikal | 5 | 25 |
| 3 | GH, Mahe | 18 | 90 |
| 4 | GH, Yanam | 13 | 65 |
| 5 | CHC, Mannadipet, Puducherry | 3 | 21 |
| 6 | CHC, Thirunallar, Karaikal | 13 | 93 |
| 7 | CHC, Palloor, Mahe | 13 | 93 |
| 8 | PHC, Villianur, Puducherry | 11 | 79 |
| 9 | PHC, Muthialpet, Puducherry | 13 | 93 |
| 10 | PHC, Katterikuppam, Puducherry | 12 | 86 |
| 11 | PHC, Karayamputhur, Puducherry | 11 | 79 |
| 12 | PHC, Kovilpathu, Karaikal | 13 | 93 |
| 13 | PHC, Ambagarathur, Karaikal | 13 | 93 |
| 14 | PHC, Pandakkal, Mahe | 14 | 100 |

## Appendix 7.2

## (Reference: Paragraph 7.1.5; Page 112)

### (a) Region-wise details of Number of Sterilisation acceptors

| Year | Tubectomy | | | | Vasectomy | | | |
|---|---|---|---|---|---|---|---|---|
| | Puducherry | Karaikal | Mahe | Yanam | Puducherry | Karaikal | Mahe | Yanam |
| 2016-17 | 7,011 | 872 | 241 | 336 | 10 | 0 | 2 | 12 |
| 2017-18 | 7,018 | 918 | 249 | 342 | 9 | 1 | 0 | 5 |
| 2018-19 | 6,536 | 798 | 98 | 55 | 7 | 0 | 0 | 4 |
| 2019-20 | 6,669 | 732 | 74 | 120 | 12 | 0 | 0 | 5 |
| 2020-21 | 3,578 | 474 | 24 | 117 | 1 | 0 | 0 | 1 |
| 2021-22 | 4,308 | 637 | 36 | 127 | 2 | 0 | 0 | 3 |

### (b) Achievement in Sterilization and Spacing methods (2016-22)

| Family Planning services | Achievement (in numbers) |
|---|---|
| Vasectomy | 74 |
| Tubectomy | 41,370 |
| IUCD insertion | 19,412 |
| Condom users | 49,307 |
| Oral pills users | 15,193 |

(Source: Information furnished by Deputy Director (Family Welfare & Maternal Child Health))

**Appendix 7.3**

**(Reference: Paragraph 7.2.3; Page 115)**

**Manpower in State Health Authority**

| Sl. No. | Name of the post | No. of posts | |
|---|---|---|---|
| | | To be filled up | Filled up |
| 1 | Operations Manager | 2 | -- |
| 2 | Monitoring and Evaluation Manager | 2 | -- |
| 3 | Policy Manager | 1 | -- |
| 4 | IT Support cum Data Manager | 2 | -- |
| 5 | Beneficiary Verification Manager | 1 | -- |
| 6 | Grievance Redressal Manager | 1 | -- |
| 7 | Medical Management and Quality Manager | 2 | -- |
| 8 | IEC Manager | 1 | -- |
| 9 | Capacity Development Manager | 1 | -- |
| 10 | Finance Manager | 2 | -- |
| 11 | Accounts Assistant | 1 | -- |
| 12 | Administrative Officer | 1 | -- |

## Appendix 8.1

**(Reference: Paragraph 8.4.1; Page 119)**

**CT Scan units/X-Ray machines without AERB Licence/Registration**

| Sl. No. | Type of Equipment | Manufacturer | Model |
|---|---|---|---|
| **GH, Puducherry** | | | |
| 1 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 2 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 3 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 4 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 5 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 6 | X-Ray Machine (Mobile) | Allengers Medical System Limited | MARS-6 |
| 7 | Dental X-Ray Unit | AMS6010 | Orlax |
| **GH, Karaikal** | | | |
| 8 | X-ray Machine 500 MA | ALLENGERS | 525 |
| 9 | X-ray Mobile 100 MA | ALLENGERS | 60 CBM |
| 10 | CT scan | TOSHIBA | ASTEION |
| **GH, Mahe** | | | |
| 11 | X-Ray Machine 300 MA | GE | E7239FX |
| **GH, Yanam** | | | |
| 12 | CT scan | TOSHIBA | ASTEION |
| 13 | Dental X-Ray Unit | HINDEX | 6010 |
| 14 | X-Ray Above 500 MA (HF) | GE | DX-300 |

## Appendix 8.2

## (Reference: Paragraph 8.5.1; Page 120)

## Status of manpower

| Sl. No. | Post Name | Sanctioned Posts | Working Strength | Vacant Posts | Percentage of vacant posts |
|---|---|---|---|---|---|
| **Department of Drugs Control (DDC)** | | | | | |
| 1 | Drugs Inspector | 4 | 0 | 4 | 100 |
| 2 | Superintendent | 1 | 1 | 0 | 0 |
| 3 | Assistant | 2 | 0 | 2 | 100 |
| 4 | LDC | 1 | 0 | 1 | 100 |
| 5 | MTS (G) | 3 | 3 | 0 | 0 |
| | **TOTAL** | **11** | **4** | **7** | **64** |
| **Department of Food and Drugs Testing (DFDT)** | | | | | |
| 1 | Senior Public Analyst | 2 | 0 | 2 | 100 |
| 2 | Government Analyst | 1 | 0 | 1 | 100 |
| 3 | Bio-Chemist | 1 | 1 | 0 | 0 |
| 4 | Public Analyst | 2 | 0 | 2 | 100 |
| 5 | Bacteriologist | 1 | 0 | 1 | 100 |
| 6 | Manufacturing Chemist | 2 | 1 | 1 | 50 |
| 7 | Junior Scientific Officer | 2 | 1 | 1 | 50 |
| 8 | Senior Scientific Assistant | 1 | 0 | 1 | 100 |
| 9 | Senior Sample Taker | 1 | 0 | 1 | 100 |
| 10 | Technical Assistant | 9 | 6 | 3 | 33 |
| 11 | Senior Lab Technician | 4 | 3 | 1 | 25 |
| 12 | Sample Taker | 1 | 0 | 1 | 100 |
| 13 | Lab Technician Gr.II | 6 | 0 | 6 | 100 |
| 14 | Lab Attendant | 6 | 5 | 1 | 17 |
| 15 | Superintendent | 1 | 1 | 0 | 0 |
| 16 | Assistant | 1 | 1 | 0 | 0 |
| 17 | UDC | 2 | 2 | 0 | 0 |
| 18 | LDC | 1 | 1 | 0 | 0 |
| 19 | Store Keeper Gr.III | 1 | 1 | 0 | 0 |
| 20 | Driver | 1 | 0 | 1 | 100 |
| 21 | Peon | 1 | 1 | 0 | 0 |
| 22 | Watchman | 2 | 2 | 0 | 0 |
| 23 | Sanitary Worker | 3 | 0 | 3 | 100 |
| | **TOTAL** | **52** | **26** | **26** | **50** |

| Department of Food Safety (DFS) | | | | | |
|---|---|---|---|---|---|
| **Sl. No.** | **Post Name** | **Sanctioned Posts** | **Working Strength** | **Vacant Posts** | **Percentage of vacant posts** |
| 1 | Senior Food Safety Officer/ Designated Officer | 4 | 0 | 4 | 100 |
| 2 | Food Safety Officer | 7 | 0 | 7 | 100 |
| | **Total** | **11** | **0** | **11** | **100** |

## Appendix 8.3

**(Reference: Paragraph 8.6; Page 122)**

**Availability of Bio-Medical Waste Management services in test-checked HCFs**

| Sl. No. | Name of the service | No. of Hospitals (5) | Medical College & Hospital (2) | CHCs (3) | PHCs (7) |
|---|---|---|---|---|---|
| 1 | Authorisation for generating bio-medical waste was obtained by the Hospital / Medical College from Puducherry Pollution Control Committee (PPCC) | 0 | 1 | 0 | 3 |
| 2 | Whether Certificate of Registration / Renewal of Registration obtained from District Registering Authority under the Clinical Establishments Act. | 2 | 0 | 1 | 4 |
| 3 | Availability of Waste Management Committee under the Chairmanship of head of hospital | 4 | 1 | 1 | 3 |
| 4 | Whether Waste Management Committee met regularly to review the performance of the hospital as regards waste disposal | 4 | 1 | 1 | 2 |
| 5 | Availability of proper system for disposal of bio-medical liquid waste | 1 | 1 | 1 | 1 |
| 6 | Whether plastics bags which contained bio-medical waste had been labelled as per guidelines *i.e.,* with symbols for biohazard and cytotoxic | 5 | 1 | 1 | 5 |
| 7 | Whether the hospital and health care authorities had ensured that personal protective equipment was provided to waste handlers (Mask, gloves, etc) | 5 | 2 | 3 | 6 |
| 8 | Availability of barcode system for bags or containers containing biomedical waste that were to be sent out of the premises was ensured by the hospital | 2 | 1 | 0 | 1 |

(Source : Details furnished by PPCC, District Registering Authorities under Clinical Establishment Act, Puducherry and Karaikal and HCFs)

## Glossary of abbreviations

| Abbreviations | Full form |
|---|---|
| AAY | Antyodaya Anna Yojana |
| AMC | Annual Maintenance Contract |
| ANMs | Auxiliary Nurse Midwife |
| BCG | Bacillus Calmette-Guerin |
| BOR | Bed Occupancy Rate |
| BPL | Below Poverty Line |
| BTR | Bed Turnover Rate |
| BWM | Bio-Medical Waste Management |
| CBMWTF | Common Bio-Medical Waste Treatment Facility |
| CCIM | Central Council of Indian Medicine |
| CEO | Chief Executive Officer |
| CEs | Clinical Establishments |
| CGP | Chief of Government Pharmacy |
| CHCs | Community Health Centres |
| CPC | Central Purchase Committee |
| CPCB | Central Pollution Control Board |
| CPHC | Comprehensive Primary Health Care |
| CSSD | Central Sterile Services Department |
| CT Scan | Computed Tomography Scan |
| DD | Deputy Director |
| DHFWS | Director of Health and Family Welfare Services |
| DHs | District Hospitals |
| DR | Discharge Rate |
| DTL | Drug Testing Laboratory |
| ECG | Electrocardiogram |
| ECHO | Echocardiogram |

| Abbreviations | Full form |
|---|---|
| ECRP | Emergency COVID-19 Response Plan |
| EDL | Essential Drugs List |
| EDRC | Essential Drugs Review Committee |
| EMRS | Emergency Medical Referral Services |
| ENT | Ear, Nose and Throat |
| ETP | Effluent treatment plant |
| FPIS | Family Planning Indemnity Scheme |
| FSSAI | Food Safety and Standards Authority of India |
| GDP | Gross Domestic Product |
| GHs | General Hospitals |
| GIUF | Government of India Undertaking Firms |
| GoI | Government of India |
| GoP | Government of Puducherry |
| GP | Government Pharmacy |
| GPS | Global Positioning System |
| GSDP | Gross State Domestic Product |
| H&FW | Health & Family Welfare |
| HBsAg | Hepatitis B surface Antigen |
| HCFs | Health Care Facilities |
| HICC | Hospital Infection Control Committee |
| HIV | Human immunodeficiency virus |
| HoD | Head of Department |
| HSG | Hysterosalpingography |
| HWCs | Health and Wellness Centres |
| ICU | Intensive Care Unit |
| IGMCRI | Indira Gandhi Medical College Hospital and Research Institute |

| Abbreviations | Full form |
|---|---|
| IMR | Infant mortality rate |
| IPD | In-patient Department |
| IPHS | Indian Public Health Standards |
| ISMH | Indian Systems of Medicine and Homeopathy |
| JIPMER | Jawaharlal Institute of Postgraduate Medical Education & Research |
| JSSK | Janani Shishu Suraksha Karyakram |
| JSY | Janani Suraksha Yojana |
| LAMA | Leave Against Medical Advice |
| LHVs | Lady Health Visitors |
| LMOTs | Liquid Medical Oxygen Tanks |
| MCHs | Medical College Hospitals |
| MCI | Medical Council of India |
| MCP | Mother and Child Protection |
| MIP | Men-in-position |
| MMR | Maternal Mortality Rate |
| MO | Medical Officers |
| MoSPI | Ministry of Statistics and Programme Implementation |
| MPCE | Monthly Per capita Consumption Expenditure |
| MPLAD | Member of Parliament Local Area Development |
| MRI | Magnetic Resonance Imaging |
| NABH | National Accreditation Board for Hospitals and Healthcare Providers |
| NAM | National Ayush Mission |
| NFHS | National Family Health Survey |
| NHA | National Health Authority |
| NHM | National Health Mission |
| NHP | National Health Policy |

| Abbreviations | Full form |
|---|---|
| NIF | National Indicator Framework |
| NLEM | National List of Essential Medicines |
| NMEP | National Malaria Eradication Programme |
| NNMR | Neo-natal mortality rate |
| NOC | No Objection Certificate |
| NQAS | National Quality Assurance Standards |
| NSQ | Not of Standard Quality |
| OP | Outpatients |
| OPD | Outpatient Department |
| OPV | Oral Polio Vaccine |
| OTs | Operation Theatres |
| P&R Department | Planning and Research Department |
| PHCs | Primary Health Centres |
| PIP | Persons-in-position |
| PMJAY | Pradhan Mantri Jan Arogya Yojana |
| PMRC | Physical Medicine and Rehabilitation Centre |
| PPCC | Puducherry Pollution Control Committee |
| PSHM | Puducherry State Health Mission |
| PSHS | Puducherry State Health Society |
| PSWMPL | Pondicherry Solid Waste Management Company Pvt Ltd |
| RGAMCH | Rajiv Gandhi Ayurveda Medical College Hospital |
| RKS | Rogi Kalyan Samiti |
| RPR | Rapid Plasma Reagin |
| SCs | Sub-Centres |
| SDG | Sustainable Development Goal |
| SHA | State Health Authority |

| Abbreviations | Full form |
|---|---|
| SHLSC | State High Level Steering Committee |
| SMPB | State Medicinal Plant Board |
| SNs | Staff Nurses |
| SS | Sanctioned Strength |
| STIs | Sexually transmitted infections |
| TB | Tuberculosis |
| TSDF | Treatment, Storage and Disposal Facility |
| U5MR | Under-five mortality rate |
| UPSC | Union Public Service Commission |
| UT | Union Territory |
| UTDRF | Union Territory Disaster Response Fund |
| WCH | Women and Children Hospital |
| WHO | World Health Organisation |