

Chapter VII

Implementation of Centrally Sponsored Schemes

Implementation of Janani Suraksha Yojana (JSY), Pradhan Mantri Matru Vandana Yojana (PMMVY) and Birth Waiting Home (BWH) programmes were affected by inadequate and untimely release of funds by the State Government. As a result, intended benefits could not be provided to the needy in time, defeating the objectives of the programme. Though adequate funds were provided by the Government to screen tribal children for identification of Thalassemia and Sickle cell anaemia, State Blood Cell failed to screen children and to provide adequate equipment and components for blood transfusion services. Shortages of manpower and low expenditure made the implementation of National Tuberculosis Elimination Programme (NTEP) deficient in the State and achievement of the NHP goal of eliminating TB by 2025 appears uncertain. Prevalence Rate of Grade 2 Disabilities (G2D) is more than two per cent against the target of one per cent. This indicates that the tracing, tracking, and reporting of the (G2D) disease in the community are not adequate. Regarding Malaria control Programme, Annual Blood Examination Rate (ABER) is not uniform in the State and is less than 10 per cent in two districts of Krishna and Chittoor. About 2201 habitations (five per cent) in the State are still in high-risk zone for Malaria parasite. Due to shortage of manpower, three departments became non-functional at newly constructed Super Speciality Hospital, Anantapur. This had a cascading effect of nonsanctioning of 16 new PG seats in GMC, Anantapur as part of Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) programme.

7.1 National Health Mission

The National Health Mission (NHM) is a flagship programme of the Government of India. The programme aims in attainment of universal access to equitable, affordable, and quality healthcare services, accountable and responsive to people's needs, with effective inter-sectoral convergent action, to address the wider social determinants of health.

The key goals of NHM are enabling and achieving the stated vision, making the system responsive to the needs of citizens, building a broad-based inclusive partnership for realising national health goals, focusing on the survival and wellbeing of women and children, reducing the existing disease burden and ensuring financial protection for households.

While the healthcare infrastructure, management of health services, and Human Resource availability are discussed in the previous chapters, implementation of some programmes under NHM, were discussed in this Chapter.

7.2 Maternal and Child health

7.2.1 Reproductive and Child Health

Reproductive and Child Health (RCH) is an umbrella of programmes under National Health Mission (NHM). RCH targets reduction of maternal and infant mortality and total fertility rates. RCH programme aims to reduce social and geographical disparities in access to and utilisation of quality reproductive, maternal, newborn, child and adolescent health services. Some of the programmes under RCH are discussed below.

7.2.1.1 Janani Suraksha Yojana

Janani Suraksha Yojana (JSY) is a safe motherhood intervention programme under NRHM being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant woman. Each beneficiary registered under this Yojana should have a Janani Suraksha Yojana (JSY) card along with a Mother – Child Protection MCP card. Accredited Social Health Activist (ASHA)/Anganwadi Worker (AWW)/ any other identified link worker under the overall supervision of the Auxiliary Nurse Mid-wife (ANM) and the MO, PHC should mandatorily prepare a micro-birth plan to monitor Antenatal check-up, and the post-delivery care. It is a direct cash benefit scheme 168 to pregnant woman at the time of delivery in Public HCFs. Numbers of institutional deliveries, non-institutional deliveries and JSY beneficiaries who received benefit are indicated in *Table 7.1*.

Table 7.1: Institutional & non-institutional Deliveries and JSY beneficiaries received payments

Year	Institutional Deliveries as per HMIS	Deliveries in Public Institutions	No. of pregnant women received JSY benefits (percentage)	No. of pregnant women who have not received JSY benefits (percentage)
2017-18	7,37,140	3,16,869	2,72,432 (85.98)	44,437 (14.02)
2018-19	7,42,638	3,22,083	2,72,912 (84.73)	49,171 (15.27)
2019-20	7,32,248	3,07,903	2,59,726 (84.35)	48,177 (15.65)
2020-21	7,09,456	2,90,078	2,82,264 (97.31)	7,814 (2.69)
2021-22	7,51,363	2,85,652	1,65,435 (57.91)	1,20,217 (42.09)
Total	36,72,845	15,22,585	12,52,769 (82.28)	2,69,816 (17.72)

Source: Information furnished by CFW for the years 2017-21 and for the year 2021-22 from NHM- DBT mode

It can be seen from *Table 7.1* above that 2,69,816 pregnant women delivered in public HCFs but did not receive the benefit during 2017-18 to 2021-22. Department attributed this to issues such as to bank details uploading and non-tracing of the discharged women. Thus, it is clear that the condition, that the pregnant women should be

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For Rural woman at ₹1000/-, Urban woman at ₹600/- in Andhra Pradesh

registered and tracked during the period of pregnancy, was not adhered to in implementation of JSY.

Government replied (August 2023) that 2,69,816 Pregnant Women who were eligible under JSY were paid subsequently and none of the eligible pregnant women were denied the payment.

JSY is a direct cash benefit scheme to promote institutional delivery among the poor pregnant women. Thus, Government should provide adequate funds and timely disbursement of financial benefits to beneficiaries to increase institutional deliveries.

7.2.1.2 Birth Waiting Homes

Government of India introduced a scheme for Tribal area to construct 'Birth Waiting Homes' (BWHs) to enable women from distant and interior habitations to reach the delivery care institution at least seven days before the expected date of delivery (EDD) to prevent the complications of arrival in late labor. Giving birth at a health facility with skilled care can make the difference between life and death for both mother and child. BWHs help to ensure that both mothers and newborns receive the care they need during the first hours and days after birth.

The following were observed regarding establishment and maintenance of BWHs:

➤ GoI released the following funds under National Health Mission (NHM) towards maintenance of Birth Waiting Homes and provision of diet to the Pregnant Women (PW) and attendants during their stay at BWHs as indicated in *Table 7.2*.

Table 7.2: Statement of funds provided for maintenance of BWHs

(₹ in lakhs)

Year	No. of BWHs approved in RoP	Available	RoP approvals	Funds released to ITDA	Expenditure	Per cent of utilisation
2019-20	31	30	24.80	24.50	8.88	36.24
2020-21	41	32	2,60.71	2,22.03	24.11	10.86
2021-22	41	35	2,83.88	2,19.81	29.80	13.56
	Total		5,69.39	4,66.34	62.79	13.46

(Source: Information furnished by CFW)

Thus, out of ₹4.66 crore released over three years from 2019-20 to 2021-22, only an amount of ₹0.63 crore (13.46 *per cent*) was utilised by Integrated Tribal Development Agencies (ITDAs) towards establishment and functioning of BWHs while an amount of ₹4.03 crore was kept unspent.

➤ Establishment of ten new BWHs¹⁶⁹ was approved¹⁷⁰ by GoI for Andhra Pradesh. The funds were also received from GoI and the same were released to ITDAs. However, only five new BWHs were established in 2020-21 and 2021-22.

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Maredumilli, Araku, Pedabayalu, G.K.Veedhi, Gurthedu, Dumbriguda, Munchingiputtu, Bhadragiri, Parvathipuram and Darakonda

¹⁷⁰ ROP 2020-22

Government replied (August 2023) that construction of nine BWHs was completed and were functional. It was futher stated that BWH at PHC Darakonda, was in finishing stages and would be completed by August 2023. Efforts should be made to put them for utilisation by providing infrastructure, equipment and staff with adequate fund releases.

In the test checked HCFs, 58.25 *per cent* of funds were not released by ITDAs towards Birth Waiting Homes (BWHs) during 2020-21 and 2021-22 as given in *Table 7.3.*

Table 7.3: Allocation and release of funds to the test checked hospitals towards BWHs

(₹ in lakhs)

				(1 000 0000000)					
Name of the Hospital /	No. of deliveries	Funds receivable	Funds	Short fall					
location of the BWH	in the previous	by BWH	received						
location of the B ++ 11	_		received						
	year								
2020-21									
AH Seethampet	709	14.52	2.40	12.12					
DH Parvathipuram	1440	29.47	0	29.47					
DH Paderu	39	1.39	0.81	0.58					
		2021-22							
AH Seethampet	744	16.25	2.34	13.91					
DH Parvathipuram	957	20.72	29.40	(8.68)					
DH Paderu	206	4.95	1.50	3.45					
Total		87.30	36.45	50.85					

Source: Hospital records

No amounts were released to the three-test checked HCFs during 2017-18 to 2019-20 by the respective ITDAs.

State Project Monitoring Unit (SPMU) stated that four ¹⁷¹ BWHs in Srikakulam District were not operational due to dilapidated condition of the buildings and three BWHs in Visakhapatnam District for other reasons such as proximity to Mortuary (Paderu), DH and used as Pregnant women Hostel in Araku valley AH and Chinthapalli CHC.

In AH Seethampeta, BWHs were in dilapidated condition and housed 108 ambulance call centre personnel. This was confirmed during Audit as it was one of the test-checked AHs.



Figure 7.1: BWH at Seethampeta in Dilapidated condition (June 2022)

At AH, Seethampeta, we observed that the Hospital had received a meagre amount of ₹2.40 lakh and ₹2.34 lakh against ₹14.52 lakh and ₹16.25 lakh received by Mission Director, National Health Mission (NHM) during the years 2020-21 and 2021-22 respectively. The Medical Superintendent, Seethampeta AH replied

Pathapatnam, Kothuru CHC, Seethampet AH and Palakonda

that no amounts were received towards payment of wages to Aaya for cleaning. Further, records of BWHs were not maintained during the period from 2020-21 and 2021-22.

- BWH at DH Paderu was established in the year 2011 with four rooms. However, funds were not released to DH Paderu during 2017-18 to 2020-21 for maintenance.
- DH, Parvathipuram replied that an amount of ₹29.47 lakh was received from ITDA Parvathipuram on 10 January 2022. However, the entire amount was remitted back to ITDA on 21 April 2023 stating that free diet and medicines were being provided from JSSK funds¹⁷².

The reply was not acceptable, as the BWH programme was envisaged to provide food, milk and safe drinking water at ₹300/- per pregnant woman (PW) per day for seven days along with the patient's attendant prior to delivery. Further, an amount of ₹5,200/- per month would be paid towards maintenance of BWHs for providing Aaya, who is assisting the PW in the BWHs and for cleaning the toilets, warming of milk, purchase of brooms and detergents, *etc*. This indicates that the objectives of both the programmes BWHs and JSSK were not properly conveyed by the Department to the HCFs.

Further, Performance Reports and Functionality Reports of BWHs should be obtained by the State Nodal Agency (SNA). However, the State Nodal agency did not monitor the same. SHS did not furnish to audit, the details of Utilisation Certificates, financial reports on the diet, wage compensations paid to the Pregnant Women *etc*.

Government accepted (August 2023) the audit observation and added that they had issued instructions to all ITDAs for timely release and utilisation of funds and promised future compliance.

7.2.1.3 Pradhan Mantri Matru Vandana Yojana

Under PMMVY, a cash incentive of ₹5,000/- would be provided directly to the account of Pregnant Women and Lactating Mothers (PW&LM) for first living child of the family (FLCF) who were deprived of the benefit of wage compensation. During the years 2017-18 to 2021-22, out of 18,19,641 PW and LM (FLCF), only 8,61,382 received the full benefit.

Budget releases from GoI (60 per cent) and respective State share (40 per cent) during the years from 2017-18 to 2021-22 are given in *Table 7.4*.

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Under, JSSK only ₹100/- would be provided for diet per day for each delivered woman, for a maximum stay of seven days in case it is a C-section delivery

Table 7.4: Year wise releases by GoI and GoAP towards PMMVY

(₹ in crore)

Year	Total No	GoI		Release of funds GoI & GoAP							Total
	of First	Share	1 st qı	ıarter	2 nd qı	ıarter	3 rd qu	arter	4 th qı	ıarter	GoAP
	Pregnant Women	received	GoI	GoAP	GoI	GoAP	GoI	GoAP	GoI	GoAP	Share received
2017-18	3,19,705	65.21	43.47	28.98	21.74	14.45	-	-	-	-	43.43
2018-19	3,88,523	135.00	33.75	22.50	33.75	22.50	33.75	22.50	33.75	22.50	90.00
2019-20	3,46,932	101.25	33.75	Nil	33.75	Nil	33.75	Nil	Nil	Nil	0.00
2020-21	3,70,693	14.39	14.39	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00
2021-22	3,93,288	14.39	14.39	Nil	Nil	Nil	Nil	Nil	Nil	70.66	70.66

^{*} State share of 40 per cent (₹70.66 crore) was released in lumpsum belatedly in March 2022.

Source: Information furnished by the Commissioner Health and Family Welfare

As per the Rules governing the Grants-in-Aid, the matching State share must be released within 21 days from the date of release of Central share. However, State share was not released since 2019-20 to match Central share.

The Commissioner, Family Welfare accepted the delay (October 2022) and stated that there was no matching State share pending to be released against the Central share release.

In the year 2019-20, GoI released its share of ₹101.25 crore for first three quarters (at ₹33.75 crore per quarter). Since the State share was not released simultaneously the release of Central share was stopped for the fourth quarter and nominal releases were made in the subsequent two years.

The objective of the PMMVY is to give partial compensation to PW and LM who were working and had to experience a wage-loss due to the pregnancy. State had lost the opportunity to compensate the pregnant woman due to non-release of state matching share.

Low birth weight has been defined by WHO as weight at birth of less than 2.5 kgs. Low birth weight is included as a primary outcome indicator in the core set of indicators for the Global Nutrition Monitoring Framework. As per WHO, the proportion of infants with low birth weight is an indicator of a multifaceted public health problem that includes long-term maternal malnutrition, ill-health, and poor health care in pregnancy. Low birth weight is caused by intrauterine growth restriction, prematurity, or both. It is closely associated with fetal and neonatal mortality and morbidity.

Out of 36,73,012 institutional deliveries¹⁷³ recorded in the State during 2017-22, only 36,32,213 new-born babies were weighed. Among the weighed, 1,86,420 new-born babies (5.13 *per cent*) were born with low birth weight *i.e.*, below 2.5 kgs.

An undernourished mother almost inevitably gives birth to a low birth weight baby. To avoid poor nutrition Governments are providing support for nutritious food to the pregnant mothers through PMMVY, JSY, *etc.* However, the delivery mechanism in the State, in implementation of these schemes, was not effective.

Total no. of deliveries recorded - 36,91,605

Government accepted (August 2023) the audit observation and stated that the pending State share amount of ₹70 crore was released at the end of March 2022 and all pending beneficiaries were paid.

Though payments were made, the reply is not acceptable as belated payments would have deprived the pregnant women and lactating mothers of receiving the benefit of wage compensation, when the need for rest and nutrition was most required.

7.2.2 Rashtriya Bal Swasthya Karyakram

Rashtriya Bal Swasthya Karyakram (RBSK), a GoI initiative, is a referral mechanism of government approved surveillance programme committed to improve health outcomes through early identification management of Defects at birth, Diseases in Children, Deficiency conditions and Developmental Delays including Disabilities (known as 4Ds). The programme was intended to recruit and train Mobile Health Teams (MHTs) to screen and identify children specifically suffering from the selected health conditions. Children identified with these defects are required to be referred to the District Early Intervention Centres (DEICs) for treatment.

7.2.2.1 Implementation of RBSK in the State

NHM, sanctioned an amount of ₹13.50 crore for constituting 450 mobile teams under RBSK. However, GoAP did not initiate the activities in the year of approval. Mobile Teams were constituted in June 2018 and engaged till March 2020, though agreement with the firm 174 was made from 07 April 2018 to 06 April 2023.

We observed that 1.08 crore children were screened by MHTs, defects were identified among 1.49 lakh children and only 92,000 children were treated leaving 56,600 children untreated from June 2018 to October 2019.

Government accepted (August 2023) the audit observation of non-operation of MHTs and stated that at present under Family Physician Concept, the PHC Medical Officers were visiting the villages in Dial-104 vehicles and conducting screening once in 15 days in the afternoon at AWCs and Schools, and identifying sick children and referring to District Early Intervention Centre (DEIC).

Further, we observed that data relating to child mortality or data of birth defects among neonates or children under Five years was not maintained either at State level or at district level.

Government accepted (August 2023) the audit observation and stated that at present the children were being screened for 20 birth defect conditions at all delivery points (HCFs) and referred to nearest DEIC for treatment and follow-up after entering the details in MSS (Matru Sisu Samrakhshana) Portal. However, we observed that the MSS portal had been operational since August 2023 for newborn screening only and the portal had not made provision to capture old/ follow-up cases.

M/s Dhanush Infotech Pvt. Ltd., in consortium with Thrill Health and Wellness Pvt. Ltd.

7.2.2.2 Implementation of RBSK in test checked districts

During the year 2019-20, funds amounting to ₹20.45 lakh and ₹16.22 lakh were released to District Health Societies, Anantapur and SPSR Nellore Districts respectively towards arrangement of transportation facility to the children from their concerned PHCs to DEICs. However, we observed that the amounts were not utilised till July 2022.

DEIC, Anantapur stated that children were not visiting the rehabilitation centres due to financial constraints or lack of motivation and some children did not turn up due to frequent sickness.

The Department attributed non-utilisation of funds to proliferation of COVID-19 pandemic.

In DEIC, Atmakur, SPSR Nellore district, we observed that 304 children with Congenital deafness were identified, and 55 children required Cochlear implant surgery during the years 2017-22. However, only 12 children were provided with Cochlear implant and 43 children were waiting for treatment.

Government accepted (August 2023) the audit observation and stated that 36 children were provided with Cochlear implants and promised future compliance.

7.2.3 Haemoglobinopathy

Haemoglobinopathy is a group of inherited disorders involving abnormal production or structure of the haemoglobin molecule which include haemoglobin C disease, haemoglobin S-C disease, Sickle Cell anaemia, and Thalassemia.

To improve the prognosis for patients affected with such disorders, and to reduce the number of children affected with Thalassemia Major and Sickle Cell disease, State Blood Cell (SBC) was established (March 2016) in Andhra Pradesh under the administrative control of Commissioner of Health and Family Welfare.

7.2.3.1 Haemoglobinopathy screening

Haemoglobinopathy screening is based on estimation of Haemoglobin (Hb) by digital Haemoglobinometer and NESTROFT¹⁷⁵ as the primary screening test, followed by CBC¹⁷⁶ and HPLC¹⁷⁷ tests for the screen positive cases. GoI envisaged to screen about two lakh Tribal children for identification of blood diseases viz. Thalassemia, Sickle cell and other 12 mutations to reduce infant mortality rate and released funds amounting to ₹6.25 crore during 2018-19. However, screenings were not undertaken for the review period.

State Blood Cell, in their reply (January 2023) stated that budget was released in 2018-19 and 2019-20 for screening of tribal children and procurement of drugs for blood disorders which was not utilised at that time. The unspent budget was released for the procurement of Blood Storage Unit (BSU) equipment, establishment of day care

NESTROFT test is Naked Eye Single Tube Red Cell Osmotic Fragility test

¹⁷⁶ Complete Blood Count

¹⁷⁷ High-performance liquid chromatography

centres in four ITDAs and maintenance of ten District Early Intervention Centres (DEICs) in the State. It was further stated that 2,036 children were screened between June 2022 and November 2022 in Tribal areas by the Tribal Welfare Department. Thus, despite release of ₹6.25 crore by GoI, and after a lapse of three years, only one *per cent* of tribal children targeted were screened.

Thus, even though funds were provided, State Blood Cell screened only one *per cent* of the targeted tribal families and children. This may increase the risk of disorders such as haemoglobin C disease, haemoglobin S-C disease, Sickle Cell anaemia, Thalassemia and other mutations.

7.2.3.2 Non collection of epidemiological data

Family and population screening is a holistic and cost-effective approach to have a registry for epidemiological data. High-quality epidemiological data is required for high-quality public health planning and policy making to provide life-long treatment to people with Thalassemia, Sickle Cell Anaemia and Haemophilia to prevent serious complications and premature deaths. SBC provided the following data relating to disease surveillance¹⁷⁸ collected from district units as given in *Table 7.5*.

Table 7.5: No. of patients identified with Thalassemia, Sickle Cell Anaemia and Haemophilia during the years 2020-23

									2022 22	
			020-21			2021-22			2022-23	
S. No.	District	No. of Thalassemia patients	No. of Sickle Cell Anaemia patient	No. of Haemophilis patients	No. of Thalassemia patients	No. of Sickle Cell Anaemia patients	No. of Haemophilli patients	No. of Thalassemia patients	No. of Sickle Cell Anaemia patients	No. of Haemophilia patients
1	Srikakulam	119	265	46	119	265	48	153	Data not available	47
2	Vizianagaram	32	182	24	Data 1	not ava	ilable	56		49
3	Visakhapatnam	260	283	0	292	465	206	295		160
4	East Godavari	236	53	117	468	124	422	252		217
5	West Godavari	224	54	213	Data 1	not ava	ilable	208		233
6	Krishna	106	0	0	106	0	185	99		185
7	Guntur	148	1	0	165	1	236	256		246
8	Prakasam	39	0	0	39	0	115	64		110
9	SPSR Nellore	49	0	8	51	0	36	78		46
10	YSR	89	0	143	74	0	147	115		150
11	Anantapur	147	9	0	147	9	98	191		100
12	Chittoor	52	0	2	52	0	38	66		46
13	Kurnool	200	0	1	207	0	91	296		100
Tota	1	1,701	847	554	1,720	864	1,622	2,129	NA	1,689

(Source: Information furnished by the department)

As noticed from the above, the number of cases increased year after year. Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Anantapur and Kurnool had high rate of Thalassemia incidence in Andhra Pradesh. The Department did not provide the data on Sickle Cell Anaemia for the year 2022-23. Further, data relating to

Surveillance is an ongoing and systematic collection, analysis, interpretation, and dissemination of data about cases of a disease and is used as a basis for planning, implementing, and evaluating disease prevention and control activities.

Vizianagaram and West Godavari districts for the year 2021-22 was also not available indicating that epidemiological data collection was improper.

7.2.3.3 Absence of standard operating procedures in blood transfusion services

As anaemia is the predominant symptom in Thalassemia, the major treatment consists of regular transfusions of RBCs throughout life ranging from transfusions every two to four weeks to once every two to three months depending upon the severity of the disease. Blood transfusion corrects anaemia and promotes normal growth. To ensure safety and quality of blood components, leuko-depleted filters are used to prevent alloimmunisation¹⁷⁹. Thus, each thalassemia patient requires a minimum of four to 24 leuko-depletion filters in a year.

As per thalassemia patient load of 1,720 for the year 2021-22, as part of preparedness activity, SBC should have procured about 41,280 leuko-depletion filters during 2022-23. However, only 5,000 filters were supplied (June 2022) by APMSIDC against an indent of 31,008. SBC accepted (January 2023) that only one transfusion per month per patient was calculated for 2,584 patients while indenting. Further, it was also stated that 'there was no negligence to the effected patients', and the remaining units were finalised for procurement in the Bid finalisation committee.

The reply is not tenable since Leuko-filters for Thalassemia patients were required at two transfusions every month for twelve months for each patient and accordingly they should have been indented and procured for the safety of the patients.

During test check of District Hospital, Hindupur, we observed that blood component separation facility was not available with the Blood Bank and leuko-filters were not used in transfusion. Department replied that indent was placed with DCHS, Anantapur for supply of equipment and leuko-filters were not used in the blood bank due to non-availability.

Thus, SBC failed to screen the tribal families and children in particular as envisaged, even if funds are provided. SBC did not formulate SOP for safe transfusion services and provide required equipment such as Leuko-filters and component separation machine to check and control blood disorder diseases.

Reply from the Government is awaited.

7.3 National Tuberculosis Elimination Programme (NTEP)

India has the highest estimated burden of Tuberculosis Infection (TBI) globally, with nearly 35-40 crores of Indian population having TBI, of which 26 lakhs people (18-36 lakh)¹⁸⁰ were estimated to develop tuberculosis (TB) disease annually. Although early diagnosis and treatment of active TB remains a top priority in India, preventing TB by finding and treating TBI and active case finding (ACF) amongst high-risk groups (HRGs) are extremely important steps towards ending TB.

Sourced from Guidelines for Programmatic Management of TB preventive treatment in India by MoHFW

development of alloantibody against the foreign red blood cell

1. Releases would be made by the State Project Monitoring Unit at NHM to the implementing units and the implementing units should furnish the UCs for the amount utilised. Allocation of funds by NHM and expenditure made as per Financial Management Report (FMR) are shown in *Table 7.6*.

Table 7.6: Funds allocation and expenditure on NTEP during 2012-22

(₹ in crore)

Year	Opening balance	Allocation as per RoP #	Total Expenditure as per FMRs	Closing Balance
2017-18	6.68	45.64	26.44	25.87
2018-19	25.87	85.94	53.53	58.28
2019-20	58.28	67.55	71.75	54.07
2020-21	54.07	67.90	61.44	60.52
2021-22	60.52	89.37	75.64	74.25

RoP – Record of Proceedings

Source: Financial Management Report (FMR), Opening Balance furnished by the DPHFW

It can be observed from the above that available resources were not fully utilised in any year. DPHFW replied (December 2022) that released resources were efficiently utilised. Since the details of funds released by State Project Monitoring Unit (SPMU) were not furnished, Audit could not ascertain the efficient utilisation thereto.

Reply from the Government is awaited.

2. On scrutiny of records (October 2022), Audit noticed shortage in the availability of human resources for implementation of the programme in the State. The post of lab technician (LT) is crucial in examination of sputum and confirmation of the case. The State Program Officer (TB) confirmed that 43 posts (18.07 per cent) in the State were vacant. Vacancies in the cadres of Senior Treatment Supervisor (STS) and Senior TB Laboratory Supervisor (STLS) were 7.95 and 14.39 per cent respectively. Overall, 107 posts out of 884 sanctioned (12.10 per cent) posts were vacant in all the 13 cadres. Vacancy in crucial posts hampers effective implementation of the programme.

Government accepted (August 2023) the audit observation and stated that, out of 884 sanctioned posts, 86 posts (10 *per cent*) were now vacant and the recruitment was a continuous process.

3. **Case notifications**: According to the United Nations SDG 3.3, all nations have set the goal of eradicating TB by the year 2030. Government of India has set the target of eradicating TB by the year 2025 by launching Jan Andolan, a people's movement.

The number of TB cases (new and relapse) notified to the health authorities during a specified period of time per 1,00,000 population is the case notification rate. Number of patients notified along with type of notification and case notification rate for the four year period is indicated in *Table 7.7*.

Table 7.7: Statement showing TB case notifications and type during the years

Year	Pat	ients noti	fied	Type of cases			Case notification rate			
	Public	Private	Total	New	Previously tested	PMDT#	Public	Private	Total	
2019	76,486	22,383	98,869	85,006	10,519	3,344	149.0	2.0	151.0	
2020	46,901	17,164	64,065	54,646	7,497	1,922	89.0	33.0	122.0	
2021	62,100	24,732	86,832	74,857	9,403	2,572	117.0	47.0	164.0	
2022	62,075	30,112	92,187	81,132	8,769	2,286	117.4	56.9	174.3	

programmatic management of drug-resistant TB

Source: India TB report for the years

Thus, case notification rate increased from 151 in 2019 to 174 by October 2022.

Government replied (August 2023) that the strategy adopted was to detect more number of cases in the initial years and treat all the cases successfully so that the transmission can be curtailed and new TB cases would be reduced over a period of time.

4. **Patients with co-infections:** People living with HIV are prone to tuberculosis (TB). This is because of weak immune system, which makes it harder for the body to fight with TB germs. Cotrimoxazole Preventive Therapy (CPT) and Anti-Retroviral Treatment (ART) are known to reduce mortality in HIV-positive TB patients. WHO's 2012 update strongly recommended 100 *per cent* uptake of CPT and ART in HIV-infected TB patients, both to be started as soon as possible after the initiation of anti-tuberculosis treatment. Patients with both the infections are detailed in *Table 7.8*.

Table 7.8: Details of Patients with TB & HIV infections

		ents with IV status	TB & HIV	co-infected	l patients	Paediatric TB patients		
Year	Public	ic Private Diagnosed		Put on ART	Put on CPT	Notified	With known HIV status	HIV positive among tested
2017-18	57,872	1,440	2,632	686	664	909	829	32
2018-19	61,679	14,708	4,430	2,152	1,609	2,016	1,788	35
2019-20	73,644	21,967	6,734	6,109	5,831	2,227	2,091	28
2020-21	46,497	17,052	3,488	3,180	3,146	2,227	1,277	9
2021-22	61,981	24,204	4,870	4,772	4,723	1,141	1,126	17
Total	3,01,673	79,371	22,154	16,899	15,973	8,520	7,111	121

Source: Information furnished by DPHW

Thus, it was clear that all the HIV-infected TB patients were not put on CPT and ART together. Department replied (December 2022) that Andhra Pradesh had achieved 98 to 99 *per cent* CPT and ART during 2019-22.

Government stated (August 2023) that the success rate for TB-HIV was 95.6 per cent as per India TB report 2023.

The reply is not acceptable as death rate for TB-HIV co-infected cases in 2021 is 1.4 *per cent* (23 co-infected patients' death was reported as per TB report 2023 for the year 2021). Mortality can be minimised if all the TB-HIV co-infected patients were put on CPT and ART.

5. TB is a disease which can be overcome completely only when communities are mobilised and supported in a holistic manner. Complete surveillance is an important

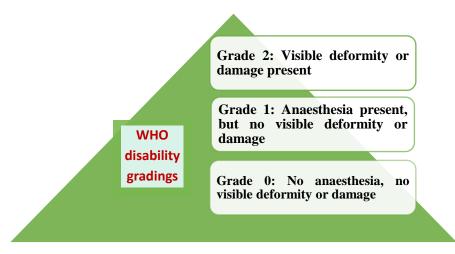
public health function in prevention and control of disease. Though there was a decline in number of TB detections from 2019-20 (175 per lakh population) to 2020-21 (121 per lakh population), the year 2021-22 marked a rise in rate *i.e.*, 164 cases per lakh population. This is an alarming sign in the State as the SDG 3.3 goal for 2030 is to record zero notification of TB cases per one lakh population in a year.

Government replied (August 2023) that to eliminate TB, the strategy was to detect more number of cases in the initial years and treat all the cases successfully, so that the transmission can be curtailed, and new TB cases will be reduced over a period of time. In the year 2021, the TB notification rate was 164 per lakh population and in the year 2022, it was 174 per lakh population which was higher than India's average by doing higher number of TB testing compared with earlier years, 1,419 per lakh population in the year 2021 and 1,524 per lakh population in the year 2022, which was more than India's average of 1,281 per lakh population.

NTEP programme implementation in the State was hampered due to shortage of manpower, non-utilisation of funds and high case notification, which is an alarming sign as the SDG 3.3 goal for 2030 is to record zero notification of TB cases per one lakh population in a year.

7.4 National Leprosy Eradication Programme

Leprosy is curable and treatment in the early stages can prevent disability. National Leprosy Eradication Programme (NLEP) is a Centrally Sponsored Scheme under the umbrella of National Health Mission (NHM). The primary goal of the Programme is to detect cases of leprosy at an early stage and provide complete, free of cost treatment to prevent occurrence of disabilities in affected persons and to stop the transmission to community level. This programme also aims to spread awareness about the disease and reduce stigma attached with the disease.



Leprosy is curable with a combination of drugs known as Multi Drug Therapy (MDT). Based on skin lesions or nerve involvement, cases are classified into two types for treatment purposes, *viz.*, Paucibacillary¹⁸¹ (PB) and Multibacillary¹⁸² (MB) case. Year wise details of new cases detected, Annual New Case Detection Rate (ANCDR), Prevalence Rate (PR) and proportion of Multibacillary (MB) cases among new cases during 2017-18 to 2021-22 are detailed in *Table 7.9*.

Table 7.9: Details of New Leprosy Cases

Year	No. of New Cases identified	No. of New Cases under MDT	ANCDR per 1,00,000 population	Rate per	of child cases among	of MB cases	cases among new cases	disability among new cases	Gr-1 disability among new cases in <i>per cent</i>
2017-18	4,695	3,561	8.98	0.62	9.88	47.45	40.81	228/4.9*	135/2.9
2018-19	5,294	3,590	10.12	0.73	8.10	48.24	45.13	195/3.6	115/2.1
2019-20	4,685	3,082	8.81	0.64	7.51	48.50	43.56	131/2.8	76/1.6
2020-21	1,811	1,417	3.31	0.35	7.79	52.35	40.42	48/2.7	76/4.2
2021-22	1,888	1,589	3.44	0.36	5.46	62.66	42.06	35/1.9	96/5.1

Source: furnished by DPHW

We observed that;

1. 4,323 new cases¹⁸³ were detected in the year 2013-14 with Annual New Case Detection Rate (ANCDR) of 8.13¹⁸⁴. Six years later in 2019-20¹⁸⁵, new cases reported were 4,685 with ANCDR of 8.81. Thus, there was an increase in number of new cases and ANCDR which is a warning sign.

Government replied (August 2023) that Leprosy Case Detection Campaign (LCDC) was conducted in 10 Districts in 2019-20, and therefore active case detection increased. Further it was stated that during 2020-22 case detection campaigns were not conducted due to COVID and in 2022-23 ANCDR was raised due to new case detection campaign.

Increase in new cases due to increase in LCDC is a sign of increase in disease surveillance. However, increase in detection of new cases is not a desirable trend.

2. Proportion of Multibacillary (MB) cases among new cases increased from 47.45 *per cent* in 2017-18 to 62.66 *per cent* in 2021-22. This indicates increased intensity of Leprosy in Andhra Pradesh.

Department replied (July 2023) that due to the COVID Pandemic active case detection rate was decreased, so that the MB cases were increased. But in 2022-23 the MB case rate is 58.25 and PB case rate is 42.75. This shows a decreasing trend of MB cases which indicates early detection of leprosy.

3. Case prevalence rate less than one per 10,000 population is the target for elimination of Leprosy as a public health problem. However, the case prevalence rate in Srikakulam (2017-18 and 2018-19) and Vizianagaram (2017-18 and 2019-20) was

^{*}among 228 new cases 4.9 per cent (11 cases) are suffering with Grade 2 disability

with one to five skin lesions without demonstrated presence of bacilli in a skin smear

with more than five skin lesions; or with nerve involvement

¹⁸³ Calculated at ANCDR of 8.13 on census data of AP. 7,108 new cases with ANCDR of 8.13 in united AP

¹⁸⁴ NHM Annual Report 2014-15 (page 120)

¹⁸⁵ 2020-22 figures are not considered as screenings were not done due to COVID pandemic

greater than one. Thus, the goals set for elimination of Leprosy were not achieved in these districts.

Government accepted (August 2023) the audit observation and stated that for early case detection special programmes like Sparsh awareness programme and detection of cases in Hard-to-reach areas, ASHA based surveillance for leprosy suspects (ABSULS) were taken up in AP. The NGOs in Chillakalapalli, Pogiri and Saluru were actively involved.

4. Grade of disability is a key epidemiological and operational indicator, where Grade-II Disability (G2D) is considered as an indicator for delayed diagnosis and a hidden endemic. Early diagnosis and prompt treatment reduce the prevalence of the disease, prevent disabilities, help reduce transmission and help monitor the spread and burden of disease. Active follow-up after treatment completion is also desirable. The objective of NLEP programme is to reduce G2D percentage to less than one among new cases at National level. *Table 7.10* gives the district wise disability percentages to indicate G2D status:

Table 7.10: Statement showing district wise disability percentages to indicate G2D status

S.No.	Name of the District	2017-18	2018-19	2019-20	2020-21	2021-22
1	Srikakulam	5.6	4.8	3.3	3.6	NA
2	Visakhapatnam	3.2	3.7	NA	NA	NA
3	West Godavari	2.8	NA	NA	NA	NA
4	Krishna	10.2	NA	2.2	3.1	4.3
5	Guntur	2.1	4.3	5.1	4.9	3.9
6	Prakasam	10.6	5.8	3.2	NA	NA
2	SPSR Nellore	4.0	3.6	NA	NA	2.0
8	Chittoor	5.3	4.3	3.7	4.6	5.8
9	YSR	7.3	4.5	5.7	2.2	2.2
10	Anantapur	7.5	3.9	NA	NA	NA
11	Kurnool	5.4	5.5	5.2	8.1	2.1

Source: Information furnished by DPHFW

Government replied (August 2023) that Grade 2 deformity was in decreasing trend since 2019-20 and early detection of cases would decrease G2D deformity and promised compliance.

Since the target is to reduce G2D percentage to less than one, more than two *per cent* of G2D Prevalence Rate indicates that the tracing, tracking, and reporting of the disease in the community is not adequate.

5. Relapse is occurrence of new signs and symptoms of the disease during the period of surveillance or thereafter in a patient who successfully completes an adequate course of MDT. As per the NLEP monthly reports, suspected relapse cases and confirmed cases by DHs were detailed in *Table 7.11*.

Table 7.11: Statement of suspected relapse and confirmed cases

Year	No. of relapse cases suspected	No. of relapse cases confirmed	Percentage of confirmation	No. of cases developed with new
	by PHC	at DH	cases	disability after MDT
2017-18	40 (39) *	37 (36)	92.5	6 (6)

Year	No. of relapse cases suspected by PHC	No. of relapse cases confirmed at DH	Percentage of confirmation cases	No. of cases developed with new disability after MDT
2018-19	12 (12)	14 (14)	116.7	0 (0)
2019-20	18 (18)	20 (20)	111.1	1(1)
2020-21	9 (9)	8 (7)	88.9	4 (4)
2021-22	12 (12)	6 (6)	50.0	1(1)
Total	91 (90)	85 (83)	93.4	12 (12)

Source: Information furnished by the department

From the above table it can be understood that proportion of relapse cases are more among Multibacillary (MB) cases. MB cases in the community were in increasing trend. Department should expand active case detection in targeted population to detect the severity of the spread.

Government replied (August 2023) that relapse cases depend on the immunity of the effected person. Due to COVID the detection was low and hence MB cases increased accordingly and relapse cases also increased. However, at present the MB cases have decreased, and relapse cases also decreased.

WHO estimated risk of relapse after nine years of stopping MDT is 0.77 *per cent* for MB and 1.07 *per cent* for PB patients. Hence, increase in detection of MB/ PB/ relapse cases is a matter of concern.

Early detection of relapsed cases and subjecting them to medical treatment would prevent community transmission of leprosy bacilli.

Sanctioned posts and Persons in Position in 13 districts of AP of the Leprosy Wing of the Health Department is shown in *Table 7.12*.

Table 7.12: Post wise Human Resource position

S.No.	Name of the Post	Sanctioned posts	Men-in- Position	Vacancy	Vacancy Percentage
1	Addl. Dist. Medl & Health	13	11	2	15.38
2	Health Education Office/	28	11	17	60.71
3	Para Medical Officer	13	8	5	38.46
4	Dy. Para Medical	366	192	174	47.54
5	Statistical Officer/Dy.S.O.	13	8	5	38.46
6	Dist. Nucleus Medl.	13	10	3	23.08
7	Lab-Technician	13	9	4	30.77
8	Pharmacist	1	0	1	100.00
9	Physiotherapist	13	7	6	46.15
10	Office Superintendent	5	4	1	20.00
11	Accountant/Sr.Asst/Jr.Asst.	30	26	4	13.33
12	Typist	12	6	6	50.00
13	Office Subordinates	26	16	10	38.46
14	Driver	26	11	15	57.69
15	Sweeper/Night Watchman	26	15	11	42.31
16	Nursing Orderly Male	2	1	1	50.00
	Total	600	335	265	44.17

Source: Information furnished by the Department

As observed from the above table, 44.17 *per cent* of posts were vacant in the Leprosy wing. Posts dealing with Health Education, Paramedical, Statistical and Physiotherapy

^{*}Figures in brackets indicate MB cases among cases identified

services which are essential for dealing with disease prevalence, accountability, treatment and in promoting behavioural changes in the community, were vacant. Thus, detection, surveillance and health education activities were partial in the State.

Government replied (August 2023) that NLEP program was converted to horizontal programme ¹⁸⁶ and DPMO/ APMO posts were not filled after their retirement. To fill the gap and to work for leprosy, a nodal person was nominated from paramedical staff in every PHC. It was further replied that passive case detection was strengthened by involving Dermatologists of Government and Private hospitals and Post exposure prophylaxis SDR¹⁸⁷ was administered to contacts of new cases to reduce the transmission.

Increase in new cases and increase in MB cases, prevalence of G2D rate more than two, occurrence of relapse cases and deficient human resources would make Leprosy a public health concern.

Prevalence Rate of G2D is more than two *per cent* against the target of one *per cent*. This indicates that the tracing, tracking, and reporting of the disease in the community are not adequate as per targets of NLEP. Continuous incidence of leprosy among children is a matter of concern.

7.5 National Vector Borne Disease control programme (NVBDCP)

NVBDCP is an umbrella programme for prevention and control of vector borne diseases like Malaria, Dengue, Chikungunya and other fever related diseases.

Results of disease surveillance in Andhra Pradesh are indicated in *Table 7.13*.

Table 7.13: Statement showing year wise fever disease surveillance

Disease	2017	2018	2019	2020	2021	2022 (Up
						to October)
Malaria	1,03,953	1,462	84,230	28,688	62,685	1,50,376
Enteric Fever	1,08,448	1,367	85,272	33,020	31,285	5,27,714
Fever with unknown	10,61,905	18,227	7,87,389	4,60,937	2,40,599	
origin						
Influenza like illness	19,72,758	39,693	16,13,548	8,16,515	5,51,517	46,563
Dengue	6,391	121	11,603	3,974	1,306	0
Chikungunya	1,206	25	1,125	356	18	0
Total fever associated	32,56,678	62,913	25,85,186	13,45,510	8,89,431	7,24,653
diseases *						

Source: Director of Public Health and Family Welfare

7.5.1 Implementation of Malaria control Programme

According to WHO's latest estimates, India accounted for 79 per cent of malaria cases in the WHOs South-East Asian region and about 83 per cent of malaria deaths in the Region. Malaria cases should be reduced year by year. However, the rate of reduction was decreased between 2019 and 2020, when compared with previous years in India.

^{*} total includes other fever associated diseases also

¹⁸⁶ GO MS 20 issued in the year 2005

¹⁸⁷ Single dose Rifampicin

Annual Blood Examination Rate (ABER) is the percentage of persons screened annually for malaria. ABER is an index of operational efficacy of the NVBDCP. The Annual Parasite Index (API) depends upon the ABER. Annual Parasite Index (API) refers to high and moderate malaria transmission risk areas. Areas with API more than two *per cent* are classified as high-risk areas. As per National Framework for Malaria Elimination in India 2016-30, milestone set for all the States and their respective districts is to reduce API to less than one case per 1,000 population at risk and sustain zero deaths due to malaria by 2024. Sufficient blood slides should be systematically obtained and examined for malaria parasite to work out accurate API.

As per the Malaria Operational Manual, ABER should be more than ten *per cent* of the population, which is considered adequate to reflect a true picture of incidence of Malaria. We observed that in the following districts for the years 2017-2021, ABER was less than 10 *per cent* as shown in *Table 7.14*, which indicated that the true picture was not reflected.

Table 7.14: Statement showing district wise Annual Blood Examination Rate

Sl. No	District	2017	2018	2019	2020	2021
1	Srikakulam	14.60	17.00	17.70	8.30	13.50
2	Vizianagaram	17.00	17.30	17.50	11.50	16.50
3	Visakhapatnam	16.60	17.60	18.60	14.30	16.60
4	East Godavari	15.60	14.70	15.70	11.70	13.80
5	West Godavari	15.30	13.90	13.20	8.00	8.80
6	Krishna	8.30	8.40	8.20	5.90	9.70
7	Guntur	13.40	13.20	13.50	7.70	12.70
8	Prakasam	13.50	13.90	10.50	7.30	10.30
9	SPSR Nellore	6.00	5.30	6.10	10.10	10.80
10	Chittoor	12.40	11.70	10.40	4.60	7.30
11	YSR	18.00	18.60	14.40	6.80	13.50
12	Anantapur	10.70	10.40	11.40	6.00	9.80
13	Kurnool	11.10	11.10	11.90	10.00	12.30
	Total	13.10	13.00	12.90	8.50	11.80

(Red colour indicates the ABER below 10 and green colour indicates ABER above 10) **Source**: Information furnished by the Director of Public Health and Family Welfare

Krishna district reported ABER below 10 in all the years under review. Department furnished API for the years 2017 to 2022 as given in *Chart 7.1*.

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A calculation of the total number of positive slides for a parasite in a year multiplied by 1,000 for the total population annually.

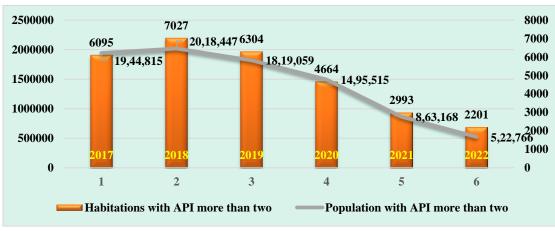


Chart 7.1: Population and Habitations with API more than two

Source: Information furnished by the Department

The population having API more than two had shown a decreasing trend, however, 2,993 habitations (7.51 *per cent*) out of 39,867 habitations to the end of December 2021¹⁸⁹ still had API above two, indicating that these habitations were in risk zone. However, the national average API for the year 2021 was 0.12 only.

Government accepted (August 2023) that ABER was reported less than 10 in eight districts during 2020 and in four districts during 2021 due to COVID. State ABER was 11.80 and 14.14 in 2021 and 2022 respectively. All districts reported ABER above 10 except two districts (Krishna 9.06 and Chittoor 9.96) in 2022. Further, it was stated that due to strengthening of surveillance activities, high risk habitations were reduced to 2,201 habitations (4.93 *per cent*) and the State Annual Parasite Index (API) was 0.04.

Thus, the incidence of malaria is still high in two districts.

Regarding Malaria control Programme, Annual Blood Examination Rate (ABER) is not uniform in the State and is less than 10 *per cent* in two districts of Krishna and Chittoor. About 2201 habitations (five *per cent*) in the State are still in high risk zone for Malaria parasite.

7.6 National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke

Under National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), Non-Communicable Disease (NCD) Clinics were set up at District and CHC levels to provide services for early diagnosis, treatment, and follow-up for common NCDs. Provision has been made under the programme to provide free diagnostic facilities and drugs for patients attending the NCD clinics. Cardiac Care Units (CCU) were set up in identified districts for providing facilities for emergency Cardiac Care. Day Care Centres in the identified districts are setup to provide facilities for Cancer care.

Data for the year 2022 is for 10 months only (up to 13 November 2022)

During the period from 2017-18 to 2021-22, out of ₹125.15 crore budget released, an amount of ₹78.50 crore only was incurred towards implementation of the NPCDCS program.

Government accepted (August 2023) the audit observation pertaining to the financial years 2019-20 and 2020-21 and attributed short utilisation to COVID-19 pandemic. Government further stated that in the year 2021-22, they had utilised the budget effectively and appropriately to meet the objectives and optimise resource allocation.

However, it is observed from the statement of budget and expenditure given in the reply that only 92.21 *per cent* of funds were utilised in 2021-22. Further, record relating to the year 2021-22 was not provided to substantiate effective utilisation of budget.

7.6.1 Patient referral cards at PHCs

Primary Health Care goes beyond first contact care and is expected to mediate a two-way referral support to higher-level facilities (from first level care provider through specialist care and back) and ensures follow up support for individual and population health interventions. For opportunistic screening of Diabetes and to record the follow up, patient referral card should be provided to PHCs as part of NPCDCS programme.

While verifying the budget allotment and expenditure with regard to issue of referral cards to patients at PHCs, for the years 2017-18, 2019-20 and 2020-21, a total of ₹1.03 crore was allocated in ROPs. However, State did not spend the funds towards the same. Further, non-issue of referral cards was confirmed to audit by the sampled HCFs.

One of the programme objectives is to support the development of database of NCDs through Surveillance System and to monitor NCD morbidity and mortality and risk factors. As patient referral cards are essential to record the screening data and to advise the referral centres, their absence hindered the creation of database.

Government accepted (August 2023) the audit observation and promised future compliance by providing ABHA IDs in the Aarogyasri card. As patient referral cards are essential to record the screening data and to advise the referral centres, absence of screening history would hinder the creation of database.

7.6.2 Patient referral cards at Sub Centres

As part of NPCDCS programme, patient referral Card in duplicate¹⁹⁰ should be provided to all sub-centres in the State. Under this component, budgetary allocation was made by the NHM in the years 2017-18, 2019-20 and 2020-21 while approving RoPs for the years.

An amount of ₹5.87 crore was allocated during the years; however, ₹0.60 crore expenditure was incurred by the State towards the patient referral cards, which is about $10 \ per \ cent$ of the budget allotted. Further, during physical verification of sub-centres, we observed that no referral cards were issued to the patients at SCs.

one to be given to the patient (the suspected case >140 dl. During health camps or on a designated day ANM and (or) Male Health Worker will /mg) and other to be retained at the subcentre for future reference and follow up

The common infrastructure/manpower envisaged can be utilised for early detection of cases, diagnosis, treatment, training and monitoring of different programs such as National Program for Prevention Control of Cancer, Diabetes, CVDs and Stroke (NPCDCS), National Program for Health Care of Elderly (NPHCE), National Tobacco Control Program (NTCP), National Mental Health Program (NMHP) *etc*.

Government replied (August 2023) that ₹59.97 lakh expenditure was made for printing Community Based Assessment Checklist (CBAC) forms and were supplied to all Sub Centres. Further, it was stated that it was in the process of issuing printed ABHA IDs in the Aarogyasri card.

Thus, the envisaged objective in providing screening cards *i.e.*, to record history of persons of the age of 30 plus years to verify alcohol and tobacco intake, physical activity, blood sugar and blood pressure was not achieved by the State.

7.6.3 Human Resources

Operational guidelines for NPCDCS envisaged the following human resources to manage NCD clinic/Cardiac Care Unit (CCU) and to provide emergency and OPD services, counselling, rehabilitation services, *etc*. The availability of human resources in test checked DHs is detailed in *Table 7.15*.

Table 7.15: Statement showing the availability of Human Resource at District Hospitals

S.No.	Name of the Post	Requirement	DH, Atmakur	DH, Hindupur	DH, Tekkali
1	General Physician	One	One	Not available	Not available
2	General Nursing & Midwifery (GNM)	Two	Two	Two	Two
3	Technician	One	Not available	Not available	Not available
4	Physiotherapist	One	One	Not available	One
5	Counsellor	One	Not available	Not available	Not available
6	Data Entry Operator	One	Not available	Not available	Not available

Source: Hospital records

Due to non-availability of dedicated Physicians in DH Hindupur and DH Tekkali and technicians in three DHs, existing staff were burdened with additional work and the services to the patients were not available to the envisaged degree.

In CHC Sompeta, one Staff Nurse was appointed in November 2021 and one Medical Officer was appointed in March 2022. However, the Medical Officer was on leave since April 2022.

The programme provides financial support for essential contractual staff such as doctors and nurses at the units. The contractual manpower at district level can be utilised for NCD Clinic and CCU as well as for day care Chemotherapy unit and at CHC level to run the NCD Clinic. However, the provision was not utilised to engage Human resources on contract basis.

Government replied (August 2023) that NCD Clinics were established in 26 Districts (DHs/AHs) and these clinics were conducted by Physician and staff nurse.

However, audit could not confirm whether the staff provided in these clinics were dedicated or deputed/ diverted from other sources. The record relating to deployment of human resource in the Non-Communicable Diseases Clinics (NCDCs) was not provided to audit. As NCDCs require dedicated staff, and without dedicated human resources, the envisaged objectives of programme would not be achieved.

7.6.4 Equipment worth ₹84.34 lakh kept idle

In order to provide Cardiac Care and Cancer Care at district level, the districts not having Medical College hospitals and not covered under Scheme for Upgradation of District Hospitals to Medical College hospitals, were provided financial assistance for establishing at least four bedded cardiac care unit (CCU).

We observed that equipment worth ₹84.34 lakh supplied under NPCDCS was kept idle in DH, Hindupur due to non-availability of General Physician and Cardiologist.

Government replied (August 2023) that the Physician available at DH, Hindupur was providing the services in NCDC and Cardiac care unit. Further, it furnished the list of equipment available and put to use at DH.

However, record supporting utilisation of services by patients and number of patients who utilised CCU were not provided in support of the reply.

7.7 Pradhan Mantri National Dialysis Programme

The Pradhan Mantri National Dialysis Programme (PMNDP) was rolled out in April 2016, as part of the National Health Mission (NHM) for the provision of free dialysis services to the poor. Based on consultation with experts and discussion with some of the States, GoI is implementing PMNDP in the PPP mode from 2016-17. Accordingly, GoAP invited tenders for establishing 13 Haemo-Dialysis (HD) Centres with 10 beds each in District Hospitals of Andhra Pradesh. Initially one service provider was selected for the years 2016-18. Due to increased demand another service provider was also selected for establishing dialysis centres in Area Hospitals and CHCs also.

Kt/V is another way of measuring dialysis adequacy. If the average Kt/V value¹⁹¹ for three measurements is consistently below 1.2, the patient and the nephrologist need to discuss ways to improve it. Patient must know his Kt/V values, we examined the implementation of PMNDP in selected HCFs and observed that:

1. As per operational guidelines, all the dialysis services through the established centres should be provided only to BPL families. However, nothing was on record to confirm whether the services were provided only to BPL families. Department stated that the service provider is following Aadhar card-based registration system, and all referrals are from Government Hospitals. The reply is not acceptable as Aadhar is not a base to determine eligibility under BPL category.

The Kidney Disease Outcome Quality Initiative (KDOQI) group has adopted the Kt/V of 1.2 as the standard for dialysis adequacy. K stands for the dialyser clearance, the rate at which blood passes through the dialyser, expressed in milliliters per minute (mL/min), t stands for time and V stands for volume of water a patient's body contains.

2. Copies of no-fee receipt provided to the patients should be the basis for making payment to the service provider. However, payments were made without any such receipts. 'No fee receipts' were not provided to the patients in AH, Kadiri, CHC Sompeta and DHs Atmakur, Hindupur and Tekkali. This was confirmed by the concerned Hospital Superintendents. Department stated (December 2022) that service providers would be instructed to implement no-fee receipt concept. 'No-fee receipts' should also be subjected to a third-party annual audit. Since no-fee receipts were not provided to patients, third party audit could not be conducted.

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

3. Kt/V value is the measurement of the efficacy of a haemodialysis session. The service provider should submit a half yearly report of clinical audit done by the third party to provide the Kt/V and standardised Kt/V report of each patient to the committee. However, clinical audit reports by the third party were not available in the records.

The department stated that the service provider was conducting in-house audit and Kt/V reports were submitted to the Nephrologists concerned. However, we observed that in cases where the average Kt/V value for three measurements was consistently below 1.2, the patient and the nephrologist were required to discuss about Kt/V values and ways to improve it which was not adhered to.

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

7.8 Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)

Super speciality hospitals form a part of Tertiary Health Care Services and provide specialised services in a particular field. Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) announced in 2003 envisaged creation of tertiary healthcare capacity in medical education, research, and clinical care across the country.

PMSSY has two components:

- A. Setting up of new AIIMS Institutions in underserved regions of the country, and
- B. Up-gradation of existing Government Medical Colleges (GMCs) which broadly envisages improving health infrastructure through establishment of Super Specialty Blocks/Trauma Care Centres.

Each up-gradation project would be adding the following to the existing GMCs.

- (i) 8-10 Super Specialty Departments.
- (ii) Around 15 new PG seats to each Teaching Hospital.
- (iii) 150-250 beds

AIIMS Mangalagiri is one of the AIIMS healthcare institutes being established by the Ministry of Health & Family Welfare, Government of India under the Pradhan Mantri Swasthya Suraksha Yojna (PMSSY) started functioning from the year 2018.

Up-gradation of the Government Medical College, Anantapur was included in the scheme in the third phase of PMSSY (November 2013) at an approved cost of ₹150 crore (i.e., ₹120 crore & ₹30 crore being Central and State share respectively) for establishment of eight Departments in Super Specialty Hospital (SSH) viz. Gastroenterology, Surgical Gastroenterology, Neurology, Neurosurgery, Cardiology, Endocrinology, Nephrology and Urology with new infrastructure and additional PG seats. The details of proposed infrastructure and PG seats are given in *Table 7.16*.

Table 7.16: Details of proposed infrastructure for SSH

Name of the Government Medical College	No. of beds	No. of ICU beds	Total beds	No. of OTs	No. of proposed PG seats
Government Medical College, Anantapur	168	40	208	6	16

Source: Hospital records

We observed that:

The Super Speciality Hospital, Anantapur which was constructed under PMSSY-III had been made functional from August 2020. As per approved guidelines, 16 new PG seats were to be allotted to the proposed SSH subject to functioning of the hospital in full shape.

As three out of eight departments were non-functional, the proposed PG seats to GGH, Anantapur were not sanctioned. Required sanctioned strength of medical and paramedical staff were not provided by the Government. This was confirmed by the Assistant Director (Admin) of the GGH, Anantapur.

As per the Scheme Guidelines the State Government shall release ₹30 crore as its matching share in the establishment of SSH, Anantapur. The MOHFW, GoI allotted the work of upgradation of GMC (Super Speciality Hospital) Anantapur under PMSSY Phase-III to M/s Haigreeva Infra Tech Project Ltd (M/s HITES¹⁹²). However, the State Government released only ₹15 crores out of ₹30 crores. Due to non-release of the State share, IT networking & WI-FI infrastructure worth ₹2.12 crore was not procured and installed by the agency.

Assistant Director (Admin) (FAC) replied that the letter would be issued to the higher authorities for release of balance ₹15 crore.

Reply from the Government is awaited.

7.8.1 **Non-functioning of the Departments**

Super Speciality Hospital (SSH), Anantapur was constructed under PMSSY III. As per the Detailed Project Report, the contractor completed the construction of SSH with

M/s Haigreeva Infra Tech Project Ltd., by M/s HLL Infra Tech Services Ltd., (HITES), a Government of India Enterprise

eight departments namely i. Gastroenterology, ii. Surgical Gastroenterology, iii. Neurology, iv. Neurosurgery, v. cardiology, vi, Endocrinology, vii. Nephrology and viii. Urology. The Hospital along with the equipment was handed over (August 2020) to the Superintendent GGH Anantapur. Audit noticed that only five out of eight departments were functioning. Three departments were non-functional due to non-availability of manpower.

As the SSH was sanctioned to provide affordable/ reliable tertiary healthcare services and non-availability of Gastroentrology, Surgical Gastroentrology and Urology departments, defeated the purpose for which it was established.

Reply from the Government is awaited.

7.8.2 Non installation of equipment

Out of ₹41.57 crore allotted, equipment worth ₹39.91 crore was procured¹⁹⁴ (2018); however, equipment worth ₹22.51 crore only was installed while the remaining equipment worth ₹17.4 crore was lying idle in the storeroom for the last four years. The remaining equipment worth ₹1.66 crore was not received from the supplier. Assistant Director (Admin)(FAC) replied that the same would be installed and intimated to audit.

Due to non-installation of equipment for four years the performance of the equipment in accordance with manufacturer specifications and guarantees to patients' safety could not be ensured.

The infrastructure created through the upgradation scheme remained unutilised after two years. Government was yet to provide its share of financial resources to make the SSH complete in full shape.

Government had not furnished specific reply with respect to implementation of PMSSY.

In Anatapuramu medical college, three out of eight super speciality departments were non-functional due to lack of teaching staff. This resulted in foregoing 16 Post Graduate seats in the College and deprived the State of super speciality services as well as admission to eligible students.

7.9 YSR Aarogyasri Scheme

Towards achievement of universal health coverage for BPL families whether defined in terms of financial protection or access to and effective use of health care, GoAP is implementing state sponsored Dr. YSR Aarogyasri Health Insurance Scheme. The scheme provides end-to-end cashless services for identified diseases under secondary and tertiary care through a network of service providers from Government and private sector.

Government of India (GoI) had initiated a new scheme called the Pradhan Mantri Jan Aarogya Yojana (PMJAY) from January 2019. This scheme is implemented by the

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¹⁹³ Gastroenterology, Surgical Gastroenterology and Urology

¹⁹⁴ HLL Infratech services Limited (HITES)

National Health Authority (NHA). PMJAY is being implemented as part of the Aarogyasri scheme, as per the guidelines of the PMJAY scheme.

7.9.1 Institutional arrangement

The government of Andhra Pradesh set up the Dr.YSR Aarogyasri Health Care Trust (AHCT), which is an independent body. Hospitals having a minimum of 50 hospital beds with requisite infrastructure and expertise within the States of Andhra Pradesh and Telangana are eligible to be empanelled under the scheme for providing services. In respect of single specialty hospitals like ENT, Ophthalmology *etc.* 20 bedded hospitals are eligible.

With the stated objective to bring quality and transparency into the system of empanelment, online empanelment procedure was adopted. Hospitals while applying must upload entire details of the hospital such as infrastructure, availability of specialists, equipment, lab facilities with documentary and photographic evidence. Once the online application is registered, these hospitals are inspected by a team of doctors from the Empanelment and Disciplinary Committee (EDC) and based on the report and evidence, the EDC will accept/reject the empanelment application. The hospitals whose applications are accepted are thereafter inducted into the scheme after a workshop and signing of MoU.

An empanelled health care provider shall be referred to as a Network Hospital (NWH). The EDC shall initiate disciplinary proceedings against erring NWHs for infrastructure deficiencies, equipment deficiencies, manpower deficiencies, service deficiencies, violation of service contract agreement, *etc*.

7.9.2 Salient features of Aarogyasri

- ➤ The scheme provides coverage of ₹5.00 lakh per family per year for secondary and tertiary care hospitalisation in public and private Network Hospitals (NWHs) in AP and cities of Hyderabad (Telangana), Bengaluru (Karnataka) and Chennai (Tamil Nadu).
- As of May 2023, 2,475 hospitals were empanelled to provide health care facilities covering 3,708 packages/ procedures.
- Four crore individuals (81 *per cent* of the population of the State) from 1.44 crore households, are registered under the scheme.

7.9.3 Financial outlay

The State has been implementing Aarogyasri Scheme since April 2007, and Central Government sponsored Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme is also being implemented in consonance with existing State scheme with effect from January 2019. The Budget allocation from 2018-19 to 2021-22 is detailed in *Table 7.17*.

Table 7.17: Budget allocation from 2018-19 to 2021-22

(₹in crore)

Year	Budget allocation by GoAP	NHA releases	Total Releases	Expenditure	Remarks
2017-18	1,000.00	NA*	1,000.00	1,000.00	*PMJAY
2018-19	1,300.00	182.84	1,482.84	1,299.01	implemented
2019-20	1,305.00	374.06	1,679.06	1,502.00	from Jan 2019
2020-21	1,700.00#	261.23	1,961.23	1,676.96	#Release was
2021-22	1,758.93	223.94	1,982.87	1,920.18	₹1024.69 crore only
Total	7,063.93	1,042.07	8,106.00	7,398.15	

Source: Information furnished by AHCT. The expenditure shown here only indicates budgetary support to AHCT and not the claims paid by AHCT

7.9.4 Service provided by public and private care providers

Curative and super speciality services are provided by the Government by outsourcing these services to the private sector. All the public health facilities from PHCs to Teaching Hospitals are also empanelled as network hospitals in the scheme. The expenditure made by AHCT on claims under YSR Aarogyasri programme is detailed in *Table 7.18* below.

Table 7.18: Expenditure particulars of Aarogyasri on public and private hospitals

(₹ in crore)

Year	Total Aarogyasri claim amount paid	Aarogyasri claim amount in Public Hospitals	% of aarogyasri claim amount in Public Hospitals	Aarogyasri claim amount in Private Hospitals	% of aarogyasri claim amount in Private Hospitals
2017-18	11,53.52	2,20.82	19.14	9,32.70	80.86
2018-19	12,65.63	2,50.36	19.78	10,15.27	80.22
2019-20	14,27.57	2,34.17	16.40	11,93.40	83.60
2020-21	15,82.84	2,83.77	17.93	12,99.06	82.07
2021-22	17,77.25	3,00.53	16.91	14,76.72	83.09
Total	72,06.81	12,89.65	17.89	59,17.15	82.11

Source: Information furnished by AHCT

Spending related to aarogyasri on private health care providers ranged between 80.22 per cent to 83.60 per cent during the years 2017-22.

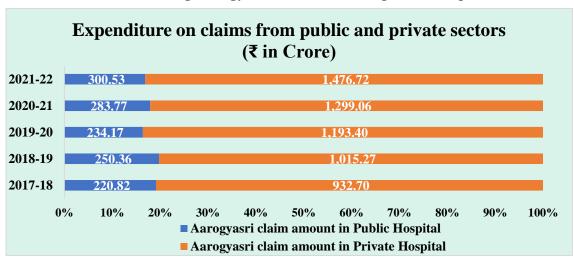


Chart 7.2: Chart showing Aarogyasri claims towards public and private HCUs

NHP, 2017 envisaged free primary care provision by the public sector, supplemented by strategic purchase¹⁹⁵ of secondary care hospitalisation and tertiary care services from both public and from non-government sector to fill critical gaps. The order of preference for strategic purchase would be public sector hospitals followed by not-for profit private sector and then commercial private sector in underserved areas, based on availability of services of acceptable and defined quality criteria.

Audit noticed that Aarogyasri claim amounts for both public and private Health Care Units (HCUs) are increasing. There was an increase of 36.10 *per cent* with respect to public HCUs and 33 *per cent* with respect to private HCUs when compared to the base year 2017-18. *Chart 7.2* also indicates that the proportion of the expenditure on claims in public sector is decreasing. This could be due to preference for private facilities and also suggests insufficient push for public to avail benefit of Aarogyasri through public hospitals.

Government replied (August 2023) that number of patients provided with health services by Government Hospitals was increased from 1,14,550 cases in 2017-18 to 3,69,007 in 2022-23, and the performance of Government Hospitals increased to 25 per cent in 2022-23 from 23.20 per cent in 2017-18 and assured to improve the performance of the Government Hospitals in future.

However, reply of the Government is not acceptable, as the number of cases of Government Hospitals increased from 1,14,550 (23.20 per cent) in 2017-18 to 3,69,007 (24.45 per cent) in 2022-23, whereas the number of cases of Private Hospitals increased from 3,79,100 (76.80 per cent) in 2017-18 to 11,40,308 (75.55 per cent) in 2022-23, thus increase in number of cases of Private Hospitals is 7,61,208 against 2,54,457 in Government Hospitals during the same period.

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The policy envisages strategic purchase of secondary and tertiary care services as a short term measure. Strategic purchasing refers to the Government acting as a single payer.

7.9.4.1 Private hospitals performed procedures reserved for Public Hospitals

The AHCT reserved¹⁹⁶133 procedures exclusively for public hospitals. Of these, 123 procedures were permitted to Private Teaching Hospitals up to 40 pre-authorisations per month for practical exposure to students and the remaining ten procedures reserved for public hospitals *(Appendix 7.1)*. However, 25 private teaching colleges did not observe these instructions in 281 cases by performing ten procedures reserved exclusively for Public Hospitals.

Since these procedures were to be performed exclusively by Public Hospitals, the cost of ₹86.51 lakh incurred towards these procedures was not admissible. Further, Private hospitals cannot raise pre-authorisations for 133 reserved procedures from December 2020¹⁹⁷ onwards. However, in 177 cases, 81 private hospitals involving an amount of ₹50.20 lakh were found allowed to perform these procedures.

Thus, in the above 458 cases, an amount of ₹1.37 crore was paid to private /private teaching hospitals in violation of AHCT orders.

Government accepted (August 2023) the audit observation and stated that AHCT(Trust) disallowed 133 procedures to all Private Network Hospitals in December 2020. Further Government stated that the IT team had not implemented the changes in the Trust portal and Private Network Hospitals performed the above procedures.

7.9.4.2 No claim/ minimal participation of Network Hospitals

We observed that out of 1,421 Network Hospitals (NWHs) empanelled by AHCT, 525 NWHs (both public and private) had not made a single claim during the period January 2019 to March 2021. Out of 718 public NWHs in the State, 64.09 *per cent*, *i.e.*, 460¹⁹⁸ NWHs had not made a single claim during this period. Similarly, out of four NWHs located outside the State and having facility to avail the benefits of the scheme, two NWHs had not made a single claim. Further, we observed that 81 NWHs had made one to five claims during the period January 2019 to March 2021. Out of 81 NWHs, 44 NWHs were public.

Thus, the benefits of the Scheme had not been utilised by 460 NWHs as no claims were made and 44 NWHs had utilised the scheme minimally.

Government replied (August 2023) that due to lack of technical facilities, manpower and upgradation works PHCs and AHs did not perform well during the review period. Further, Government stated that steps were taken to improve performance of all the public hospitals.

7.9.4.3 Delay in claim settlement

As per Scheme Guidelines para 13.8, the claim settlement shall be made within 60 days. NWHs raised 17,16,377 claims amounting to ₹3,730.58 crore for settlement for the period from January 2019 to March 2021. However, 14,91,779 claims only amounting to

¹⁹⁶ Dr NTRVST/P&C/2093 Dated 06.06.2018

¹⁹⁷ AHCT Circular No. Dr YSR AHCT/Operations/20/30/005/2020, dt 09.12.2020

¹⁹⁸ These included seven Area Hospitals and 57 CHCs

₹3,283.17 crore were settled. We observed that out of the claims allowed, 9,24,578 cases amounting to ₹2,062.87 crore were settled with delay as detailed in *Table 7.19 below*:

Table 7.19: Delay in settlement of payment towards claims

(₹ in crore)

No. of days taken for claim settlement	No. of cases	Amount
61-100 days	4,48,361	920.29
101-200 days	3,88,593	929.71
201-300 days	77,180	185.53
301-400 days	10,444	27.34
Total	9,24,578	2,062.87

Source: Information furnished by AHCT

Government replied (August 2023) that delay in approval of claims resulted in delay of payments. Also, some of the bills were paid in the subsequent years due to year end activity in the budget process. These delays, however, would affect the readiness of NWHs to give treatment to prospective patients.

7.9.5 Utilisation of Public Hospital claim funds

GoAP has been regulating the utilisation of claim funds earned by public hospitals through the Health, Medial & Family Welfare department (HM&FW). The HM&FW issued guidelines¹⁹⁹ on utilisation of claim funds for the following purposes:

- ➤ 20 per cent of the claim is retained by the AHCT as revolving fund for strengthening the infrastructure in Government Hospitals.
- ➤ 45 per cent of the claim is for patient care facility management²⁰⁰, which are not available in the hospital and salaries of Data Entry Operators (DEOs). The balance amount would be utilised for development of hospital infrastructure.
- > 35 per cent of the claim is for payment of incentive to the doctors and staff.

We noticed that the claim funds received in public hospitals were either used for purposes other than specified or kept idle without any utilisation as detailed below.

For example, we observed that the Area Hospitals, Sattenapalli and Tadipatri received claim amount of ₹43.19 lakh²⁰¹ for the period from May 2019 to October 2021 and kept the fund idle in the bank Account of the hospitals without spending either towards patient care or towards incentive to staff. The Superintendent, Area Hospital, Sattenapalli replied that due to frequent transfer of Superintendents and non-availability of Data Entry Operators, the amount was not utilised and promised that steps would be taken to utilise for intended purposes.

Government accepted (August 2023) the audit observation and stated that corrective action was taken, and a new system has been developed to credit the incentives directly to the treating doctors and the support staff from August 2023 and this would put an

¹⁹⁹ GO Rt.No.123 (Health, Medical & Family welfare Dept) dated 04.04.2018 and GO Rt. No. 134 dated 01.02.2010

hiring the services of aaya, barber, stretcher boy and electrician, purchase of computer peripherals, diagnostics, drugs
 Sattenapalle₹41,85,087 and Tadipatri₹1,34,400

end to inordinate delays in disbursement of incentives.

7.9.6 Ex-Gratia towards COVID – undisbursed

The Government released (May 2020 & July 2020) ₹12.41 crore to the District Collectors/District Coordinators for payment of ex-gratia at ₹2,000 to patients for post COVID facilitation after discharge from quarantine. From the records it was seen that the districts furnished UCs for ₹5.28 crore and the unspent balance of ₹7.12 crore was not remitted back to the AHCT and UCs also were not furnished. On this being pointed out the AHCT replied that the transfer of unutilised amount to the AHCT is under process (*Appendix 7.2*).

Government accepted (August 2023) the audit observation and stated that the District Collectors/ Coordinators were addressed to return the unspent balances of COVID-19 ex-gratia amount based on the U.Cs. Further, it was stated that follow-up action would also be taken thoroughly.

7.9.7 Medical and other Audits

As per clause 9 of Aarogyasri Manual, there shall be a Medical Audit of the services provided by the empanelled hospital. Further, as per Service Contract Agreement, AHCT shall empanel clinical audit agencies and it would be mandatory for hospitals to undergo third party clinical audit from any of the empanelled agencies for appropriateness and adequacy of care. Non-compliance to audit shall attract a penalty of two *per cent*. The clinical audit sample size and periodicity shall be notified by AHCT. However, during the visit of 48 selected hospitals, it was noticed that no clinical, medical and death audits were conducted for the audit period covered.

Government replied (August 2023) that the Trust constituted a team with members of Joint Executive Officer (JEO), Deputy Executive Officer (DyEO) (Technical) and other members to conduct the clinical, medical and death audits. Further, it was stated that MoU with J-PAL organisation was concluded to study the incidence of fraud and out of pocket expenditure in Hospitals to ascertain the cashless treatment in Network Hospitals.

7.10 Recommendations

- > State Blood Cell may increase screening of tribal families and children to check and control blood disorder diseases such as haemoglobin C disease, haemoglobin S-C disease, Sickle Cell anaemia, Thalassemia and other mutations.
- Sovernment may take appropriate action to address the shortfall in manpower, spend the allocated funds optimally, improve monitoring and surveillance to make the State TB free and Leprosy free as per SDG 3.
- > Government may review data collection mechanism to ensure reliable and updated data for effective planning.
- Government should establish a mechanism to conduct third party clinical audits and to act upon as per the scheme guidelines, and to maintain a database of such audit reports along with Action Taken Reports.