EXECUTIVE SUMMARY

Public health infrastructure plays a significant role in making available, the resources, materials and facilities to individuals, for ensuring good health, and also by providing to communities/ States, the wherewithal to prevent diseases, respond to emergencies and deal with challenges to health. The framework for strengthening health infrastructure in India is guided by the National Health Policy, 2017, which aims to strengthen and prioritise the role of the Government, in shaping health systems in all its dimensions. The policy also recognises the pivotal importance of Sustainable Development Goals (SDG 3) in ensuring healthy lives and promoting wellbeing for all. The Indian Public Health Standards (IPHS) is a set of uniform standards, envisaged to improve the quality of healthcare delivery in the country and serve as a benchmark, for assessing the functional status of healthcare facilities.

Despite gradual improvement in health status over the years, preventable mortality and morbidity has remained high in the State. ln view of the criticality of the healthcare facilities, in providing necessary healthcare to the citizens, the Government spending on the same, and the significant gaps in the available health infrastructure, the Performance Audit of *'Public Health Infrastructure and Management of Health services in the State'* was taken up. An attempt has been made in this Report, to assess adequacy of funding, health infrastructure, human resources, availability of drugs and equipment, and management of healthcare and emergency services, in healthcare facilities at different levels. This Report aims at identifying the areas, that require systemic corrections and improvement.

Key Findings

Health Infrastructure

Availability of healthcare facilities in the State, was not in consonance with the IPHS norms. There was a significant shortfall against these norms, in the State, with 27 *per cent* shortage in Sub-centres (SCs), 23 *per cent* in Primary Health Centres (PHCs) and 12 *per cent* in Community Health Centres (CHCs). Despite the shortages, the Government had not approved the proposals for creation/ upgradation of 72 health institutions in the State, as of 31 March 2022.

Augmentation and improvement of health infrastructure was delayed, on account of the tardy pace of construction of hospital buildings in the State. Execution of 456 works, approved during FYs 2016-17 to 2019-20, by the National Health Mission, Odisha, had not been completed, even after two to five years of approval, though ₹165.95 crore had been incurred on these works.

Provision of residential accommodation for the staff of the hospitals, was quite inadequate, compelling them to reside outside the hospital vicinity. In seven test-checked District Headquarters Hospitals (DHHs), only 312 (25 *per cent*) staff quarters were available for 1,269 staff, whereas only 272 staff quarters (14 *per cent*) were available for 1,919 teaching and non-teaching staff, in the two test-checked MCHs. Hostel accommodation facilities for students, in both the test-checked MCHs, were insufficient, due to which, the students were constrained to stay in the staff quarters and unsafe buildings.

Against the requirement of 91,392 hospital beds, as per the National Health Policy, 2017, only 32,767 beds (64 *per cent* shortage) were available in the State, seriously impacting hospital functions, as it is the primary cause of denial of admission, cancellation of surgeries and delays in emergency admissions. There were 42 *per cent* and 49 *per cent* shortages of beds in the DHHs and CHCs of the State, respectively, as compared to IPHS norms. Due to shortage of beds, patients were being treated on the floors or in congested environment, by placing additional beds.

Human resources

The human resources, available in hospitals across the State, were not in consonance with the IPHS norms. The doctor to population ratio in Odisha was 1:1,622 against the World Health Organisation norm of 1:1,000. For staff nurses, the ratio was 1:3,829, against the norm of one nurse for 300 people. The overall vacancy of specialist doctors in the State was 49 *per cent*, as compared to the sanctioned strength, whereas it was 40 *per cent* for Medical Officers. In case of Staff Nurses/ Nursing Officers, 30 *per cent* posts were vacant.

The vacancy in the cadre of doctors (including specialists), was 40 *per cent* in DHHs, whereas it was 58 *per cent* in CHCs. There was a shortage of 28 *per cent* MBBS doctors in PHCs, which were the first point of contact of the rural people, to a qualified doctor in the public health system. Huge gap in availability of specialists in CHCs of the State, was noticed, as 58 *per cent* of sanctioned posts were vacant.

Shortage of human resources in MCHs, hampered medical education and research work, and compromised the quality of tertiary healthcare services.

Healthcare services

Community Health Centres were found deficient in providing specialised OPD services to the patients, due to absence of specialist doctors. Five out of the 14 test-checked CHCs, lacked all the prescribed specialised OPD services. Basic amenities like seating arrangements and toilet facilities, for OPD patients, were found inadequate in the test-checked hospitals.

IPD wards in DHHs and MCHs lacked central oxygen supply. In two test-checked MCHs, only 325 beds (42 *per cent*) had the facility for central oxygen supply, against the requirement of 775 IPD beds. There were considerable gaps related to the availability of in-patient services, as most of the test-checked DHHs failed to provide Psychiatry, Skin and VD, Dental and Trauma Care services.

Accident and Trauma Care Centres for strengthening and boosting the emergency services, were not available in four of the seven test-checked DHHs. The TCCs in other three DHHs, lacked infrastructure and manpower. Dedicated TCC for Pandit Raghunath Murmu Medical College and Hospital, Baripada had not been created and the equipment worth ₹3.04 crore, was lying idle.

There was a serious dearth of emergency services. None of the seven test-checked DHHs, had dedicated emergency services, equipped with mobile X-ray/ laboratory services, OT facilities, emergency beds and separate manpower. Emergency equipment such as ventilators, oxygen concentrators, *etc.*, supplied to the health facilities were found idle, due to non-provisioning of ancillary

infrastructure and equipment. The CHCs also lacked blood storage units to meet the emergency requirement, as nine of the 14 test-checked CHCs had no blood storage units.

Maternity and New-born Services

Significant deficiencies were observed in all three major components of maternity services (Antenatal care, Intra-partum care and postnatal care), despite the fact that the Maternal Mortality Ratio (136) and Infant Mortality Rate (36.3) in the State had remained behind the national average of 103 and 35.2, respectively. Also, the Neo-natal mortality rate of the State remained at 27, compared to the national average of 24.9.

Support and auxiliary services including diet, laundry, mortuary, *etc*., were also deficient, in terms of availability of infrastructure and equipment, as compared to the norms of IPHS.

Diagnostic services

The full range of Radiology services were not available in any of the test-checked DHHs/ CHCs. The DHHs of Bhadrak, Kandhamal and Nuapada were most deficient in terms of having radiology services. Prescribed pathology services for extending evidence based healthcare to the public, were underprovided in the test-checked hospitals, due to shortage of skilled manpower and essential equipment. Important investigations like cytology, bone marrow aspiration, brucellosis, *etc*., were not carried out in most of the test-checked DHHs.

Drugs and equipment

Government was not successful in providing an uninterrupted supply of essential drugs to patients in public healthcare facilities, in terms of its own prescribed essential/ critical drug list. There was a short supply of 53 *per cent* of the indented quantity of essential drugs and medical consumables to public health facilities, during FYs 2016-17 to 2021-22. Monitoring/ supervision of supply chain management of drugs and medical consumables was inadequate, leading to stock out and expiry of essential medicines. It was noticed that 6.07 crore units of essential drugs, valued ₹11.68 crore, had expired during FYs 2016-17 to 2021-22. The norms and parameters prescribed for storage of medicines, were also not followed for ensuring efficacy of procured medicines.

Hospitals were not fully equipped with essential equipment, in terms of IPHS/ National Medical Council norms. In test- checked DHHs, the shortfall in equipment ranged from 47 *per cent* to 57 *per cent*, compared to the IPHS norms. Test-checked CHCs and PHCs were also found lacking in essential equipment. Equipment and medical devices were lying idle/ non-functional, in hospitals, due to non-provisioning of the required infrastructure and manpower. Non-availability and idling of equipment, impacted the delivery of healthcare services in hospitals, as well as medical education in the MCHs.

Regulatory issues

Bio-medical waste management in the State was inadequate. About 10 to 50 *per cent* of the healthcare facilities, functioning in the State, had no authorisation from the State Pollution Control Board, during the period from FYs 2016-17 to 2021-22. Besides, 48 *per cent* of the healthcare facilities had defaulted in regular

submission of their annual reports to the SPCB. Equipment like autoclaves and shredders, costing ₹52.64 crore, supplied to the healthcare facilities for bio-medical waste management, were found idle, due to non-provisioning of ancillary civil infrastructure.

Administration of the Odisha Clinical Establishment (Control and Regulation) Act and Rules made thereunder, was deficient, as the clinical establishments were found functioning without valid registration. Inspection of clinical establishments by the Inspecting Authorities, was either absent or inadequate.

Implementation of Central and State sector health schemes

Implementation of the disease control programmes in the State, under NHM, suffered due to inadequate manpower, low spending efficiency *etc*., impacting programme outcomes adversely. The State suffered from shortage of human resources, in critical positions, at the district level, affecting successful implementation of the programmes. The activities approved in Programme Implementation Plans for implementation of various disease control programmes, were not carried out fully to achieve the desired goals/ targets set in the National Health Policy/ SDGs.

Implementation of the National Programme for Health Care of the Elderly, for providing dedicated comprehensive healthcare to the elderly people, was not adequate and efficient, despite availability of funds. Only 9 to 20 *per cent* of the available funds under the programme, were utilised, during FYs 2016-17 to 2021-22. Dedicated geriatric wards for treatment of the elderly people, were not available in five of the seven test-checked DHHs. Similarly, funds allocated under the National Tuberculosis Elimination Programme and National Leprosy Eradication Programme (NLEP) were not fully utilised, as there were unspent balances of ₹22.24 crore under these two programmes, as of March 2022.

Sustainable Development Goal

The Odisha State Indicator Framework (OSIF) was not fully aligned with the National Indicator Framework, for monitoring progress on Sustainable Development Goal 3 (SDG 3). Mapping of the schemes and the department, with the targets in the OSIF, was inadequate. Instances of non-provision of funds or low expenditure for schemes mapped to the goals, were also noticed. The Department had neither set the targets for the health indicators, for the districts, nor had it prepared any roadmap, for the districts, to achieve the SDG goals.

Recommendations:

1. ***State Government may take suitable steps to address the gaps in human resources in the health sector, as also to rationalise the manpower in hospitals across the State, based on appropriate criteria, such as patient load or population. A periodic review of the vacancies may be conducted in all hospitals, in order to ensure timely recruitment of doctors, nurses and paramedical staff.***
2. ***Hospitals may maintain records for absconding cases and analyse the reasons of absconding, and take appropriate action for addressing the shortcomings for delivering quality healthcare service to patients.***

3. ***State Government may draw up an action plan to prioritise the provisioning of most essential healthcare services such as emergency, trauma care services, etc. It may adopt and implement IPHS norms fully, in provisioning OPD, IPD and Emergency services, ensuring availability of essential equipment and human resources.***
4. ***State Government may ensure availability of round-the-clock accident and trauma care services, along with functional ICU facilities, for critically ill patients, requiring highly skilled lifesaving medical aid.***
5. ***Essential radiology and pathology services, as per IPHS, may be ensured in hospitals, in view of increasing reliance on diagnostics, for treatment of patients.***
6. ***OSMCL may put in place a real-time Inventory Management System, with deployment of Point-of-Sale Terminals, at all DDCs, to clearly establish the actual availability of stocks of medicines, at all the hospitals and PHCs, on a real-time basis, for use by both the officials of the Corporation, as well as the healthcare facilities. Besides, the system should also enable a two-way communication and/ or work flow system, to assess and communicate the requirements, in the event of medicines getting exhausted earlier than the estimated time, due to heavy demand, or in case of medicines being over-stocked, due to slow movement/ demand, etc.***
7. ***State Government may ensure availability of the full range of essential equipment, at all levels in hospitals. It may also ensure correlation between the availability of infrastructure, manpower and equipment, to avoid idling of medical equipment and medical devices.***
8. ***The Department and its field functionaries may maintain a database of the approved works and coordinate with the line departments to monitor execution of the works, for ensuring their completion and handing over the same to the user agencies, as per the schedule.***
9. ***State Government may ensure fully equipped SNCUs, as per the MNH toolkit and IPHS, for treating critically ill newborns, in district hospitals.***
10. ***State Government may enhance its health budget and expenditure for healthcare services, to ensure the availability of adequate and quality healthcare infrastructure and services.***
11. ***The Mission Director, NHM may ensure optimum utilisation of funds received under various National Health Programmes, through effective implementation and monitoring.***
12. ***State Government may review the manpower position relating to mental health professionals and fill up the vacancies there against, with a view to ensuring quality mental healthcare services to patients, under the programme.***
13. ***State Government 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, as per NHP and SDG.***

14. ***State Government may take effective steps for filling up the vacancies and implementing the activities under NLEP more efficiently, with focus on high-endemic districts to eliminate the disease from the State.***
15. ***State Government may intensify the programme related activities in high burden districts with continuous monitoring and critical evaluation, for eliminating malaria from the State.***
16. ***State Government may strengthen the monitoring mechanism for achieving the targets for screening of various diseases, so that effective and timely treatment can be provided.***
17. ***State Government may ensure strict adherence to the BMW Management Rules, in order to provide an infection-free environment in the hospitals.***
18. ***State Government may ensure construction of effluent treatment plants in all DHHs.***
19. ***State Government may ensure creation of the required infrastructure, before procurement of biomedical equipment, so that the procured equipment is made functional, for treatment of bio-waste.***
20. ***The Health and Family Welfare Department may strengthen the enforcement mechanism and ensure regular inspections, so that all the clinical establishments, functioning in the State, comply with the provisions of the Odisha Clinical Establishment (Control and Regulation) Act and Rules.***
21. ***The Department may initiate disciplinary action for the laxity by the clinical establishments which were not registered under the OCE Act, but were issued trade licenses.***
22. ***State Government may take early steps to implement the action points, outlined in the OSIF, such as the development of a dashboard, Odisha SDG Index, baseline report, etc., and strengthen the monitoring mechanism, at all levels, for achieving the SDG goals and targets.***