Executive summary

Why did we take up this audit?

The United Nations General Assembly adopted the resolution 'Transforming our world: the 2030 Agenda for Sustainable Development' on 25 September 2015. India is committed to 2030 Agenda and Sustainable Development Goals (SDGs). Sustainable Development Goal-3 (SDG-3) seeks to ensure health and well-being for all, at every stage of life. National Health Policy (NHP), 2017 envisages to strengthen the trust of the common man in the Public Healthcare System (PHS) and thus, a predictable, efficient, affordable and effective PHS, with a comprehensive package of services and products that meet immediate healthcare needs of most people is required. The Government of Uttar Pradesh has framed (July 2019) 'Sustainable Development Goals-Vision 2030' for the implementation of SDGs in the State.

Uttar Pradesh has 9,082 Government hospitals/dispensaries with 99,824 beds and 27,237 medical officers (including allopathic and AYUSH) as on March 2022. Uttar Pradesh has noticed improvement in estimates of various key health indicators measured under National Family Health Survey **(**NFHS)-5 (2019-21) as compared to NFHS-4 (2015-16). The per capita spending of State Government on health in Uttar Pradesh consistently increased during 2016-17 to 2021-22 from ₹ 669 to ₹ 995.

We have previously audited the public health sector in the State and presented the findings in various Reports to State Legislature. Recently, a Performance audit report on 'Hospital Management in Uttar Pradesh' was laid in the State legislature in December 2019. All these earlier reports had flagged the issues on compliance, implementation of various Government health schemes, outcome indicators of the State Government hospitals, *etc*. This Performance Audit on 'Public Health Infrastructure and Management of Health Services in Uttar Pradesh' was conducted for the period 2016-17 to 2021-22 to assess the adequacy of financial resources allocated, availability of health infrastructure as well as efficacy in the management of health services in the State.

What have we found?

State Government incurred expenditure of ₹ 1,11,929 crore on healthcare during the period 2016-17 to 2021-22, which also included expenditure out of fund received from GoI for various health sector schemes. Against the budget provisions of ₹ 1,43,610 crore of the State Government on health sector during 2016-22, utilisation of revenue budget was 82 *per cent* while 60 *per cent* of capital budget was utilised. State Government's healthcare expenditure increased every year during 2016-22 with compound annual growth rate of 9.65 *per cent*, however, its percentage to total budgetary expenditure as well as GSDP had fluctuating trend between 2016-17 to 2021-22. The healthcare expenditure as percentage of GSDP ranged between 1.10 *per cent* and 1.30 *per cent*, which is targeted under NHP, 2017 to be increased to 2.5 *per cent* of GDP at national level by the year 2025. Further, the expenditure on health sector constituted 4.20 *per cent* to 5.41 *per cent* of total budgetary expenditure of State Government during 2016-17 to 2021-22 which was much below than the target envisaged to increase health

spending to more than eight *per cent* of State budget by 2020 (as per NHP, 2017) and by 2022 (as per Fifteenth Finance Commission).

To meet the physical targets and achieve higher place among States, budget allocations were to be linked with the SDG 3 goal. Accordingly, the State Government made budget provisions of ₹18,253 crore during 2017-21 for programmes related to SDG 3 to cater to the need of achieving various targets under different health sector schemes. Out of this, ₹ 13,094 crore (72 *per cent*) was sanctioned by the State Government, however, even the sanctioned funds could not be utilised fully and the expenditure incurred during 2017-21 on programmes related to SDG 3 was ₹9,651 crore (74 *per cent*). Further, the accounting of healthcare expenditure was also not transparent, as substantial portion (22 *per cent*) of expenditure on healthcare was booked under Object Head 42- Other Expenditure.

Tertiary level hospitals (medical colleges) increased in the State by 94 *per cent* from 17 in 2016-17 to 33 in 2021-22. This included upgradation of 45 district hospitals (DHs), *viz*., district hospitals male (DHMs), district women hospitals (DWHs) and combined district hospitals (CDHs) to tertiary level hospitals. In case of other hospitals like Community Health Centres (CHCs), Primary Health Centres (PHCs) and Sub-Centres (SCs), there was slight increase in the number of hospitals ranging between 0.47 *per cent* and 1.34 *per cent* during the same period. In order to augment the healthcare in rural and urban areas, State Government had taken up the construction works for PHCs (122 works), CHCs (35 works), DHs (20 works) and autonomous medical colleges (28 works) during 2016-22 and 160 maternity and child hospital wings during 2012-13 to 2018-19. However, the construction works of GMCs, DHs, CHCs and PHCs were delayed up to 1,789 days due to slow pace of construction, land dispute, delayed release of fund, delayed submission of detailed estimates, *etc*., besides delays due to Covid-19 pandemic.

Indian Public Health Standards (IPHS) Guidelines of GoI are the benchmarks for quality expected from various components of public healthcare organisations. In order to improve quality of care and patient safety, Uttar Pradesh Sustainable Development Goals-Vision 2030 provides to ensure availability of human resources and equipment as per IPHS norms at health facility level. However, rural CHCs, PHCs and SCs, which are the cornerstone of rural health services, were in shortage ranging 50 *per cent*, 51 *per cent* and 44 *per cent* respectively as compared to IPHS Guidelines/State Government norms.

Further, the infrastructure in test-checked hospitals lacked maintenance as dampness and seepages were noticed in 53 *per cent* of test-checked healthcare facilities. Most of the test-checked SCs had dilapidated buildings. Patient registration counter was not available in 34 *per cent* of test-checked PHCs, though it was available in all test-checked CHCs, DHs and Government Medical Colleges (GMCs). Separate chambers for doctors were not available in the required number. Shortage of IPD wards/beds were noticed in DHs, CHCs and PHCs. Test-checked PHCs had unavailability of dressing/injection rooms (26 *per cent* PHCs), drinking water (29 *per cent* PHCs), separate toilets for male and female (21 *per cent* PHCs) and electricity (21 *per cent* PHCs).

Availability of line services, *viz*., OPD, IPD, Emergency, OT, Maternity, Imaging and Diagnostic and Pathology, in all 107 DHs in the State was ranging between 84 *per cent* (Imaging Diagnostics Services) and 100 *per cent* (OPD and IPD).

Further, availability of Major IPD services, *viz*., General Medicine, Paediatrics, General Surgery, Orthopaedics and Obstetrics and gynaecology, were ranging between 81 *per cent* (General Surgery in CDH) and 100 *per cent* (Obstetrics and gynaecology services in DWH). Test-checked DHs also lacked some essential facilities for providing maternity services, like eclampsia rooms and dirty utility rooms which were not available in one-third of test-checked nine DHs providing maternity services. Several type of diagnostic pathological services was not provided by these hospitals.

Support services, viz., Oxygen, dietary, laundry, bio-medical waste management and cleaning were available in 99 *per cent* (dietary service) to 100 *per cent* (Oxygen service, laundry service, bio-medical waste management services and cleaning services) of 106 DHs in the State. Dietary services were being provided by all the test-checked hospitals. Laundry services were available in all test-checked hospitals, however, maintenance of records and monitoring of laundry services were inadequate.

Out of 909 CHCs for which data was made available to audit, services of General Medicine were available in 729 CHCs (80 *per cent*) as on March 2022. However, Obstetrics and Gynaecology was available in 480 CHCs (53 *per cent*) followed by Pediatrics in 373 CHCs (41 *per cent*) and General Surgery in 287 CHCs (32 *per cent*) as of March 2022. In test checked 19 CHCs, general surgery (IPD) was not available in 58 *per cent* of CHCs. In case of 38 test-checked PHCs, 45 *per cent* were not providing IPD services whereas in remaining 55 *per cent*, only day care services were being provided.

Patient load in test-checked GMCs, DHs and CHCs during 2016-20 was higher than the national average of 27 OPD patients per doctor in a day in a district hospital. Further, average patient load on registration counter during 2016-22 was 587 patients per day per registration counter in DHMs followed by 238 in CDHs.

State Government was providing free ambulance services to the patients in medical emergencies through private service operator wherein delays in response time as well as inconsistencies in records for operations of ambulances services were noticed.

Standard operating procedure for cleaning services was not available in four (25 *per cent*) out of 16 test-checked DHs and both the test-checked GMCs. Only 46 *per cent* test-checked hospitals maintained the pest and rodent control records. Seventy-one *per cent* test-checked healthcare facilities were without mandatory authorisation from the State Pollution Control Board for handling bio-medical waste under the Bio-Medical Waste Management Rules, 2016. None of the test-checked hospitals were registered under Clinical Establishments (Registration and Regulation) Act, 2010. Ten out of 16 test-checked DHs and both GMCs were equipped with the X-ray machines, however, four DHs and both GMCs did not have Atomic Energy Regulatory Board (AERB) license for operation of X-ray machines. Further, only two DHs out of 75 test-checked DHs, CHCs, PHCs and GMCs had 'no objection certificate' from Chief Fire Officer.

State Government established (October 2017) Uttar Pradesh Medical Supplies Corporation Limited (UPMSCL) for centralised procurements and supplies of drugs, consumables and equipment in the State. However, UPMSCL could not procure demanded drugs adequately. Out of 66 essential drugs sampled for test-

check in audit of GMCs, 41 *per cent* drugs in GMC, Ambedkar Nagar and 64 to 68 *per cent* drugs in GMC, Meerut were not available in rate contract of drugs during 2018-21. In case of 16 test-checked DHs, only three DWHs (19 *per cent*) at Jalaun, Kanpur Nagar and Saharanpur had all the selected drugs in different spells. Against the UPMSCL Drug Procurement Policy, drugs amounting to ₹ 46.90 crore having shelf life of less than 80 *per cent* and imported drugs/vaccines amounting to ₹ 2.18 crore with less than 60 *per cent* shelf life were accepted from suppliers. Further, drugs valuing ₹ 27.06 crore got expired in the warehouses of UPMSCL during 2019-22 mainly due to low shelf life of drugs, refusal of drugs by consignee warehouses due to lack of space, no demand, less consumption of drugs due to decrease in general patients during Covid-19 lockdown, *etc*. Many modules of Drugs and Vaccines Distribution Management System (DVDMS) software platform were not being used to fully automate supply chain management of drugs.

UPMSCL failed to prepare Essential Equipment List which was to be provided to user departments for confirmation of their requirements and finalisation of rate contracts. The availability of OT equipment in test-checked DHs ranged between 41 *per cent* and 94 *per cent*. Similarly, CHCs were lacking in laboratory and radiology equipment, though CHC, Chinhat, Lucknow had all radiology equipment. Test-checked GMCs, which are referral tertiary hospitals, had department wise shortfall of IPD equipment ranged between 13 *per cent* and 22 *per cent*. However, audit also noticed idle equipment in test-checked hospitals mainly due to unavailability of human resources for their operation.

Public healthcare in the State had shortage of doctors (38 *per cent*), nurses (46 *per cent*) and paramedics (28 *per cent*). At test-checked hospitals level, audit noticed both shortage as well as excess deployment of human resources. Thus, there was an urgent need to rationalise the asymmetric distribution of human resources in healthcare facilities. Further, the recruitment processes were delayed due to incomplete proposals sent by the Government to recruitment agencies as well as longer time taken by the recruitment agencies.

The implementation of centrally sponsored health schemes, *viz*., *Janani Suraksha Yojana*, National Mental Health Programme, National Tobacco Control Programme, National Programme for Control of Blindness and Visual Impairment and National Programme for Health Care of the Elderly witnessed less utilisation of budgeted provisions. The payment of cash assistance to pregnant women under *Janani Suraksha Yojana* in test-checked districts ranged between 51 *per cent* and 89 *per cent* of institutional deliveries along with instances of double payments to the same beneficiaries. In violation of the instructions, up to 88 *per* cent pregnant women were discharged from the hospitals within stipulated 48 hours of deliveries.

Out of 131 cities in 75 districts of Uttar Pradesh covered under National Urban Health Mission, GIS mapping of 91 cities had been done leaving 40 cities (31 *per cent*) without mapping till February 2023. Against the total number of 4,741 targeted public health institutions during 2021-22, only 55 were certified under National Quality Assurance Programme in the State.

As per SDG 3 progress report 2022 – Uttar Pradesh, values of only 27 indicators were available against value of 38 indicators available at national level. State Government had set a target to achieve Maternal Mortality Rate (MMR) to 140 per lakh live births by 2020 as per Vision 2030. However, as per SRS 2018-20 (published by Registrar General of India in November 2022), MMR was 167 per

lakh live births in Uttar Pradesh against the national average of 97 per lakh live births. There was improvement from NFHS 4 (2015-16) to NFHS 5 (2019-21) under indicators, *viz*., institutional deliveries, neo-natal mortality rate, infant mortality rate and under 5 mortality rate, however, the State was behind all-India average of these indicators.

What do we recommend?

The State Government should:

1. ***fix human resources norms for below and above 100 bedded district hospitals and sub-centres;***
2. ***in consultation with the recruitment agencies expedite the recruitment and fill up posts of doctors, nurses and paramedics to mitigate huge shortage in these cadres;***
3. ***remove region wise imbalance in deployment of doctors;***
4. ***ensure that required facilities and services for OPD, IPD, emergency, diagnostic as prescribed under IPHS norms for different health institutions are made available to the beneficiaries so that overall healthcare experience is improved;***
5. ***develop online mechanism by integrating all the blood banks to avoid expiry of blood components;***
6. ***ensure adherence to cleanliness in the healthcare facilities as envisaged under Swachhta Guidelines for Public Health Facilities and IPHS;***
7. ***ensure that the procurement agency (UPMSCL) finalises the rate contracts of Essential Drugs in a time bound manner by strictly following the laid down procedure of contract management;***
8. ***ensure that the hospitals keep a close vigil on the availability of essential drugs in their stores to avoid out of pocket expenditure by the patients;***
9. ***fix the responsibility for expiration of drugs in the central warehouse as well as in the district hospitals;***
10. ***ensure availability of consumables in each level of hospital;***
11. ***ensure that DVDMS software is made fully functional for supply chain management of drugs;***
12. ***prepare the list of Essential Equipment and implement online monitoring of demand and supply of equipment in various healthcare facilities;***
13. ***review the inter-hospital availability of equipment required in government hospitals;***
14. ***ensure training of manpower for operation and maintenance of equipment installed in hospitals;***
15. ***implement the recommendations of the expert committee relating to availability of laboratory equipment in CHCs;***
16. ***fix norms for the number of beds for district hospitals and number of sub-centres per PHC;***

17. ***construct CHCs/PHCs/SCs as per norms and expedite the under construction healthcare institution by removing bottlenecks in construction process in order to provide more hospitals/ beds to the public;***
18. ***fix the responsibility for slow pace of construction works;***
19. ***make completed hospitals/ buildings operational by providing infrastructure and human resources;***
20. ***apart from new constructions, focus on the maintenance of hospital and residential buildings;***
21. ***ensure availability of infrastructure, such as doctor's chamber, drug distribution counter, staff quarters and maintenance of hospital building and its premises as per IPHS norms;***
22. ***follow the recommendations of the National Health Policy, 2017 to increase healthcare spending to more than eight per cent of the budget and 2.5 per cent of the GSDP;***
23. ***review the healthcare ecosystem in the State to identify the constraints/factors adversely impacting the absorptive capacity of funds, and make concerted efforts for their resolution;***
24. ***review indiscriminate use of Object Head-42 and ensure that all expenditure are in future booked under appropriate object heads for transparency in financial reporting;***
25. ***monitor effectively implementation of Centrally Sponsored health schemes to achieve the targeted objectives and utilize the available fund optimally;***
26. ***map all the cities in the State to get information regarding all healthcare facilities available and increase the number of UCHCs and UPHCs as per norm to provide healthcare in urban slum areas;***
27. ***ensure availability of adequate fire safety measures in case of short circuits and fire hazards especially in ICUs;***
28. ***ensure that all utilities generating bio-medical waste comply with the provisions under Bio-Medical Waste Management Rules, 2016 and take strict action against healthcare facilities violating these Rules;***
29. ***ensure hygiene and prevent access of stray animals in the hospitals premises;***
30. ***ensure adherence of various regulations, viz., Clinical Establishments Act, radiation safety, etc., by the State Government hospitals;***
31. ***utilise the budgeted provisions to achieve the SDG goal by 2030;***
32. ***measure the value of all indicators in order to monitor the performance of the State in achievement of the SDG; and***
33. ***ensure adherence to the roadmap framed in 'Uttar Pradesh Sustainable Development Goals-Vision 2030' to achieve the envisaged SDG targets.***