

Chapter-1

Introduction

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Health is a vital indicator of human development which is a basic ingredient of economic and social development. In India, the right to health care and protection has been recognized and considered a priority.

The main objective of Uttarakhand Medical Health and Family Welfare (MH&FW) Department is to improve the health status and quality of life of its people, by focusing on health issues with the objective of reducing disease burden.

1.1 Health services

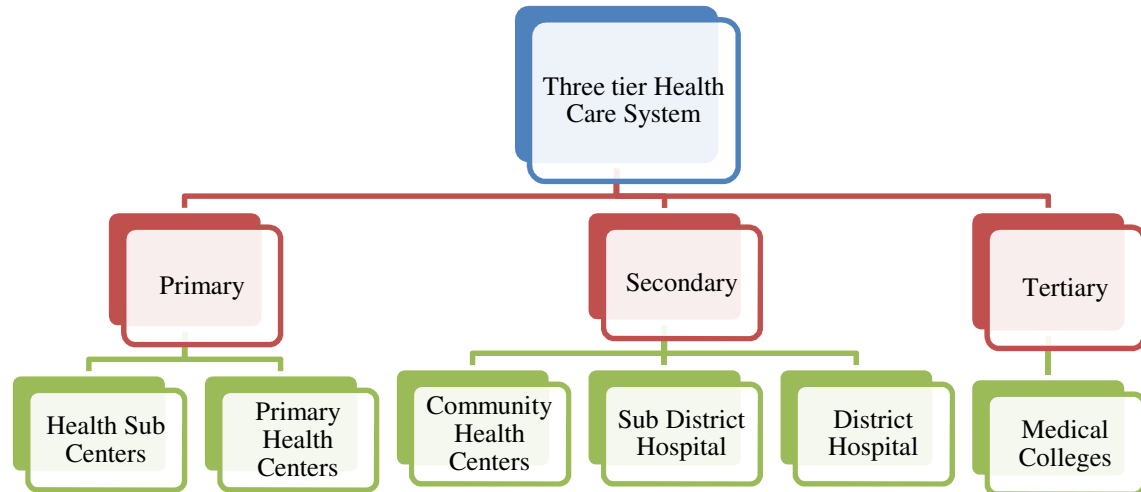
Health services provided by the hospitals can broadly be divided in the categories viz., Line services, support services and Auxiliary services as shown below:

<p style="text-align: center;">Line services</p> <ol style="list-style-type: none">i. Outdoor patient departmentii. Indoor patient departmentiii. Emergency Servicesiv. Super specialty (OT, ICU)v. Maternityvi. Blood bankvii. Diagnostic services	<p style="text-align: center;">Support services</p> <ol style="list-style-type: none">i. Oxygen Servicesii. Dietary serviceiii. Laundry serviceiv. Biomedical waste managementv. Ambulance servicevi. Mortuary service
<p style="text-align: center;">Auxiliary services</p> <ol style="list-style-type: none">i. Patient safety facilitiesii. Patient registrationiii. Grievance / complaint redressaliv. Stores	<p style="text-align: center;">Resource Management</p> <ol style="list-style-type: none">i. Building Infrastructureii. Human Resourceiii. Drugs and Consumablesiv. Equipment

All public health services depend on the presence of basic infrastructure including availability of human resources. As per National Health Policy, 2017, the primary objective of it is to improve health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public sector. The policy also recognises the pivotal importance of Sustainable Development Goals (SDG) to ensure healthy lives and promote wellbeing for all at all ages. At the global level, the Sustainable Development Agenda aims to ensure healthy lives and promote well-being for all at all ages by 2030 as per Sustainable Development Goal (SDG) 3. Further, Indian Public Health Standards (IPHS) are a set of uniform standards envisaged to improve the quality of health care delivery in the country. Further, IPHS norms were revised in 2012 and 2022 keeping in view the changing protocols of the existing programmes and introduction of new programmes especially for Non-Communicable Diseases.

1.2 Overview of healthcare facilities in the State

In the State, public health care is structured into three levels for providing primary care, secondary care and tertiary care as indicated below:



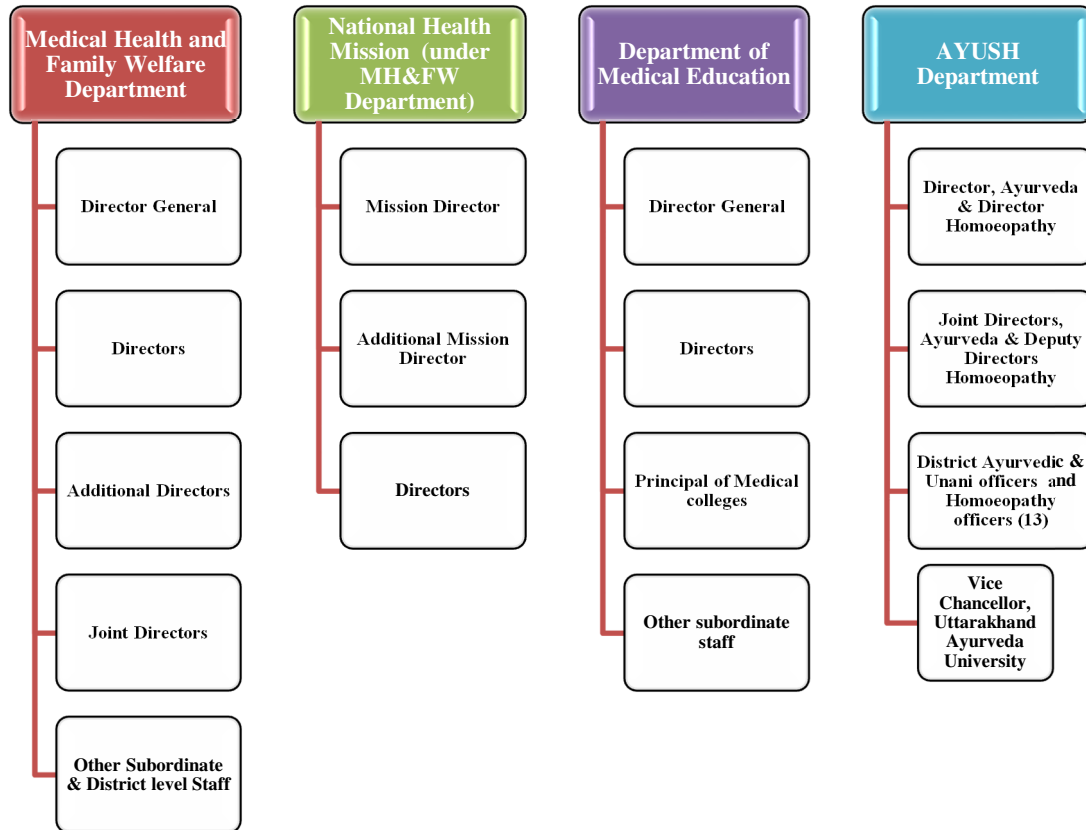
Health Sub-Centres (HSCs) and Primary Health Centres (PHCs) are primary level healthcare units which provide initial healthcare services to the people. Patients requiring more serious health care attention are referred to the second tier of the health care system consisting of Community Health Centres (CHCs), Sub-District Hospitals¹ and District Hospitals, established in each district for providing preventive, promotive and curative healthcare services to the population. A tertiary referral hospital is a hospital that provides tertiary care, which is health care from specialists in a large hospital after referral from primary care and secondary care. Tertiary health care is provided by the hospitals associated with the Government Medical Colleges (GMCs).

State Government Health Institutes in Uttarakhand include 13 district Hospitals, 20 sub-district Hospitals, 79 CHCs, 578 PHCs, 1,904 sub centres, four Medical Colleges, seven Nursing Colleges, two General Nursing and Midwifery (GNM) Training Schools and five Auxiliary Nurse Midwife (ANM) Training School. One All India Institute of Medical Sciences is also operational in the State.

1.3 Organisational Set Up

The organisational set up of Medical Health and Family Welfare Department (MH&FW), National Health Mission, Medical Education and Ayush Department is given in the organogram.

¹ Not established in Uttarkashi, Rudraprayag and Bageshwar.



The head of health services at the district level is Chief Medical Officers (CMOs), while the District Hospitals are headed by Principal Medical Officers (PMOs)/ Medical Superintendents (MSs) / Senior Medical Officers (SMOs). Community Health Centres (CHCs) and Primary Health Centres (PHCs) are headed by SMOs and MOs in-charge respectively.

Department of Medical Education Uttarakhand, under its jurisdiction, has four Medical Colleges, seven Nursing Colleges, two General Nursing and Midwifery (GNM) Training Schools and five Auxiliary Nurse Midwife (ANM) Training Schools. There are two Food/ Drug/ Chemical laboratories under the control of the Food Safety and Drug Administration, Uttarakhand.

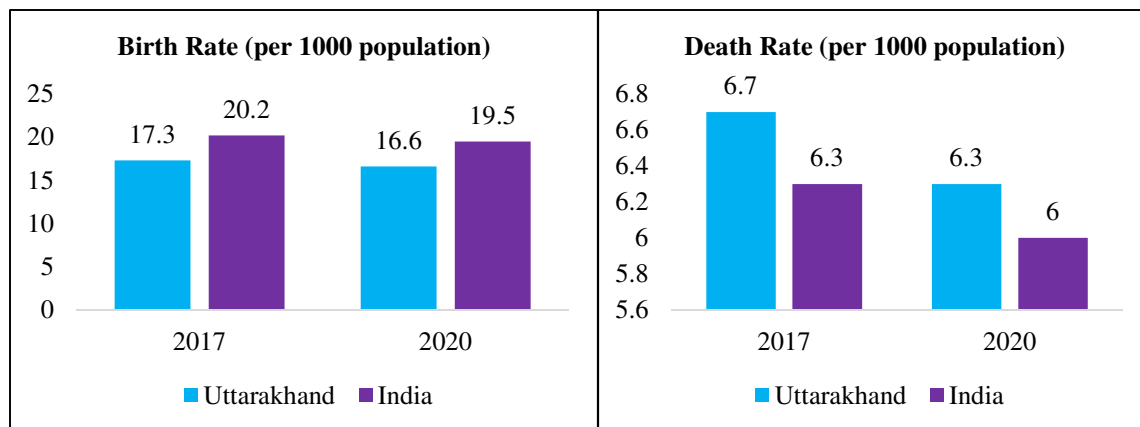
In regard to AYUSH Department, there are 551 Ayurveda & Unani and 111 Homoeopathy Government Dispensaries/Hospitals, 14 Ayurveda and seven Homoeopathy Wings in Community Health Centres (CHCs), 66 Ayurveda and 21 Homoeopathy Wings in Primary Health Centres (PHCs), 22 Ayurveda and 13 Homoeopathy Wings in District Hospitals (Male & Female), 160 AYUSH wings in State Allopathic Dispensaries including APHC and Nine Dermatology/Reproductive and Child Health (RCH) Centres of Homoeopathy.

The National Health Mission is headed by the Mission Director, which has 13 District Health Societies (DHS) one in each district of the State. The Mission implements Centrally Sponsored Schemes through DHs, CHCs and PHCs.

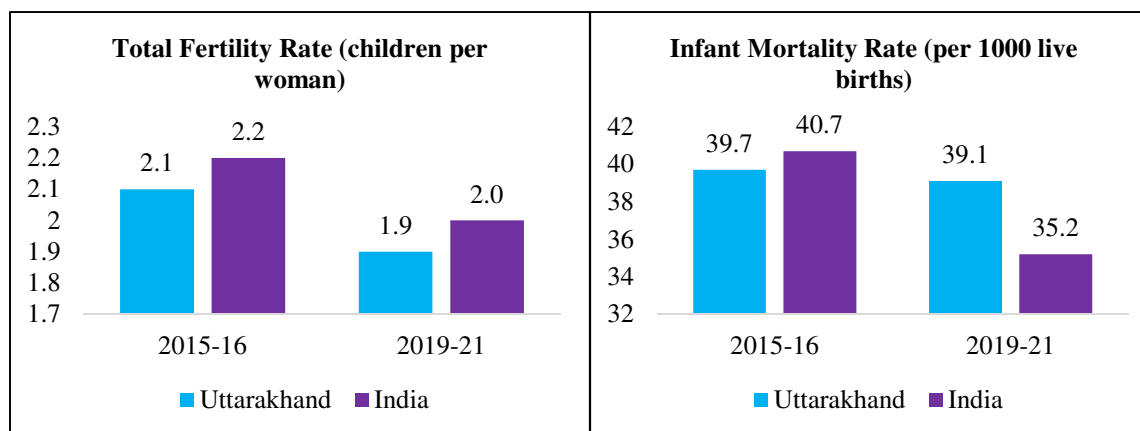
1.4 Status of Health Indicators in the State

The healthcare services in a state can be evaluated on the basis of the achievement against benchmark of health indicators. The status of a few important health indicators of Uttarakhand vis-a-vis National average are given below:

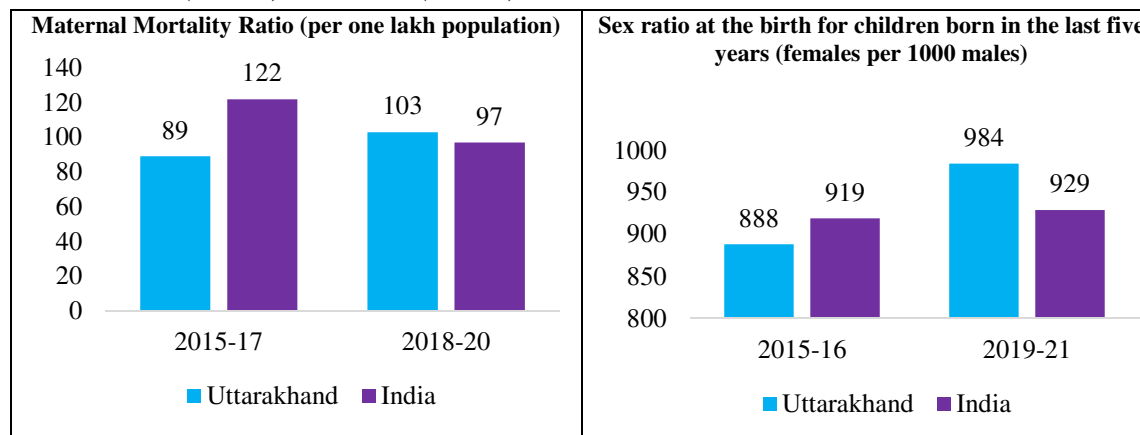
Chart-1.1: Health Indicators in the State



Source: Health and Family Welfare Statistics in India (for 2017 figures) and Sample Registration System bulletin May 2022 (for 2020 figures)



Source: NFHS-4 (2015-16) and NFHS-5 (2019-21)



Source: Sample Registration System bulletin for MMR (2015-17 & 2018-20) and NFHS-4 (2015-16) NFHS-5 (2019-21) for child sex ratio.

It is observed that the birth rate (in per 1,000) in the State has decreased from 17.3 (2017) to 16.6 (2020), which is less than the national figures. Death rate in the State also decreased from 6.7 (2017) to 6.3 (2020) which is above the national figures. In case of total fertility rate, it has decreased from 2.1 (2015-16) to 1.9 (children per woman) in 2019-21, which is lower than the national figures. Infant mortality rate also decreased from 39.7 (2015-16) to 39.1 (2019-21) but still more than the national Infant mortality rate.

The Maternal Mortality Rate of the State has increased from 89 (2015-17) to 103 (2018-20) and exceeds the national figure in 2018-20. Sex Ratio at the birth for children born in last five years (Females per 1,000 Males) in the State increased from 888 (2015-16) to 984 (2019-20) which is above the national average.

1.5 Uttarakhand Health indicators compared with National Health Indicators as per National Family Health Survey-5 (NFHS-5)

The National Family Health Survey – 4 (NFHS) conducted in 2015-16 and NFHS-5 conducted in 2019-21, provides information on population, health, and nutrition for India and each state/union territory (UT). Some of the important health indicators of State of Uttarakhand are given below:

Table-1.1: Uttarakhand Health Indicators as per NFHS-5

Indicator	NFHS -4 (2015-16)		NFHS-5 (2019-21)	
	U'khand	India	U'khand	India
Sex ratio of the total population (females per 1,000 males)	1,015	991	1,016	1,020
Sex ratio at birth for children born in the last five years (females per 1,000 males)	888	919	984	929
Total fertility rate (children per woman)	2.1	2.2	1.9	2.0
Neonatal mortality rate (NNMR)	27.9	29.5	32.4	24.9
Infant mortality rate (IMR)	39.7	40.7	39.1	35.2
Under-five mortality rate (U5MR)	46.5	49.7	45.6	41.9
Mothers who had an antenatal check-up in the first trimester (per cent)	53.5	58.6	68.8	70.0
Mothers who had at least four antenatal care visits (per cent)	30.9	51.2	61.8	58.1
Mothers whose last birth was protected against neonatal tetanus ² (per cent)	91.4	89.0	93.6	92.0
Mothers who consumed iron folic acid for 100 days or more when they were pregnant (per cent)	24.9	30.3	46.6	44.1
Mothers who consumed iron folic acid for 180 days or more when they were pregnant (per cent)	7.2	14.4	25.0	26.0
Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (per cent)	93.4	89.3	97.1	95.9

² Includes mothers with two injections during the pregnancy for their last birth, or two or more at any time prior to the last birth.

Indicator	NFHS -4 (2015-16)		NFHS-5 (2019-21)	
	U'khand	India	U'khand	India
Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within two days of delivery (<i>per cent</i>)	54.8	62.4	78	78.0
Average out-of-pocket expenditure per delivery in a public health facility (₹)	2,618	3,197	3,343	2,916
Children born at home who were taken to a health facility for a check-up within 24 hours of birth (<i>per cent</i>)	2.4	2.5	3.1	4.2
Children who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within two days of delivery (<i>per cent</i>)	NA	NA	78.9	79.1
Institutional births (<i>per cent</i>)	68.6	78.9	83.2	88.6
Institutional births in public facility (<i>per cent</i>)	43.8	52.1	53.3	61.9
Home births that were conducted by skilled health personnel ³ (<i>per cent</i>)	4.6	4.3	3.4	3.2
Births attended by skilled health personnel (<i>per cent</i>)	71.2	81.4	83.7	89.4
Births delivered by caesarean section (<i>per cent</i>)	13.1	17.2	20.4	21.5
Births in a private health facility that were delivered by caesarean section (<i>per cent</i>)	36.4	40.9	43.3	47.4
Births in a public health facility that were delivered by caesarean section (<i>per cent</i>)	9.3	11.9	14	14.3

Source: NFHS; *Note State health indicators, which have been shaded green above have improved.

Health indicators in NFHS-5 (2019-21) of the State have mostly improved from NFHS-4, while some are better than national indicators. Sex ratio of total population has improved from 1,015 to 1,016 but it remains below national average of 1,020. Sex ratio at birth for children born in the last five years had improved (984) in the state as compared to National average (929).

There has been improvement in - Under-five mortality rate (U5MR), infant mortality rate, antenatal check-ups, use of iron and folic acid by pregnant women, registered pregnancies for which the mother received a mother and Child Protection (MCP) card, postnatal care and institutional births in public facility in Uttarakhand. On the other hand, Neonatal mortality rate (NNMR) has increased.

There has been a decline in mothers whose last birth was protected against neonatal tetanus and increase in average out-of-pocket expenditure per delivery in a public health facility in the State.

1.6 Audit Objectives

National Health Policy (NHP) 2017, builds on the progress made in 15 years since the last NHP came in 2002. The context had changed in four major ways. First, although maternal and child mortality have rapidly declined, there is a growing burden on account of

³ Doctor/nurse/LHV/ANM/midwife/other health personnel.

non communicable diseases and some infectious diseases. The second important change is the emergence of a robust healthcare industry estimated to be growing at double digit. The third change is the growing incidences of catastrophic expenditure due to health care costs, which are presently estimated to be one of the major contributors to poverty. Fourth, rising economic growth enables enhanced fiscal capacity. Therefore, the new health policy was adopted to respond to these contextual changes. The primary aim of the NHP 2017 is to inform, clarify, strengthen and prioritize the role of the Government in shaping health systems in all its dimensions.

Considering the goals laid down in the NHP 2017 and experience in COVID-19 pandemic, it has become crucial to assess the adequacy of financial resources, availability of health infrastructure, manpower, machinery and equipment in the health institutions as well as efficacy in the management of health services in the State through existing policy interventions and scope for further improvement. Thus, to ensure timely and systematic corrections, performance audit on Public Health Infrastructure and Management of Health Services in the state of Uttarakhand was taken up with the following objectives. The objective of the Performance Audit (PA) is to provide a holistic view of the Health Care Sector in the State i.e., a macro picture using State level information and data and a micro picture arising from detailed audit analysis/ findings on maintenance of infrastructure and delivery of health care services.

The objectives of the Performance Audit (PA) are to :

- *assess the adequacy of the funding for Health care;*
- *assess the availability and management of health care infrastructure;*
- *assess the availability of drugs, medicines, equipment and other consumables;*
- *assess the availability of the necessary human resource at all levels e.g. doctors, nursing, para medics etc.*
- *examine the adequacy and effectiveness of the regulatory mechanisms for ensuring that quality health care services are provided in the public/ private health care institutions/ practitioners;*
- *assess whether State spending on health has improved the health and wellbeing conditions of the people as per SDG3; and*
- *examine the funding and spending of various schemes of the Government of India.*

1.7 Audit Scope and Methodology

The audit has been conducted for the period 2016-21. Wherever feasible, the data has been updated up to the years 2021-22. The audit sample is described below.

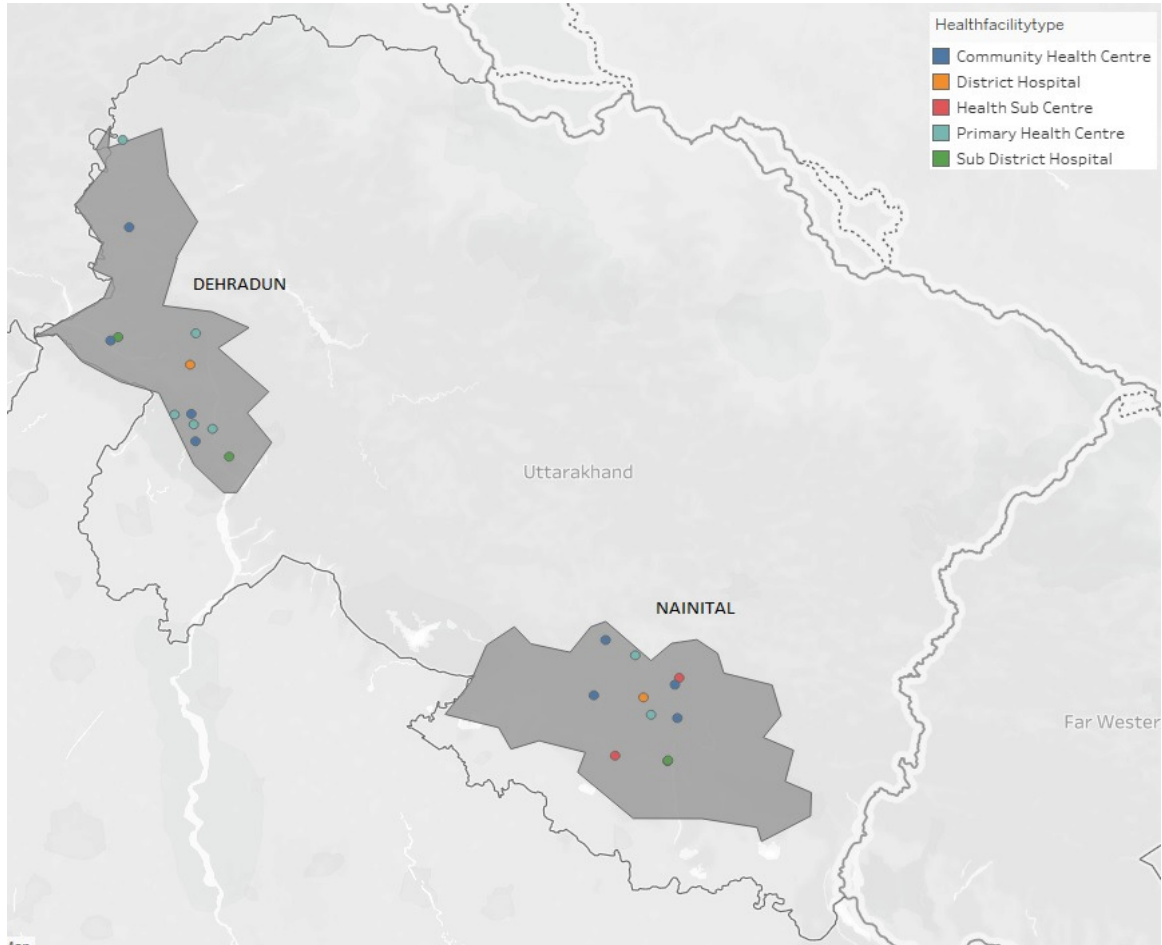


The details of selected Health Institutions of Kumaon and Gharwal districts are given in (**Appendix-1.1**). Besides, some of the information in the report are data based. The information in respect of Manpower, Line services, Equipments and Drugs for all districts were collected from the office of the Director General Health, Uttarakhand and respective District Hospitals. Further, a survey of 170 Out-patient department (OPD) patients (20 patients per Government Medical College; 15 patients per DH; 10 patients per SDH; 10 patients per CHC, five patients per PHC), selected on random basis, was conducted during performance audit to get feedback from patients' satisfaction. The result of the survey is given in Chapters 3 (Para no 3.1.9).

An Entry Conference was held on 26 November 2021 with Additional Secretary, Medical Health and Medical Education department; Director General, Medical Health and Family Welfare (MH&FW), Director, Ayurveda; Dy. Director, Homeopathy; and Joint Director, Government Medical College, Dehradun wherein audit objectives, audit criteria, audit scope and methodology were discussed. The Exit conference to discuss the draft audit observations was held on 03 November 2022 with Secretary- In -Charge, MH&FW and Medical Education Department and Secretary, AYUSH and AYUSH Education, Government of Uttarakhand.

The draft report was issued to the concerned departments on 24 August 2022 and replies were received on 03 November 2022 which have been incorporated at appropriate places in this report. The views expressed by the concerned officials during the exit conference have also been included wherever necessary. An updated and revised draft performance report was again issued to the State Government Departments in September 2023 to seek their views/inputs. However, no response had been received till December 2023 despite the reminder given in October 2023.

Districts for selection of field units in Uttarakhand are depicted on the map below:



1.8 Audit Criteria

Criteria adopted for audit include:

- National Health Policy 2017;
- Sustainable Development Goals;
- MCI Act, 1956 replaced by National Medical Commission in 2019;
- Indian Public Health Standards 2012;
- Professional Conduct, Etiquette and Ethics Regulation 2002;
- Clinical Establishment Act, 2010;
- Drugs & Cosmetics Act, 1940;

- Pharmacy Act, 1948 & Pharmacy Practice Regulations, 2015;
- Regulatory Mechanism for AYUSH;
- The National Commission for Indian System of Medicine Act, 2020;
- The National Commission for Homeopathy Act, 2020;
- The Indian Nursing Council Act, 1947;
- Bio Medical Waste Management Rules, 2016;
- National Accreditation Board for Hospitals and Healthcare Providers accreditation programmes for various Health care providers such as Allopathic Hospitals;
- Atomic Energy (Radiation Protection) Rules, 2004;
- WHO Norms;
- Assessor's Guidebook for Quality Assurance in Government Healthcare Centres published by MoH&FW in 2013 and 2014;
- Uttarakhand Procurement Act, 2008 & 2017;
- Manual, Orders, Circulars and Guidelines issued by GoI and GoU from time to time;
- Framework for Implementation of Schemes issued by GoI; and NITI Aayog Reports;
- The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (COTPA);
- The Maintenance and Welfare of Parents and Senior Citizens Act, 2007;
- Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994;
- Maternal and New Born Health toolkit;
- Operational guidelines of NMHP, NPHCE, NTCP, NPCB, RNTCP, NUHM, Community Process (ASHA), Kayakalp, Immunization, Family Planning/Family Welfare scheme and Health & Wellness Centre programmes/Schemes;
- Ayush Policy, 2018;
- Uttarakhand Drugs Procurement Policy, 2015, revised in 2019;
- Uttarakhand Fire & Emergency Service, Fire Prevention and Fire Safety Act, 2016;
- Indian Medicine Council (MCI) Regulations, 2016;
- Compulsory Aboriation Care Training and Service Delivery Guidelines;
- Comprehensive Primary Health Care Guidelines.

1.9 Consideration of Ayushman Bharat in this report

Ayushman Bharat (AB), the flagship health scheme of the Government of India, was launched in September 2018 to achieve Universal Health Coverage as recommended in the National Health Policy, 2017. AB adopts a continuum of care approach, comprising of two inter-related components, which are:

Health and Wellness Centres (HWCs)

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

Pradhan Mantri Jan Arogya Yojana (PMJAY)

- Aims to provide a cover of ₹ 5 lakh per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India.
- Over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits.
- Provides cashless access to health care services for the beneficiary at the point of service, that is, the hospital.
- Benefits of the scheme are portable across the country i.e., a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
- Services include approximately 1,393 procedures covering all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician's fees, room charges, surgeon charges, OT, and ICU charges etc.
- Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

An all-India Performance Audit of PMJAY was conducted for the period up to March 2021 and the findings of the said audit have been presented as CAG's Performance Audit Report on Ayushman Bharat- PMJAY for the year ended March 2021 (Union Report No 11 of 2023). In the current report, we have included findings related to Health & Wellness Centres in a separate chapter and a sampling of CHCs has been done based on the highest number of Ayushman Bharat card holders.

Further, as per the information provided by the State Health Authority, a total of 45.73 lakh beneficiaries are registered till March 2023 and 6.59 lakh beneficiaries have been treated/benefitted under this scheme during the period 2018-19 to 2022-23.

1.10 Audit Findings

Information/records for the PA for the period 2016-17 to 2020-21 was sought from October 2021 to March 2022. The audit observations noticed are given in succeeding chapters:

Chapter-2	Human Resource
Chapter-3	Healthcare services
Chapter-4	Availability of Drugs, Equipment and other Consumables
Chapter-5	Healthcare Infrastructure
Chapter-6	Financial Management
Chapter-7	Implementation of Centrally Sponsored Schemes
Chapter-8	Adequacy and effectiveness of the regulatory mechanisms
Chapter-9	Sustainable Development Goal – 3

