

**Chapter I**  
**Introduction and Audit**  
**Framework**

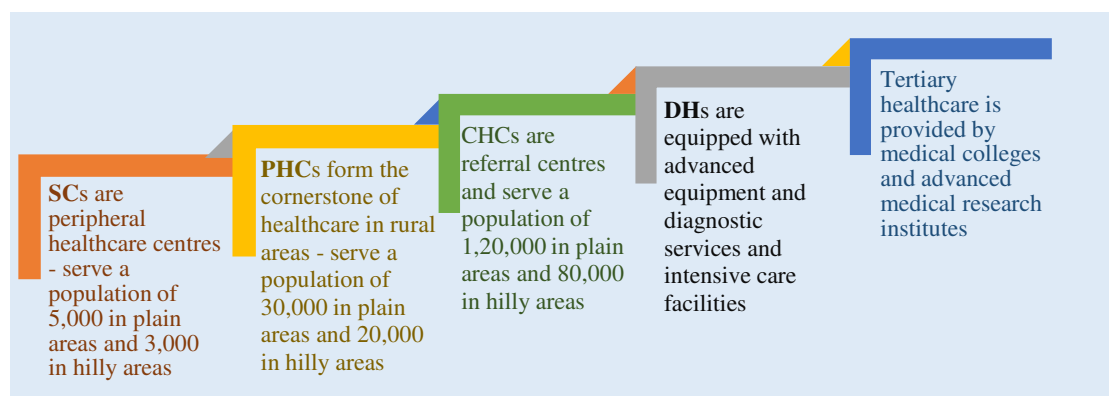


# Chapter-I: Introduction and Audit Framework

## 1.1 Introduction

Public healthcare delivery system in India is organised at three levels – primary, secondary and tertiary. The vast network of Sub-Centres (SCs), Primary Health Centres (PHCs) and Community Health Centres (CHCs) form the primary tier to serve rural population. These health centres provide and promote preventive health care and related services like immunisation, epidemic diagnosis, childbirth and maternal care, family welfare, *etc.* District Hospitals (DHs) serve as the secondary tier for rural population and as primary tier for the urban population. These hospitals handle treatment and management of diseases or medical conditions that require specialised care. Tertiary healthcare involves providing advanced and super-specialty services and is provided by medical institutions in urban areas, which are well equipped with sophisticated diagnostic and investigative facilities. The ascending levels of healthcare facilities are shown in the Chart given below:

Chart-1.1: Levels of Healthcare Facilities



## 1.2 Healthcare Services at District Hospitals

Sikkim had a population of 6.11 lakh (approx.) as per Census 2011 with a total area of 7,096 sq. km. It became a part of the Indian Union on 16 May 1975. To cater to the healthcare services of its citizens at different levels, the State Government established four District Hospitals (DHs) in its four districts<sup>1</sup>, two Community Health Centres (CHCs), 24 Primary Health Centres (PHCs), 147 Primary Health Sub Centres (PHSCs), one State Referral Hospital<sup>2</sup> and one Medical College (Public Private Partnership).

## 1.3 Overview of Public Healthcare Facilities in Sikkim

The achievement of the healthcare services in a State is evaluated based on the benchmark of health indicators. The status of some important health indicators of Sikkim *vis-à-vis* National average are shown in the table below:

<sup>1</sup> (i) Singtam DH (East District), (ii) Mangan DH (North District), (iii) Namchi DH (South District) and (iv) Gyalshing DH (West District) - one district hospital for each district

<sup>2</sup> New STNM Hospital, Sochaythang, Gangtok

Table 1.1: Health Indicators of Sikkim

Sl. No.	Health Indicators	Sikkim		India	
		2012	2017	2012	2017
1.	Birth Rate ( in per cent)	17.2	16.4	21.6	20.2
2.	Death Rate (in per cent)	5.4	4.5	7.0	7.6
3.	Infant Mortality Rate (IMR) (per thousand live births)	24	12	42	33
National Family Health Survey (NFHS) Indicators		Sikkim		India	
		2005-06	2015-16	2005-06	2015-16
4.	Total fertility rate (child per woman)	2.0	1.2	2.7	2.2
5.	Mothers who had Full Antenatal Check-up (ANC) (in percent)	22.4	39.0	11.6	21.0
6.	Institutional Births (in percent)	47.2	94.7	38.7	78.9
Prevalence of AIDS (NACO Data)		Sikkim		India	
		2011	2017	2011	2017
7.	Prevalence of AIDS(in per cent)	0.15	0.05	0.27	0.22

Source: National Family Health Survey-4, Sample Registration System (SRS) data, GoI

The health indicators of the State of Sikkim as evident from above table were better in all parameters considering its small population, as compared to the national average numbers.

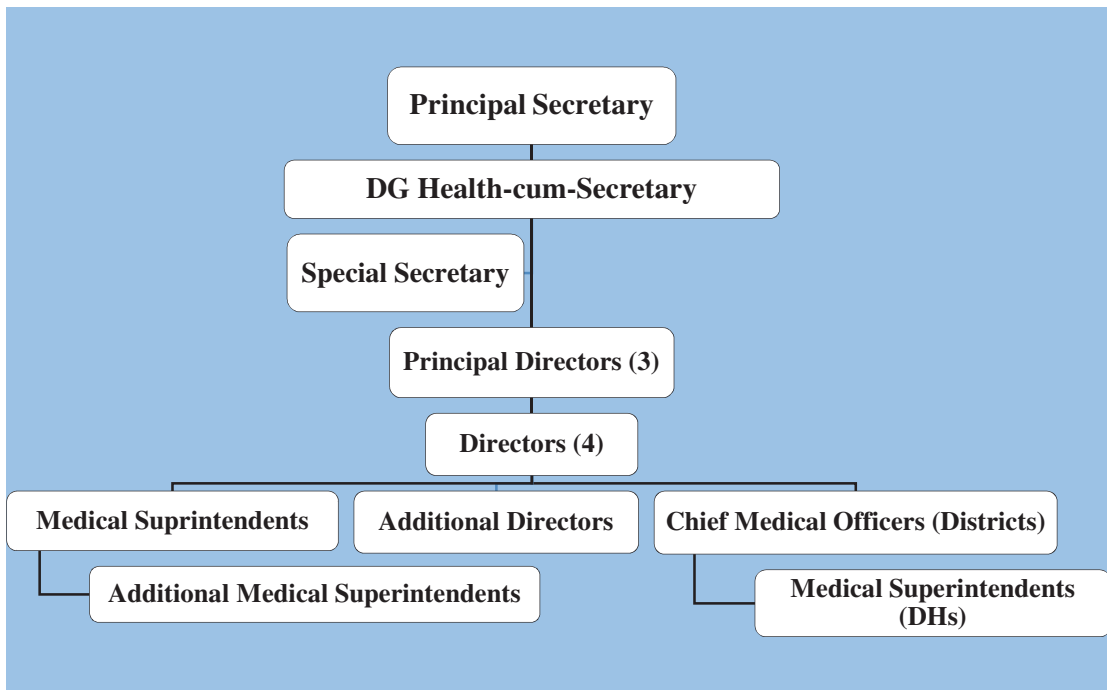
According to NFH Survey<sup>3</sup> 90 per cent of households use a government health facility in Sikkim. All India average for use of government health facility is 45 per cent.

- Presence of private service providers in the Health Sector in the State is insignificant.
- Major Health Indicators of the State registered improvement over the years and remained ahead of the national average.
- The National replacement level of Total Fertility Rate (TFR) for 2015-16 (NFHS IV) was fixed at 2.1. The TFR of Sikkim, however, declined to 1.2 under NFHS IV, far below the desired replacement level of 2.1.

#### 1.4 Accountability Structure for Healthcare in the State

At the Apex level, District Hospitals come under the purview of the Health and Family Welfare Department, which is responsible for policy formulation and oversight. At the organisational level, the Directorate of Health Services is responsible for implementation of the policy initiatives and developmental programmes relating to healthcare. At the administrative level, the Chief Medical Officer (CMO) is responsible for coordinating all the activities relating to healthcare services in the district. At the operational level, the Medical Superintendent heads the District Hospitals and is directly responsible for functioning of the DHS.

<sup>3</sup> National Family Health Survey, No.IV (2015-16)

**Chart-1.2: Organogram of the Health & Family Welfare Department**

## 1.5 Audit Framework

### 1.5.1 Background

Healthcare services in the North Eastern Region (NER) are inadequate, in terms of the number of health facilities available, as well as the quality of facilities provided. The primary reasons for inadequacy of the health services are hilly and difficult terrain, insufficient budgetary outlay on health, shortage of generalist and specialist doctors and other medi-care personnel and absence/ shortage of sophisticated diagnostic equipment, limited presence of private sector, *etc.* As per Government of India (GoI) (written statement of the Union Minister of State for Health & Family Welfare in Parliament), as of June 2019, the entire NER accounted for about 10 *per cent* (88 out of 851) of the district hospitals available across the country. Sikkim accounted for four out of these 88 (five *per cent*) district Hospitals.

The Comptroller and Auditor General of India (CAG) has reviewed the provision of healthcare services by Government of Sikkim, at periodic intervals. The C&AG had earlier (Report No. 3 of 2011) reviewed the Functioning of Primary Health Centres (PHCs) and Community Health Centres (CHCs) of the State. Key healthcare institutes and hospitals are also audited annually on a sample basis.

During 2019, the CAG decided to carry out a Performance Audit of healthcare services being provided at District Hospitals across all the States to assess the availability of resources identified as essential by Indian Public Health Standards (IPHS) for District Hospitals and to evaluate the overall quality of healthcare services provided by these hospitals and in some selected domains.

### 1.5.2 Audit Domains

The following audit domains/themes were identified for the Performance Audit of select District Hospitals:

**Chart 1.3: Audit Domains**

Resources	Line Services	Support Services	Auxiliary Services
<ul style="list-style-type: none"> <li>• Manpower</li> <li>• Infrastructure</li> <li>• Equipment</li> <li>• Drugs &amp; Consumables</li> </ul>	<ul style="list-style-type: none"> <li>• Out-patients</li> <li>• In-patients</li> <li>• Emergency</li> <li>• Operation &amp; ICU</li> <li>• Laboratory &amp; diagnostics</li> </ul>	<ul style="list-style-type: none"> <li>• Drug storage</li> <li>• Hygiene</li> <li>• Infection control</li> <li>• Ambulance</li> <li>• Power backup</li> </ul>	<ul style="list-style-type: none"> <li>• Patient rights</li> <li>• Patient safety</li> <li>• Referral services</li> </ul>

### 1.5.3 Audit Objectives

In pursuance of the audit domains/themes identified above, the objectives of carrying out Performance Audit of select district hospitals were to assess whether:

- i. adequate and essential resources - manpower, drugs, infrastructure, equipment, and consumables were available for effective functioning of the district hospitals;
- ii. timely and quality healthcare was delivered through line services like OPD, IPD, ICU, OT, trauma & emergency, *etc.* and diagnostic services;
- iii. support services like drug storage, sterilisation, hygiene, waste management, infection control, ambulance, power back-up/ UPS, *etc.* were aiding the line departments in providing a safe and sterile environment in the hospitals; and
- iv. adequate and timely healthcare services were available in selected services relating to maternal and infant care.

### 1.5.4 Audit Criteria

Audit findings were benchmarked against the criteria sourced from the following:

- i. Indian Public Health Standards (IPHS) guidelines for district hospitals
- ii. NHM guidelines 2005 and 2012
- iii. National AIDS Control Organisation (NACO) Programmes
- iv. Janani Sishu Suraksha Karyakram (JSSK) guidelines
- v. National Quality Assurance Standards (NQAS) for district hospitals
- vi. Swacchhta guidelines for public health facilities, GoI
- vii. Assessor's Guide Book for quality assurance in district hospitals 2013, GoI
- viii. Operational guidelines for prevention, screening, and control of common non-communicable diseases, GoI
- ix. Maternal and newborn Health Tool kit, 2013
- x. Government policies, orders, circulars, budgets, annual reports, *etc.*

### 1.5.5 Audit Scope and Methodology

The audit scope involved assessing the functioning of selected district hospitals during the five-year period of 2014-19, and evaluating the outcomes of health indicators. At

the State level, the analysis of the data in the Hospital Management Information System (HMIS), test check of records in the Health & Family Welfare Department and State Referral Hospital was conducted. At the district hospital level, the data captured in the local HMIS was analysed and samples were drawn to carry out a substantive checking to gain assurance about the integrity of data. Patient feedbacks were obtained through patients' satisfaction survey on healthcare services being provided by the DHs and joint physical verifications of the facilities were conducted by involving the hospital authorities. Photographic evidences were also obtained to support audit findings.

An entry conference was held on 10 August 2019 where in the audit objectives, criteria, scope and methodology of audit were explained to senior officers of Health and Welfare Department, GoS.

Audit findings were reported to the Government on April 2020 and their written responses and responses during the exit conference (June 2020) have been suitably incorporated in the Report.

### 1.5.6 Audit Sample

There are four districts in Sikkim, each district has a District Hospital. The audit selected a sample of two out of the four DHs in the State - District Hospital, Gyalshing (West District) and District Hospital, Singtam (East District) and 1,000 bedded New STNM Multi-Specialty Hospital (Gangtok) for test check. In addition, CHC, Rhenock and PHC, Machong were also selected from the East District (State Capital District).

**Table 1.2: Sampling**

Sl. No.	Name of Unit	Population	Sample Selected	Sample Size (per cent)	Sampling adopted for drawing the sample
1	The New STNM Hospital (State Referral Hospital)	1	1	100	
2	District Hospitals	4	2	50	Selected based on remoteness of location from State Capital (Gyalshing DH) and one Capital District Hospital (Singtam DH).

### 1.6 Acknowledgement

The Office of the Principal Accountant General (Audit), Sikkim acknowledges the co-operation extended by the Health and Family Welfare Department and the sampled district-level hospitals in the conduct of this Performance Audit.

