# Chapter-I Introduction

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#### 1.1 Introduction

Health is a vital indicator of human development and a basic ingredient of economic and social development. A robust public health infrastructure and effective management of health services are of vital importance to ensure good health of citizens. The public health infrastructure comprises of hospitals and other healthcare institutions while the health services comprise of services such as emergency, preventive, rehabilitative, long-term, hospital, diagnostic, primary, palliative, and home care.

These services can be broadly divided into three categories, namely:

(a) Line Services: Services directly related to patient care, like Out-Patient Department (OPD), In-Patient Department (IPD), Emergency, Super Specialty, Intensive Care Units, Operation Theatre, Blood Bank, Maternity and Diagnostic Services etc.;

(b) Support Services: Services indirectly related to patient care, like Oxygen Services, Dietary Services, Laundry Services, Bio-Medical Waste Management, Ambulance Services and Mortuary Services etc.; and

(c) Auxiliary Services: Services for facilitating the delivery of healthcare services, like patient safety facilities, patient registration, grievance/ complaint redressal and stores etc.

#### 1.2 Healthcare facilities in Rajasthan

The landscape of public healthcare facilities in the State is structured into three levels for providing primary care, secondary care and tertiary care. Primary care and secondary care are provided by the Department of Medical, Health and Family Welfare (DMH&FW), Government of Rajasthan (GoR) while tertiary healthcare is provided by the Department of Medical Education (DME), GoR. The various healthcare institutions providing primary, secondary and tertiary care are shown in **Chart 1.1** below:

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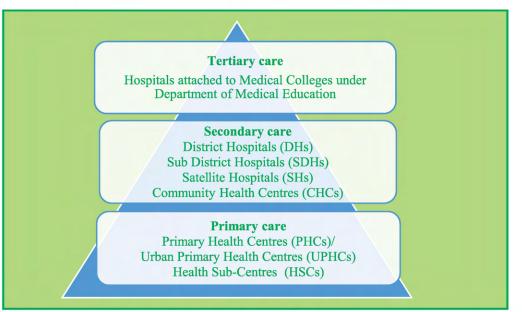


Chart 1.1: Healthcare Institutions in the State



The Additional Chief Secretary, Department of Medical, Health and Family Welfare (DMH&FW) is the Administrative Head of the Department and is assisted by the Director, (Public Health) who is responsible for overall planning and monitoring of the activities. The Chief Medical and Health Officer (CM&HO) at District level, and the Block Chief Medical Officer (BCMO) at Block level assist in administration and implementation of the schemes. The functional hierarchy of DMH&FW is shown in **Chart 1.2** below:

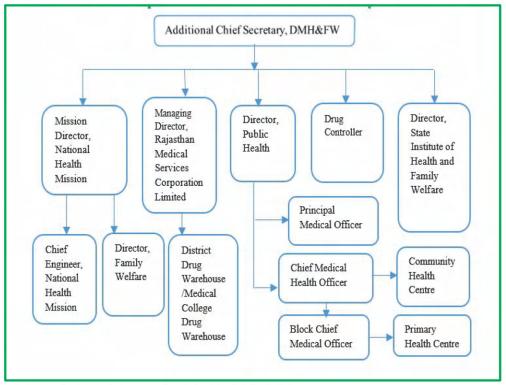
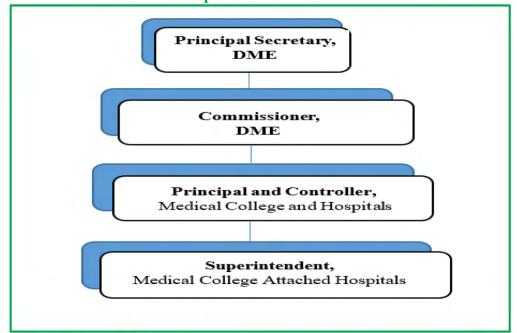


Chart 1.2: Department of Medical, Health and Family Welfare

Source: As per information furnished by DMH&FW.

The Principal Secretary, Medical Education is the Administrative Head of the Department of Medical Education (DME) and is assisted by the Commissioner, (DME) who is responsible for monitoring the activities of Government Medical Colleges and attached hospitals. The Principals and Controllers (P&C) of colleges are heads of institutions and are responsible for execution of the schemes. Each hospital attached to a Medical College function under the charge of a Superintendent. The functional hierarchy of DME is shown in **Chart 1.3** below:



#### **Chart 1.3: Department of Medical Education**

Source: Administrative report of DME.

The Government of Rajasthan (GoR) set up the Rajasthan Medical Services Corporation Limited (RMSCL), a State Public Sector Undertaking, on 4 May 2011 as a Centralised Procurement Agency for procuring generic medicines, surgical and suture items and medical equipments at the most economical cost for all the Government Medical Institutions under DMH&FW and DME.

#### **1.3** Public Health Funding

The State Government makes budgetary provisions under the Annual Budget for the State's health sector. Financial assistance under the National Health Mission (NHM) is received from the Government of India (GoI) with corresponding share of the State Government in the ratio of 60:40. The State Health Society (SHS) disburses these funds to the District Health Societies (DHSs), headed by the District Collector for further release to the Blocks, who in turn further disburse the funds to various implementing units (such as Community Health Centres, Primary Health Centres, Health Sub-Centres, etc.).

# 1.3.1 Expenditure on Healthcare

Expenditure on health and family welfare is an important parameter to gauge the importance given to this sector by the Government.

National Health Policy (NHP) proposes raising public health expenditure to 2.5 *per cent* of the Gross Domestic Product (GDP) in a time-bound manner upto 2025. Further, NHP also envisaged increasing State health sector spending to more than 8 *per cent* of the State budget by 2020. Funds expended during the period 2016-17 to 2021-22 on Health and Family Welfare by the GoR are given in **Table 1.1** below:

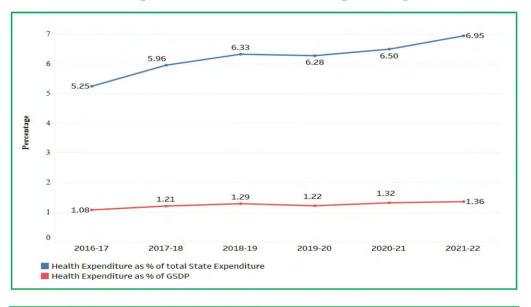
# Table 1.1: Expenditure on Healthcare by DMH&FW and DME as a percentage to GSDP

						(₹ in crore	)
S. No.	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Total State Expenditure*	1,57,085	1,67,799	1,87,524	1,93,458	1,94,071	2,34,563
2	Total State Expenditure on Health*	8,252	9,999	11,861	12,143	12,619	16,311.78
3	Total State Expenditure on Health as % of total State expenditure	5.25	5.96	6.33	6.28	6.50	6.95
4	GSDP on current prices @	7,60,587	8,28,661	9,21,789	9,98,999	9,57,912	11,96,137
5	Health expenditure as a percentage of GSDP	1.08	1.21	1.29	1.22	1.32	1.36

Source: \*As per State Finance Accounts, GoR of the respective years. @ Economic review 2020-21 and 2021-22, Directorate of Economics and Statistics under Planning Department, GoR.

It can be seen that the Health expenditure as a percentage of the State GDP ranged between 1.08 and 1.36 *per cent* indicating that the target of 2.5 *per cent* is not likely to be achieved upto 2025. Similarly, health expenditure as a percentage of total expenditure ranged between 5.25 and 6.95 *per cent* against the target of 8 *per cent*.

The State's performance in terms of these two targets are shown in **Chart 1.4** below:



#### Chart 1.4: Expenditure on Healthcare as a percentage of GSDP

Performance Audit of "Public Health Infrastructure 4 and Management of Health Services in Rajasthan" It can be seen that the State's performance in terms of these two targets has shown an improving trend in the last five years.

**1.4 Healthcare Infrastructure** 

To deliver quality health services, adequate and properly maintained infrastructure is of critical importance. The availability of Government Medical Institutions (GMIs) in the State of Rajasthan is shown in **Table 1.2** and **Table 1.3** below:

Table 1.2: Government Medical Institutions under DMH&FW as of March 2022

S. No.	Government Medical Institution under DMH & FW	Number of units	
1	District Hospitals	36*	
2	Sub District Hospitals	22	
3	Community Health Centers	685	
4	Urban Primary Health Centres / Primary Health Centres	2,409	
5	Health Sub-Centres	13,589	
	Total	16,741	

Source: Data compiled from Rural Health Statistics 2021-22 published by Ministry of Health and Family Welfare (MoH&FW), GoI and Administrative Report of DMH&FW, GoR.

\*Out of 36 DHs, 34 DHs are running in the State. DH Kota is under construction and General DH Sawai Madhopur and Government DH Sawai Madhopur are functioning as same wing and drawing and disbursing officer for both DHs are same.

#### Table 1.3: Medical Colleges and Attached Hospitals in Rajasthan as of December 2021

S. No.	Healthcare Institutions under DME	Number of units	
1	Government Medical Colleges	15	
2	Private Medical Colleges 9		
3	Medical College Attached Hospitals	58	
4	Dental Colleges	16	
	Government: 01		
	Private : 15		
	Total	98	

Source: Data Compiled from Administrative Report of Department of Medical Education, GoR.

Details of Government Medical Institutions in all the districts of the State are provided in *Appendix 1.1*.

# Status of Government Medical Colleges in the State

Medical Education Department is the Administrative Department for the Government Medical and Dental Colleges situated in the State. Out of the  $33^1$  districts in the State, there were eight Medical Colleges in seven districts upto 31 March 2016. To augment tertiary healthcare in the State, seven new Medical Colleges were established in seven districts during 2016-22. Further, four Medical Colleges have been established in 2022-23 and construction work of 12 more Medical Colleges in 12 districts is under progress. Details are given in *Appendix 1.2*.

#### **1.5 Human Resources in Healthcare**

The availability of adequate manpower is essential to provide effective health services. The availability of medical doctors in the State of Rajasthan in the two Departments, *viz*. DMH&FW and DME as of March 2022 and December 2021 respectively is given in **Table 1.4** below:

S. No.	Name of the Department	Sanctioned Strength	Persons in Position	Shortfall ( <i>Per cent</i> )
1	Department of Medical, Health & Family Welfare	15,459	9,969	5,490 (35.51)
2	Medical Education Department	6,559	5,152	1,407 (21.45)
	Total	22,018	15,121	6,897 (31.32)
Source: Information provided by DMH&FW and DME.				

#### Table 1.4: Position of doctors in DMH&FW and DME

As seen from **Table 1.4**, there were 15,121 medical doctors available in the State  $vis-\dot{a}-vis$  the sanctioned strength of 22,018.

#### 1.6 Performance against Sustainable Development Goal-3

The Sustainable Development Goals (SDGs) 2030, also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call for action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs and 169 targets are part of the 2030 Agenda for Sustainable Development adopted by 193 Member States at the UN General Assembly Summit in September 2015 and came into effect on 1 January 2016.

The Planning Department (PD), GoR is the nodal department for the implementation of SDGs in the State.

In Rajasthan there are 33 districts before Gazette Notification. Gazette Notification issued (5 August 2023) regarding constitution of 19 new districts Jaipur Urban, Jaipur Rural, Kekri, Sanchore, Khairthal-Tijara, Anupgarh, Gangapur City, Neem ka Thana, Phalodi, Dudu, Beawar, Didwana-Kuchaman, Salumber, Shahpura, Jodhpur Urban, Jodhpur Rural, Balotra. Out of 19 new districts, two districts (Jaipur and Jodhpur) were earlier included in 33 districts. Hence, total 50 districts in Rajasthan.

# 1.6.1 Status of Health Indicators in the State

Major health indicators of the State compared with national figures is shown in **Chart 1.5**.





\*Figure for Rajasthan pertains to the period 2020-21.

(Source: Sample Registration System bulletins for the respective years, National Family Health Survey-4 and 5, Special bulletin Maternal Mortality in India, Health and Family Welfare Statistics in India.)

#### 1.7 Consideration of Ayushman Bharat

*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) and *Pradhan Mantri-Jan Arogya Yojana* (PM-JAY).

In August 2018, Memorandum of Understanding (MoU) was signed between National Health Authority (NHA) and GoR to implement the PM-JAY. After 13

months of signing the MoU, PM-JAY was introduced in Rajasthan on 1 September, 2019 by integrating it with the ongoing State health scheme *Bhamashah Swasthya Bima Yojana* (BSBY) under a new name, *Ayushman Bharat-Mahatma Gandhi Rajasthan Swasthya Bima Yojana* (AB-MGRSBY). National Food Security Act beneficiaries as well as households fulfilling the criteria as per Socio Economic and Caste Census (SECC) 2011 database are eligible to avail benefits under AB-MGRSBY. As on March 2022, in Rajasthan 59,71,496 families were identified as beneficiaries under SECC 2011. As on April 2022 1,27,29,111 number of families were registered under *Chiranjeevi Yojana* which included PM-JAY families.

1.8 Audit Objectives

The Performance Audit was carried out to assess:

- i. Planning and funds for healthcare sector in the State;
- ii. Quality of healthcare infrastructure in the State;
- iii. Availability of quality drugs, medicines and equipment;
- iv. Availability of the human resources;
- v. Funding and expenditure of Central schemes in healthcare sector;
- vi. Regulatory mechanisms for ensuring quality healthcare services in the State; and
- vii. Improvement in the health and well-being of people as per SDG 3.

## 1.9 Audit Criteria

The Performance Audit was benchmarked against the criteria derived from the following sources:

- National Health Policy, 2017;
- Sustainable Development Goals;
- Medical Council of India (replaced by National Medical Commission in 2019) Act, 1956;
- Indian Public Health Standards (IPHS), 2012;
- Clinical Establishment Act, 2010;
- Drugs & Cosmetics Act, 1940;
- Pharmacy Act, 1948;
- Bio Medical Waste Management Rules, 2016;
- Atomic Energy (Radiation Protection) Rules, 2004;
- World Health Organization norms;
- Assessor's Guidebook for Quality Assurance in Government Healthcare Centres published by MoH&FW in 2013 and 2014;
- Rajasthan Transparency in Public Procurement Act, 2012 and Rules, 2013;
- Manuals, Orders, Circulars and Scheme Guidelines issued by GoI and GoR.

# 1.10 Audit Scope and Methodology

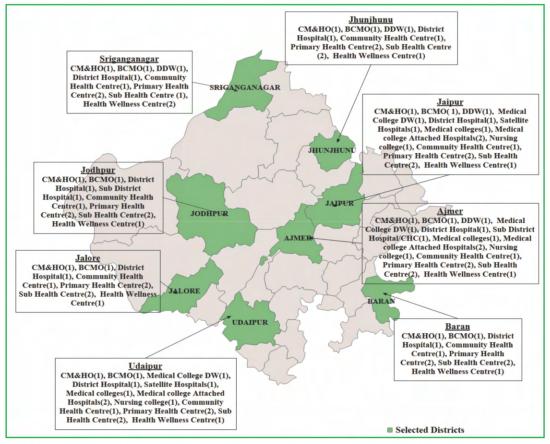
An Entry Conference was conducted with the relevant Departments in October 2021 wherein audit objectives, audit criteria, selection of units, audit methodology and scope of Performance Audit were discussed.

The Performance Audit was conducted from October 2021 to June 2023 covering the period 2016-17 to 2021-22 through test-check of records at DMH&FW, DME and Planning Department. Audit also test-checked records in the Offices of the Managing Director, Rajasthan Medical Services Corporation

Limited; Director (Public Health); Mission Director, National Health Mission; Government Testing Laboratory, Jaipur; Chief Engineer, National Health Mission and regulatory bodies, i.e. Drug Controller, Rajasthan Nursing Council, Rajasthan Medical Council, Rajasthan Pharmacy Council, Rajasthan Para-Medical Council, Commissioner, Department of Medical Education and Director, Economics and Statistics, Planning Department.

Eight districts<sup>2</sup> (25 *per cent*) out of thirty-three districts in the State were selected through simple random sampling using iDEA Software pertaining to DMH&FW. In the eight selected districts, three Medical Colleges<sup>3</sup>, six attached hospitals<sup>4</sup>, three nursing colleges attached with these Medical Colleges and three Medical College Drug Warehouses were also selected. In the selected districts, Chief Medical and Health Officer, District Hospitals, Sub-District Hospitals/ Satellite Hospitals<sup>5</sup>, District Drug Warehouses, Block Chief Medical Officer, Community Health Centres, Primary Health Centres, Health Wellness Centres and Health Sub-Centres were also selected.

Within the selected districts, GMIs at various levels covered in audit are shown in **Chart 1.6** below:



#### Chart 1.6: Levels at which Government Medical Institutions were covered

Source: GMIs selected on the basis of information provided by DMH&FW and DME.

- 2 Eight districts: Ajmer, Baran, Jalore, Jaipur, Jodhpur, Jhunjhunu, Sriganganagar and Udaipur.
- 3 Three Medical Colleges: (Jaipur: Sawai Man Singh Medical College; Ajmer: Jawahar Lal Nehru Medical College and Udaipur: Ravindra Nath Tagore Medical College).
- 4 Six Attached Hospitals: (Ajmer: Two, Jaipur: Two and Udaipur: Two).
- 5 Hospitals having 51-100 beds are considered Sub-District Hospitals and with 31-50 beds are considered Satellite Hospitals.

Details are given in *Appendix 1.3*. Further, information was also collected from the remaining 26 District Hospitals<sup>6</sup> of the State.

Audit methodology involved review of documents, joint physical verification with staff of concerned GMI and beneficiary survey of 498 patients<sup>7</sup> and 70 doctors<sup>8</sup> to assess the effectiveness of healthcare service. Apart from that, joint physical inspections of hospital assets, stores and civil works were conducted in the selected units.

Management Information System (MIS) data regarding web-based computerized system of *e-Aushadhi*<sup>9</sup> and *e-Upkaran*<sup>10</sup> furnished by Rajasthan Medical Services Corporation Limited for the period 2016-17 to 2021-22 were also analysed in audit.

Audit findings were discussed with the officers of the related Departments in the Exit Conference held on 16 February 2023. Written replies of GoR and views of GoR expressed in the Exit Conference have been appropriately incorporated in the Report.

#### **1.11** Structure of the Report

Chapter I	Introduction
Chapter II	Human Resources
Chapter III	Healthcare Services
Chapter IV	Availability of Drugs, Medicines, Equipment and Other Consumables
Chapter V	Healthcare Infrastructure
Chapter VI	Financial Management
Chapter VII	Implementation of Centrally Sponsored Schemes
Chapter VIII	Adequacy and effectiveness of the Regulatory Mechanisms
Chapter IX	Sustainable Development Goal-3

The Report structure is detailed below:

<sup>6</sup> DHs Nagaur, Dausa, Kekri and Beawar (Ajmer), Rajsamand, Pratapgarh, Neem ka Thana (Sikar), Banswara, Balotra (Barmer), Sheoganj (Sirohi), Sirohi, Karauli, Hindaun (Karauli), Tonk, Shahpura (Bhilwara), Alwar, Pipar City (Jodhpur), Sagwara (Dungarpur), Gangapur City (Sawai Madhopur), Sawai Madhopur, Hanumangarh, Dholpur, Nokha (Bikaner), Chittorgarh, Bundi and Jaisalmer.

<sup>7</sup> In 38 GMIs: MCHs: Six, DHs: Eight, CHCs: Eight and PHCs:16.

<sup>8</sup> Survey of 70 doctors: Five each in Eight District Hospitals and in Six Medical College Attached Hospitals.

<sup>9</sup> *e-Aushadhi* is a web-based application of RMSCL which deals with the management and supply of stocks of various drugs, sutures and surgical items required by Government Medical Institutions in Rajasthan.

<sup>10</sup> *e-Upkaran* is the web-based application of RMSCL which deals with the management and maintenance of equipments and instruments of Government Medical Institutions of Rajasthan.

# 1.12 Acknowledgement

Audit acknowledges the co-operation and assistance extended by the Department of Medical, Health & Family Welfare, Department of Medical Education, Planning Department and all the test-checked GMIs in providing records, information and clarifications from time to time for the smooth conduct of audit.