

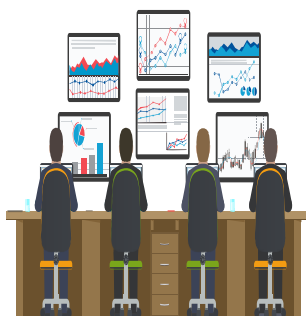
Institutionalizing the COVID-19 Learnings: Comprehensive Health Monitoring through the National Public Health Observatory and Health Emergency Operations Center

India with its large population, diverse geography and federated health systems faced a **significant challenge due to the COVID-19 pandemic**. India was at the global center stage due to the highly infectious nature of this pandemic and the country's continental proportions. The **challenge was massive** considering the historic neglect which healthcare infrastructure has seen in country and with pandemic round the corner, the **focus of government was to ensure saving lives which required innovative solutions to manage the response**.

Foreseeing the situation, Union Health Ministry **established a data driven system in the country** so that data from the remotest of the facility should be available with the central government to monitor the **current situation of pandemic and guide State government** to take necessary actions.

Union government established a framework for data sourcing through **development of COVID-19 India Portal and setting up of War Room** with skilled resources in MoHFW. More than 1000+ officers in country were trained to utilize the Covid-19 Portal of MoHFW and the War Room ensured **quality and standardized data** with regular follow-up with all officers every day.

1. About the National Public Health Observatory



To monitor the overall healthcare service delivery, integration of healthcare programs, and revolutionize the Healthcare situation in the country the Union Ministry has established the **National Public Health Observatory and (NPHO) Health Emergency Operations center (HEOC)** for real-time **monitoring and analysis of various data points for informed decision making**.

Key Objectives of NPHO:

1

Comprehensive Monitoring of Health Systems:

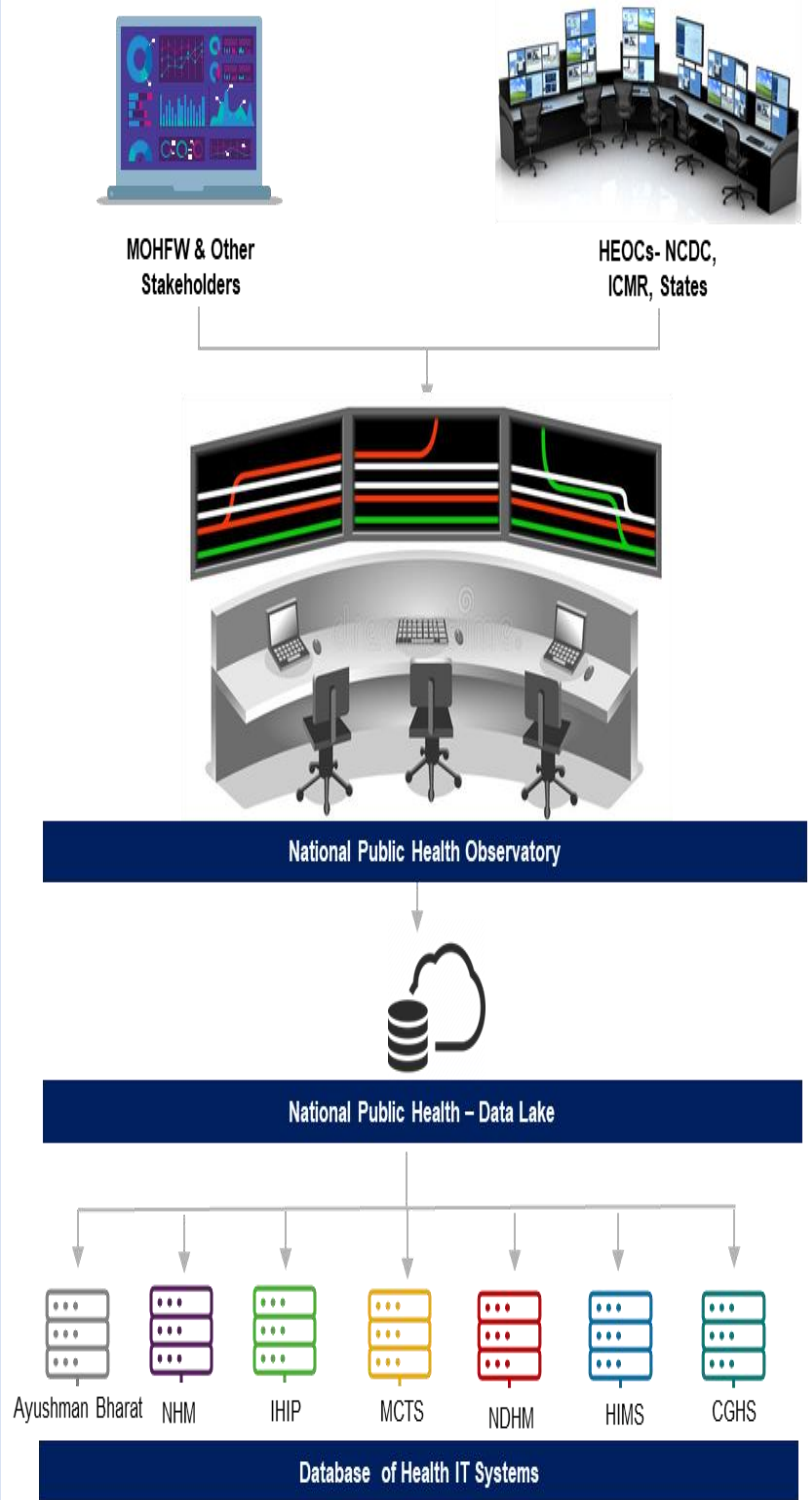
To strengthen existing day-to-day health system monitoring infrastructure and capabilities at the MOHFW for a holistic situation analysis of the health system from top to bottom leveraging various KPIs.

2

Support in Health Emergency Management:

To readily monitor and support any health emergency management efforts and work in close coordination with national and local disease surveillance teams to support in recognizing any public health threats and support with coordinated responses.

Integrated Platform Approach for NPHO

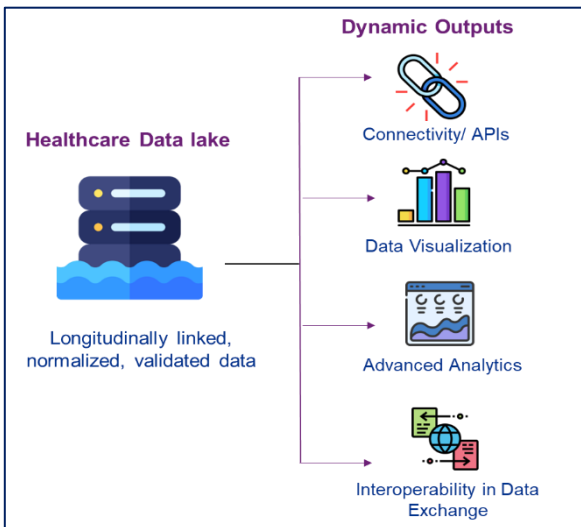


2. Data Lake – A Single Source of Healthcare Data

Population	Public Health Programmes
Health Infrastructure	Health Financing
Human Resources	Non-Health Well Being Parameters
Social Media Analytics	CCTVs for Monitoring

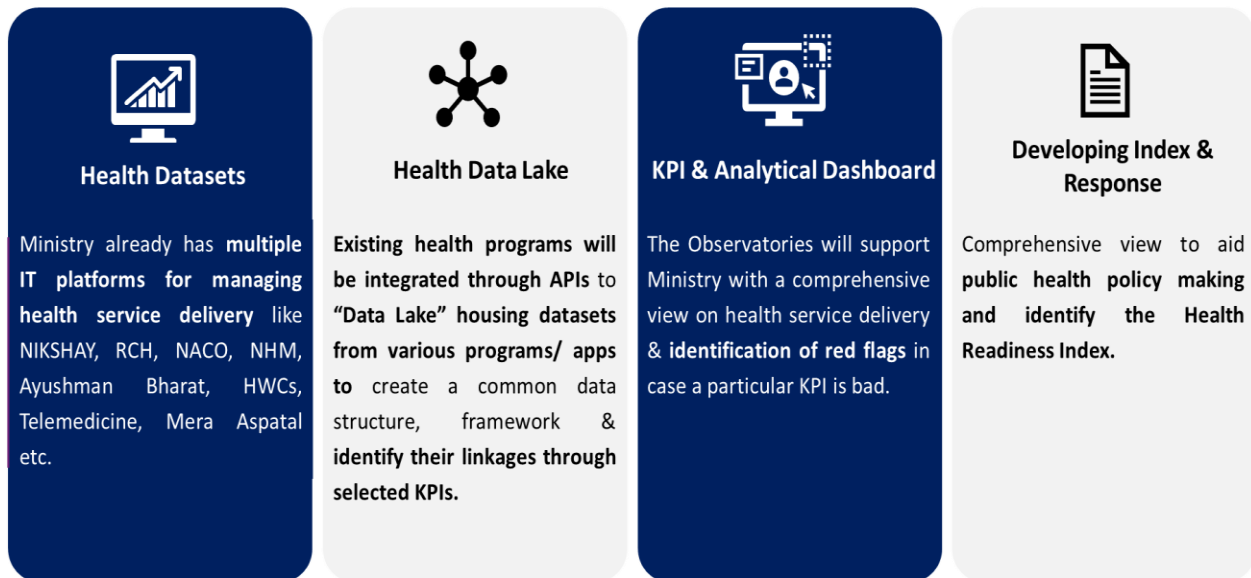
To achieve synergy between historically siloed run and vertical national health programs, the NPHO provides a **one stop view of multiple existing health IT applications by integrating them through Application Programming Interface (APIs)** to generate insights on various healthcare indicators and social determinants of health.

NPHO follows an agile approach to source authentic and standardized data from various sources, including National Health Programs, public health agencies such as **National Health System Resource Centre (NHSRC), National Health Authority (NHA), and National Surveys such as National Family Health Surveys (NFHS), Sample Registration Surveys (SRS).**



Data parameters from various Health IT Applications and published Reports in Healthcare being collated, standardized, cleansed, and stored in a **Data Lake acting as single source of healthcare data** in the country.

India's NPHO Approach for Health Systems Monitoring



3. NPHO Value Addition to India and the World

NPHO disseminates pertinent findings through various channels, including reports and alerts to decision makers. This information is used by policymakers undertake informed decisions aimed at improving health outcomes.

In addition to data collection and analysis, **NPHO also engages in research and documentation.** This research helps to **identify effective interventions and strategies for improving public health outcomes**, which can inform policy decisions at the local, state, and national levels.

With the establishment of NPHO, **India has become one of the few countries which has focused on long term vision of data driven framework** to support crucial policy decisions in the country.

The NPHO has gained recognition from experts and researchers from across the world and has put India at the forefront of health data analytics on the global stage.

Few glimpses of the National Public Health Observatory and Health Emergency Operations Center



Visit the National Public Health Observatory at Ministry of Health & Family Welfare and experience how real-time data-driven insights aid in policy making!