







### **Background**

In the wake of the COVID-19 pandemic, the Uttar Pradesh government faced significant challenges in managing and identifying health facilities, particularly those designated as COVID-19 hospitals. The absence of a centralized and standardized database led to confusion, inefficient resource allocation, and hindered service delivery at a critical time. To combat these issues and improve public health infrastructure, the state with support of UP-TSU launched the Uttar Pradesh ke Swasthya Kendra (UPkSK) platform in July 2021, building on the ongoing Ayushman Bharat Digital Mission (ABDM). UPkSK emerged as a revolutionary digital repository that provides a comprehensive database of all public health facilities across Uttar Pradesh.

Before UPkSK, various government departments maintained separate records, often using different names for the same facilities—leading to inconsistencies and inefficiencies. To address this, the state conducted an extensive field survey to gather accurate information on each facility, including geographic coordinates and photographs, culminating in a standardized facility master. With UPkSK, healthcare management in Uttar Pradesh has transformed, significantly enhancing the efficiency, transparency, and accessibility of healthcare services. The platform ensures seamless access to data on facility locations, available services, and resources, making it an essential tool for administrative monitoring and decision-making for improved health outcomes.



UPkSK is a GIS-based application, integrating data from multiple existing systems, including:



Manav Sampada for HR data



Drugs and Vaccines Management
System for drug management



Block Community Process Manager-Management Information System (BCPM-MIS) for ASHA worker data, and



Health Management Information System for service delivery data

This integration allows users to access comprehensive details about each facility, including drug availability, human resources, and service offered. A key feature is its support for life cycle management of health facilities, enabling additions, mergers, and upgrades. UPkSK's integration with the Ayushman Bharat Digital Mission (ABDM) made Uttar Pradesh the first state to have a digital health facility repository linked to the national registry. This streamlined healthcare management and set a national precedent for digital transformation in public health.

#### Health facilities mapped as of January 1, 2025



District Hospitals
108



Special Hospitals **259** 



Community Health Centres



Primary Health Centres **4503** 



Sub-Centres **25760** 



Medical Colleges

### **Health Facility Management and Service Delivery**

UPkSK has transformed public health facility management in Uttar Pradesh by creating a centralized digital repository that integrates multiple data sources, such as GIS mapping, HR data, and service delivery statistics. This system, developed in response to the challenges of the COVID-19 crisis, now provides real-time operational insights, enabling informed decision-making. Additionally, it has standardized the nomenclature and categorization of health facilities across the state, replacing inconsistent paper-based records with a unified digital platform.

## Enhancing Healthcare and Educational Infrastructure through Geo Mapping

The geo-mapping of health facilities in Uttar Pradesh plays a crucial role in improving healthcare accessibility, especially in remote areas. By mapping healthcare locations against population data, the initiative guides the strategic creation of new sub-centers and Community Health Centers (CHCs) to ensure services reach underserved communities. It has been highlighted that 5,000 new sub-centers have already been established, with more in process, ensuring resources are allocated based on actual population needs. The mapping also identifies 'dark spots' where no facilities existed, allowing for targeted interventions in previously neglected areas.

In addition to healthcare facilities, the geo-mapping effort has been extended to medical and nursing colleges

across the state. This helps optimize the educational infrastructure, ensuring access to training institutions is well-distributed between urban and rural areas. According to Health Department Officials, this mapping ensures that new institutions are strategically located and existing ones are upgraded to meet the increasing demand for healthcare professionals, addressing imbalances in training resources across the state.

### **Challenges and Solutions**

	Challenge	Solution
Technology Adoption among Frontline Health Workers	A key challenge in digital health interventions was the difficulty faced by ANMs and ASHAs in adapting to new digital platforms, impacting programs like UPkSK platforms, impacting programs like UPkSK.	Ongoing training, refreshers, and hands-on support were provided to enhance their digital skills and effectively use the tools
Internet Connectivity Issues in Remote Areas	A key challenge was the unreliable internet connectivity in remote areas, affecting realtime data access for systems. This dependency on stable connections in areas with poor coverage caused operational delays and hindered the deployment of digital tools.	Enhanced infrastructure and alternative connectivity solutions were explored to improve internet reliability.
Data Management and Integration Challenges	A major challenge was data management and integration in programs like UPkSK, which aimed to centralize health-related data. Due to dependencies on multiple systems and delays in real-time updates, maintaining data consistency and availability was difficult.	Integration of multiple health data systems (e.g., Manav Sampada for HR and DVDMS for supply chain management of drugs) into a unified platform to streamline operations and improve data consistency. This integration reduced reliance on various systems, making health data more accessible and reliable for decision-making.

### **Sustainability and Future Directions**

The sustainability of the UPkSK platform relies on the continuous training and support offered to frontline health workers, ensuring their effective use of the available digital tools. Additionally, the ongoing integration of various health data systems into UPkSK establishes it as a vital resource for the future of health data management in Uttar Pradesh.



21,280 facilities using DVDMS



Over 31,687 health facilities and 75 warehouses mapped through UPkSK





# The Real Impact of UP Ke Swasthya Kendra: A Transformative Digital Journey

- Centralized digital repository developed for all the public health facilities from Medical college to Sub Centre
   (SC) level with geolocation and photographs.
- © Ensured 100% Health Facility Registry (HFR) generation of public health facilities in one go, via API integration with UPkSK.
- Utilizing UPkSK to identify gap and creation of new 10000 sub centres at village level on the basis of distance and population.
- Allocation of catchment area of SCs by utilizing Geo-mapping of facilities available on UPkSK.
- Leveraging UPkSK in generating exception/monitoring reports on basis of HR, drugs, equipments etc. that guided administration in identifying the gap for differential governance as per geography. Eg ANM recruitment on the basis of posting at SC.







