

Dissertation Thesis

**TOPIC: ASSESSING THE ABDM MICROSITE PROJECT- AN ANALYSIS OF
GAPS AND ADVANTAGES IN INDIA'S DIGITAL HEALTH INITIATIVE:
CROSS SECTIONAL ANALYTICAL STUDY**

By- Dr Simran Malhotra

INTRODUCTION

The Ayushman Bharat Digital Mission (ABDM) is a transformative initiative by the Government of India aimed at revolutionizing healthcare access through digital technology. The ABDM Microsite project is a crucial component of this larger effort, focusing on targeted outreach and integration of small to medium-sized healthcare facilities within specific geographical regions.

According to the National Health Authority's (NHA) public dashboard, the Ayushman Bharat Digital Mission has achieved remarkable progress. Over 64 crore 79 lakh Ayushman Bharat Health Accounts (ABHAs) have been created. The initiative has successfully linked more than 39 crore 70 lakh health records. The Healthcare Facility Registry (HFR) now includes over 3 lakh verified healthcare facilities. Additionally, more than 4 lakh healthcare professionals have been verified within the system.



KEY COMPONENTS OF ABDM

Health ID (ABHA)

The Ayushman Bharat Health Account (ABHA) Number is a unique identifier that allows individuals to access and manage their medical records, ensuring continuity of care and efficient healthcare delivery.

Healthcare Facility Registry (HFR)

The HFR is a comprehensive directory of all healthcare facilities, including hospitals, clinics, and pharmacies, helping patients find the nearest and most suitable healthcare provider.

Personal Health Record (PHR)

The PHR is a digital system that empowers individuals to manage their own health information, including medical conditions, allergies, medications, and test results, facilitating seamless sharing with healthcare providers.

Healthcare Professionals Registry (HPR)

This registry is a database of all healthcare professionals in your region, such as doctors, nurses, and other clinicians. It helps match patients with the right healthcare professionals based on their needs and location.

MICROSITE

The ABDM Microsite project focuses on onboarding small to medium-sized private healthcare facilities, such as clinics, hospitals, and labs, within specific geographical regions, providing specialized support and interventions tailored to their needs.

Categorization

A microsite may be of the following two categorizes:

Category A Microsite: A microsite which consists of at least 1000 facilities, inclusive of all types of health facilities.

Category B Microsite: A microsite which consists of at least 500 facilities but less than 1000 facilities, inclusive of all types of health facilities.

Stakeholder Involvement

The implementation of a microsite requires the participation of various stakeholders, including the

1. National Health Authority
2. State/UT ABDM offices
3. Development partners
4. Interfacing agencies
5. Health Management Information System solution providers.

AIM

This study aims to assess and analyze gaps in the microsite's implementation across central governance, state-level adoption, interfacing agency coordination, development agency constraints, and healthcare provider perspectives.

OBJECTIVE

1. To gather insights from various stakeholders, including government officials, developmental partners, and digital health solutions providers, regarding their experiences and perspectives on the project.
2. To identify the key challenges faced by stakeholders in the implementation of the ABDM microsite project.

RESEARCH QUESTIONS

1. What are the primary challenges encountered by healthcare providers and patients in the implementation of the ABDM Microsite Project?
2. Would expanding the ABDM Microsite Project to additional regions be a viable and effective strategy for broader adoption of digital health services across India?

REVIEW OF LITERATURE

S.No.	Title	Author	Features
1.	Evaluating the Impact of Microsite Implementation on Healthcare Delivery	Dr. Priya Mehra	The study examines the impact of microsite implementation on healthcare delivery efficiency. Highlights improvements in patient data management, healthcare provider coordination, and reduced administrative burden. Provides case studies from multiple states demonstrating positive outcomes.
2.	The Ayushman Bharat Digital Mission (ABDM): making of India’s Digital Health Story	R.S. Sharma and Aishwarya Rohatgi	It outlines ABDM's goal to establish a national digital health ecosystem leveraging digital technologies to make healthcare more equitable and accessible through various building blocks and interoperable frameworks.
3.	Challenges for adoption of smart healthcare strategies: An Indian perspective	Chandrashekar Subbarao and Suresh Renukappa	The study discusses barriers to smart healthcare adoption in India, such as privacy and security issues, data quality challenges, and lack of standards for data representation, which ABDM aims to address through policies and standards.
4.	Challenges in Microsite Adoption for Digital Health Initiatives	Dr. Arjun Kapoor	The study identifies key challenges in adopting microsites for digital health initiatives, including technical integration issues, resistance from healthcare providers, and financial constraints. Proposes strategies for overcoming these challenges through stakeholder engagement and targeted training programs.
5.	ABDM Provider’s Perspective	Mr. Ajit Rangnekar and Ms. Rashmi Pimpale	The study highlights ABDM's aim to create a national digital health ecosystem for secure exchange of health records. Features include unique health IDs, registries for healthcare facilities and professionals, and leveraging AI and blockchain.

REVIEW OF LITERATURE

S.No.	Title	Author	Features
6.	Enhancing Data Security in Healthcare Microsites	Dr. Sameer Gupta	Focuses on data security measures in healthcare microsites. Discusses encryption protocols, access control mechanisms, and compliance with data protection regulations. Highlights best practices for ensuring data confidentiality and integrity within microsite frameworks..
7.	Microsites as a Catalyst for Healthcare Innovation	Dr. Anjali Rao	Explores the role of microsites in fostering healthcare innovation. Analyzes how microsites facilitate the deployment of new digital health tools and services, enabling rapid experimentation and scaling of successful solutions. Includes case studies on innovative projects implemented through microsites.
8.	Stakeholder Perspectives on Microsite Implementation	Dr. Meera Sharma	Provides insights from various stakeholders on the implementation of microsites, including healthcare providers, patients, and administrators. Discusses perceived benefits, challenges, and recommendations for enhancing the effectiveness of microsite deployments.
4.	Cost-Benefit Analysis of Microsite Deployment in Rural Areas	Dr. Vikram Singh	Conducts a cost-benefit analysis of deploying microsites in rural areas. Assesses the financial investment required against the potential benefits in terms of improved healthcare access, patient outcomes, and operational efficiencies. Highlights the long-term economic viability of microsites.

METHODOLOGY

Study design

- Type of study- Cross sectional analytical study
- Study location- Enira Consulting Private Limited, Janpath, New Delhi
- Duration of study- March 2024- June 2024

Target population

- State Mission Directors (SMD) and officials from the National Health Authority (NHA)
- Representatives from Developmental partners (PATH, WICF, WISH, Piramal Swasthya Management and research institute, IIC) and Interfacing agencies (Doctors for You, Youth for action, Entrolabs, Bhavya Health, Alert India, MJVK, HLPPT, World Health Partners).
- Healthcare professionals working in clinics, hospitals and labs within the microsite regions.
- Executives from digital health solution companies providing Health Management Information System (HMIS) and Laboratory Management Information Systems (LMIS).

Sample size- 80

- Government officials: 10
- Developmental agency: 5
- Interfacing agency: 5
- Doctor: 30
- HMIS / LMIS :30

RESULTS

POSITIVE OUTCOMES OF THE ABDM MICROSITE PROJECT

Improved Access and Efficiency

The creation of unique Health IDs (ABHA) and the integration of electronic health records (EHRs) have significantly enhanced the continuity of care, making healthcare services more accessible and efficient for patients.

Enhanced Collaboration

The project has fostered a cohesive approach to implementing digital health solutions through collaboration between the NHA, state governments, development partners, and interfacing agencies, addressing initial barriers and promoting widespread adoption.

Increased Digitization

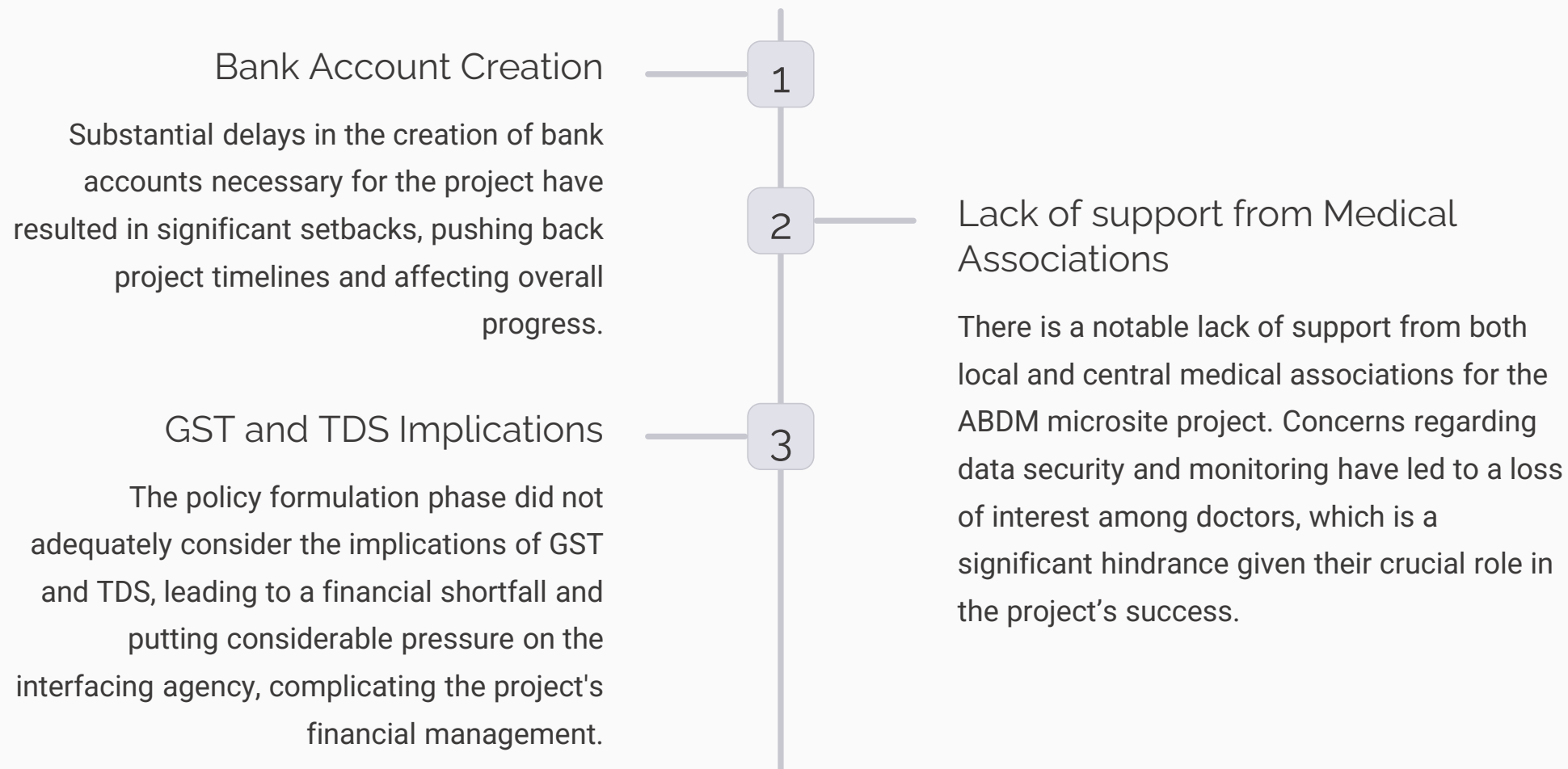
The adoption of Health Management Information Systems (HMIS) and Laboratory Management Information Systems (LMIS) in microsite regions has facilitated the digitization of healthcare records, streamlined administrative processes and improved data accuracy.

CHALLENGES

Challenges are categorized into several levels:

1. Central level
2. State level
3. Interfacing and development level
4. HMIS providers
5. Doctors' level.

CENTRAL LEVEL



Challenges at the State Level

1

Project Management Unit

The establishment of the Project Management Unit (PMU) has encountered significant issues, with many states either not setting it up at all or not having it fully operational, leading to staffing shortages and inefficiencies.

2

Technical Glitches

Persistent technical problems, such as server downtimes and glitches during demonstrations, have diminished the interest and enthusiasm of the personnel involved, hindering the project's progress.

3

Delay in HFR Verification

The verification process for the Health Facility Registry (HFR) has been significantly delayed due to the heavy workload on the limited number of nodal officers responsible for verification at the state level.



CHALLENGES FOR INTERFACING AND DEVELOPMENTAL AGENCIES



Resistance from Doctors

Many doctors exhibit rigid behavior towards digitization, preferring traditional pen-and-paper methods, leading to extended project durations as they are hesitant to adopt new digital practices.



Software Issues

Due to budget constraints, the human resources hired often lack the necessary knowledge or compatibility with the software, hampering their ability to address doctors' questions and concerns effectively.



Lack of Regional Translation Support

The absence of region-wise translation support for IEC materials has hampered the project's reach and effectiveness in diverse linguistic regions.

Challenges for HMIS Providers

Lack of On-Ground Presence

There is a noticeable lack of workforce deployment from HMIS providers, with only a few companies actively engaging in field-level

activities.

Sandbox Integration

The integration process is lengthy and plagued by poor documentation, with no set timeline and expensive connectors or adaptors available in the market.

DOCTORS' PERSPECTIVES



Multiple Practice Locations

Doctors who practice at multiple locations are hesitant to participate in the project, fearing discrepancies in their practice.



Data Security and Privacy

Doctors have significant concerns regarding data security and privacy, leading to reluctance in adopting the new system.



Scan and Share Initiative

While the Scan and Share initiative aims to streamline the registration process, it has merely shifted the congestion from the registration line to the waiting line outside the doctor's room, not fully achieving the intended purpose.

STRATEGIC PLANNING



Discussion

1

Key Takeaways

The ABDM microsite project has seen both successes and challenges. While it has improved access and efficiency through a federated system, and enhanced collaboration, there have been technical issues, financial constraints, and resistance from healthcare professionals.

2

Opportunities Ahead

The project presents opportunities to leverage digital technologies, foster stakeholder engagement, and address the unique needs of diverse regions and healthcare facilities.

3

Addressing Threats

Potential threats include policy and regulatory hurdles, data security concerns, lack of funding, delay in HFR verification, and delay in bank creation, which can affect the project's efficiency. The need for sustained commitment and coordination among stakeholders is also crucial. Overcoming these will be crucial for the project's success.