

Synopsis

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Study of ABDM Compliant Health Management Information Systems in digitizing Indian Healthcare Landscape: A Literature Review

Introduction:

The Ayushman Bharat Digital Mission (ABDM) has been a pivotal initiative in India aimed at transforming healthcare delivery through digital technologies.

The Ayushman Bharat Digital Mission (ABDM) aims to develop the backbone necessary to support the integrated digital health infrastructure of the country. It will bridge the existing gap amongst different stakeholders of healthcare ecosystem through digital highways (1)

This literature review seeks to explore the impact of ABDM-compliant HMIS in Indian public health institutions, shedding light on its effectiveness, challenges, and implications. The ABDM aims to create a national digital health ecosystem for seamless healthcare delivery. Implementing ABDM-compliant HMIS holds promise for improving public health service efficiency and patient care.

Review of Literature:

The literature surrounding ABDM-compliant HMIS in Indian healthcare landscape indicates a significant shift towards digitization and data-driven healthcare management.

Accelerating Digitisation in Healthcare Delivery

Given the rapid evolution of technology and innovations in the health sector, this vision of an integrated health system can only be achieved with active participation of all stakeholders in the healthcare ecosystem. It is against this backdrop that the 'Accelerating Digitisation in Healthcare Delivery' roadmap provides an overview for the stakeholders in the ecosystem such as hospitals/clinics, laboratories, health tech players, pharmacies, insurance players and the citizens to play their role achieving the common goal of universal health coverage (2).

Digital health as a sector is expected to grow in leaps and bounds in the coming years, and this is an opportunity for all of us to double our efforts to become a global leader in providing affordable, quality healthcare for all(3). This Roadmap is a step towards achieving this goal and inviting all the stakeholders to align their vision towards accelerating digitisation in the healthcare sector and become a part of transforming India's healthcare delivery(2).

A Brief Guide on Ayushman Bharat Digital Mission (ABDM) and its Various Building Blocks

Ayushman Bharat—Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) has successfully used the available public digital infrastructure to provide end-to-end services through an information technology (IT) platform from identification of beneficiaries to their admission and treatment in hospitals to their discharge and paperless payment to hospitals (4).

- Emerging technologies such as artificial intelligence, the internet of things (IoT), Blockchain and cloud computing provide additional opportunities for facilitating a more holistic digital health ecosystem, that can increase the equitable access to health services, improve health outcomes and reduce costs.

Accelerating Digitisation in Healthcare Delivery

Studies have highlighted improvements in data accuracy, accessibility, and efficiency in healthcare service delivery. However, challenges such as infrastructure limitations, user adoption, and data security concerns have also been identified (4).

The review will examine existing research on the impact of HMIS on healthcare delivery in India and globally. It will explore themes such as:

- Improvement in data collection and analysis for public health initiatives(5).
- Improved patient record management and accessibility.
- Efficient and streamlined clinical workflows and decision-making.
- Potential challenges like data security, privacy concerns, and user adoption.

Research Questions:

- What are the key features and components of ABDM and how HMIS helps digitization in Indian Healthcare?

- In what ways do ABDM-compliant HMIS improve patient care delivery and healthcare service efficiency through digitisation?
- What are the potential challenges associated with implementing ABDM-compliant HMIS in public health settings?

Objectives:

- To review existing literature on ABDM-compliant HMIS in Indian healthcare landscape.
- To identify potential benefits and challenges associated with implementing ABDM-compliant HMIS.
- To provide valuable insights for policymakers and healthcare professionals on maximizing the effectiveness of ABDM within public health settings.

Methods and Materials:

This literature review utilized a systematic approach to identify relevant studies published in peer-reviewed journals, government reports, and grey literature. Search terms included "Ayushman Bharat Digital Mission," "Health Management Information Systems," "Healthcare Digitization" and related keywords. Studies were screened based on relevance to the topic and inclusion criteria.

Study Population: Inclusion Criteria:

- Studies focusing on the Indian healthcare system, ABDM compliance, and HMIS implementation.
- Publications in English language.
- Studies published between 2018 and 2024.

Exclusion Criteria:

- Studies not related to ABDM or HMIS in Indian context.
- Non-English publications.

Study Tools:

- PubMed, Google Scholar, and relevant databases were used for literature search.
- Citation management software was employed for organizing and managing retrieved articles.

Implications of Research:

This literature review contributes to understanding the impact of ABDM-compliant HMIS on digitising healthcare delivery in Indian healthcare landscape.

The Ayushman Bharat Digital Mission (ABDM) in India revolutionizes healthcare, offering Unique Health IDs and Digital Health Records for seamless patient care. Explore how this initiative empowers individuals, bridges healthcare gaps, and transforms the paradigm of healthcare delivery (6).

Findings will inform policymakers, healthcare administrators, and researchers about the effectiveness, challenges, and opportunities associated with digital healthcare transformation in India.

Ethical Considerations:

The review will adhere to ethical research principles by ensuring data privacy and responsible citation practices.

No primary data collection involving human subjects was conducted

References

1. <https://abdm.gov.in/abdm>. ABDM.
2. [Accelerating_Digitisation_in_Healthcare_Delivery_v3_fad6fe700f](#).
3. Joe W, Yadav S. The National Digital Health Mission (NDHM) of India: A Concurrent Assessment.
4. A brief guide on Ayushman Bharat Digital Mission (ABDM) and its various building blocks.
5. National Health Policy 2017. National Health Policy 2017. Ministry of Health and Family Welfare. Available from:
https://www.nhp.gov.in/nhpfiles/national_health_policy_2017.pdf.
6. Navigating the Ayushman Bharat Digital Mission (ABDM) Ecosystem: A Roadmap to Digital Health [Internet]. [cited 2024 Jun 12]. Available from:
<https://medlr.in/blog/navigating-the-abdm-ecosystem-a-roadmap-to-digital-health>