

Integration of ABHA into digital healthcare platform

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Introduction

- In 2020, the government launched the National Digital Health Mission (NDHM), which is currently known as the Ayushman Bharat Digital Mission (ABDM).
- The Ayushman Bharat Health Account (ABHA) was launched in 2021, marking a big step forward in personal health data management by allowing individuals to build and control their digital health records.
- The Ayushman Bharat Digital Mission (ABDM) aims to build the foundation for India's integrated digital health system. All healthcare professionals that create digital health data, such as diagnostic reports, discharge summaries, prescriptions, and so on, are urged to take an active role in ABDM.
- ABHA number is a 14-digit number that will uniquely identify you as a participant in India's digital healthcare ecosystem. ABHA number will establish a strong and trustable identity for you that will be accepted by healthcare providers across the country. Seamless sign up for PHR (Personal Health Records) applications such as ABDM ABHA application for Health data sharing.

Significance of ABHA integration into Digital healthcare platform

- **Centralized Data Management** - ABDM integration enables centralised data management, resulting in efficient storage, organisation, and retrieval of this information.
- **Empowering Patients** - ABDM empowers patients by offering digital tools and services to let them actively engage in their healthcare journey
- **Seamless Interoperability** -The ABDM aims to build a strong digital infrastructure that facilitates smooth interoperability across various healthcare stakeholders, including as hospitals, clinics, diagnostic centres, pharmacies, and insurance companies.
- **Enhanced Monitoring and Evaluation** - ABDM enables the real-time monitoring and assessment of healthcare services and results
- **Efficient Healthcare Delivery** - Integrating digital technology such as electronic health records (EHRs), telemedicine, and online consultations allows healthcare practitioners to expedite operations, decrease paperwork, and make more informed decisions.
- **Strengthened Healthcare Infrastructure** - By promoting the adoption of digital technologies, it encourages the development and implementation of robust IT systems, connectivity networks, and cybersecurity measures.



Literature review

- In recent years, both large and small healthcare technology companies have profited from digitization. The health market has grown as a result of extensive usage of mobile phones and the internet, as well as advantageous government policies. By 2021, the digital healthcare business in India is anticipated to be worth INR 524.97 billion. The market is expected to reach INR 2528.69 billion by 2027, with a 28.50% CAGR between 2022 and 2027. (Itd R and M. Digital Healthcare Market in India-Research and Markets).
- In 2018, the National Institute for Transforming India (NITI Aayog) advocated digitising the Indian healthcare system through the National Health Stack (NHS). The NHS was built on the following important basic components of the national digital health initiative: national health electronic registries, a coverage and claims platform, a federated personal health records (PHR) framework, a national health analytics framework, and others. (Raj GM, Dananjayan S et.al.2023).
- As hospitals and physician offices use electronic health records, the focus has been on "meaningful use," which involves exchanging clinical information and measuring quality of treatment. Many health systems are already tracking patients across many settings, identifying high-volume users who require more care coordination and other services, and responding rapidly to quality gaps. Such applications appear to improve care for many patients. (Joshua M. Sharfstein, MD et.al.2015).

Methodology

Research question – What is the impact of the integration of ABDM (Ayushman Bharat Digital Mission) into digital healthcare platform and how can ABHA integration help the digital health platform to maintain patient health record?

Objective - "To study the impact of integration of Ayushman Bharat Health Account (ABHA) into a digital health platform".

- a) **Study design:** - descriptive study design on secondary data.
- b) **Duration of study:** 3 months
- c) **Sample size:** 10 companies that have integrated ABHA into their digital healthcare platforms and 10 companies that haven't integrated ABHA into their digital healthcare platforms.
- d) **Data sources:** - Research papers, website of companies, Catalogs, Annual reports, fact sheets, survey reports, PubMed, Science direct, Elsevier.

Result

□ This study evaluates the impact of integrating the Ayushman Bharat Health Account (ABHA) into digital healthcare platforms on various operational, financial, and patient outcome metrics. The analysis was conducted on 20 companies, divided into two groups: 10 companies that have integrated ABHA into their platforms (Group A) and 10 companies that have not (Group B) on the following basis are:-

1. **Operational efficiency**
2. **Financial performance**
3. **Patient outcomes and satisfaction**
4. **Compliance and data security**
5. **Innovation and competitive advantage**

Group A:-List of companies who have integration of ABHA

- Operational efficiency** - Average Appointment Scheduling Time reduced 15%.
- Financial performance** - Investment in Technology: Increased by 15% to further integrate and leverage digital health tools.
- Patient outcomes and satisfaction** - Patient Satisfaction: Increased by 25%, with high ratings for ease of access and streamlined processes.
- Compliance and data security** - Data security significantly improved, with a 30% reduction in data breaches owing to ABHA's secure integration, enhancing overall patient data protection.
- Innovation and competitive advantage** - user base growth increased by 20% due to improved digital health capabilities, which drew additional users to the system.

S.No.	Company	M1	M2	M3
1	Aarogya HMS	Yes	Yes	No
2	Softcure Hospital Software	Yes	Yes	Yes
3	Smart HMS	Yes	Yes	Yes
4	e-clinical works	Yes	Yes	Yes
5	Chikatsa	Yes	Yes	Yes
6	Healthplix	Yes	Yes	Yes
7	Fortis Healthcare	Yes	No	No
8	Karexpert	Yes	Yes	No
9	Eka care	Yes	Yes	Yes
10	Practo	Yes	Yes	Yes

Group B:- List of companies who haven't integrated ABHA

- Operational efficiency** - Average Appointment Scheduling Time: No significant change from baseline, this suggests that without ABHA integration, appointment scheduling efficiency stays constant.
- Financial performance** - Operational Costs increased by 3% due to rising labour costs and inefficiencies. This investment promotes ongoing progress and the use of innovative technology.
- Patient outcomes and satisfaction** - Patient retention rate increased by 5%, indicating minor increases in patient satisfaction but not the significant retention benefits found in Group A.
- Compliance and data security** - 85% compliance, with minor gaps in achieving national digital health requirements, suggesting space for improvement.
- Innovation and competitive advantage** – In user base growth the 10% gain was mostly driven by traditional marketing efforts rather than digital health innovations, indicating slower development than Group A.

S.NO.	COMPANY	M1	M2	M3
1	Clinion eClinical Platform	No	No	No
2	Revolut Healthtech Pvt. Ltd.	No	No	No
3	docNmeds	No	No	No
4	Parihaar Healthcare Pvt. & Ltd.	No	No	No
5	Connect2clinic	No	No	No
6	Sparta cloud solutions	No	No	No
7	Origami risk	No	No	No
8	Easy solutions infosystems Pvt. Ltd.	No	No	No
9	CSC healthcare	No	No	No
10	Covetus	No	No	No

Discussion

- The 73rd World Health Assembly in 2020 approved the Global Strategy on Digital Health 2020-25. WHO recommended Member States to create country-specific eHealth mechanisms. Digital health services should prioritise accessibility, equitability, affordability, and sustainability in healthcare. They should also address illness prevention at all levels, including health promotion and protection.
- In India, the NHP 2017, which established the National Digital Health Authority (NDHA) for digital healthcare delivery, emphasises the importance of "preventive and promotive health care orientation" in all developmental policies to achieve optimal health and well-being. Digital health encompasses more than just diagnostic and therapeutic health, but also promotes and prevents health, research and development, innovation, and cooperation across sectors.
- The integration of the ABHA with digital healthcare systems has resulted in considerable operational, financial, and patient outcome improvements. The study's findings show the differences between firms that have implemented ABHA (Group A) and those who have not (Group B).

Conclusion

Benefits for Companies Integrating ABHA:

- Enhanced operational efficiency.
- Improved financial performance.
- Better patient outcomes.
- Increased compliance.
- Boosted competitive edge and market position.

Challenges for Companies Not Integrating ABHA:

- Modest advantages.
- Continued operational inefficiencies.
- Increased costs.

Tactics for Enhancing ABHA Adoption:

- **User-Friendly Interfaces:** Simplify access and usage for patients and healthcare providers.
- **Educational Campaigns:** Raise awareness about the benefits and usage of ABHA.
- **Incentives for Healthcare Practitioners:** Encourage healthcare providers to adopt and integrate ABHA into their practices.

Key Requirements for Successful Deployment:

- Guaranteeing data security and privacy.
- Combatting cybersecurity threats.
- Increasing user acceptance.
- Ensuring interoperability across healthcare systems.

Thank you