



## **Full Length Review Article**

### **DIGITAL REVOLUTION: MINDFUL INNOVATION IN THE INDIAN HEALTHCARE INDUSTRY**

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#### **ABSTRACT**

The article highlights the medical innovations in the Indian healthcare industry with reference to the new startups. There is a paradigm shift from use of traditional health services to Electronic Healthcare (e-Health) and Mobile healthcare (m-Health) services. The article focuses on the benefits and the lacunae attached to new innovations.

#### **INTRODUCTION**

We are moving towards a Digital Health revolution. "Digital Health" is one of the pillars of "Digital India" envisioned by the current Indian government and also an upcoming trend in the Indian healthcare industry. Digital Healthcare aims to transform the Indian healthcare industry by use of information and communication technologies to deal with health issues. With the growing usage of internet, smartphones and awareness about telemedicine, many hospitals are exploring options to make use of digital technology. This will help them to increase their reach to patients located in the remote locations. Followed by e-Health, m-Health is another biggest technological breakthrough in today's world.

##### **e-Health Universe**

The e-Health initiative aims at providing effective and economical healthcare services to all citizens. The program aims to make use of technology and portals to facilitate people maintain health records and book online appointments with various departments of different hospitals using eKYC data of Aadhaar number. Undoubtedly, e-interfaces help lessen the time taken to otherwise reach the hospital and seek an expert opinion for treatment.

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Improving accessibility and solving the shortage of doctors in India, eHealth business is a boon to the Indian Industry. One of the recent entrants to this market is Lybrate, inception in the year 2014, as an online platform providing specialized opinion on health problems. It has a network of around 100,000 trusted doctors from 80 cities to communicate about health issues. Lybrate also provides health tips to patients from experienced doctors. Application users are able to consult doctors instantly online, get reports automatically shared with doctors and continue consultation. Even traditional medicine practices such as Ayurveda faces the problem of absence of doctors and pharmacies. As a solution, yoga guru Baba Ramdev, also, is lining up an online platform (chikitsalaya) for ayurvedic consultation and treatment.

##### **Emerging m-Healthcare**

M-Health is one of the components of e-Health. m-Health applications have tremendously helped both the doctors and patients. Usage of several smart applications has allowed the doctors to give appointments and check their schedules over phone, get notification on several events e.g. the patient being admitted, patient getting discharged, any abnormal lab/test result etc. In addition, doctor can access patient records from anywhere, order a new medicine or stop medicines currently given to the patient. Likewise, the patient has been benefitted with the use of mobile technology. They can book appointments and receive appointment confirmation,

access lab reports and receive information regarding cancellation of appointments etc. One of the recent initiatives made at the Stanford Change Labs is formulation of MUrgency, an emergency ambulance service in India. Patients can call ambulance conveniently and quickly with the use mobile application. MUrgency addresses the need of the hour using cloud platform that connect people during medical emergency. It is an easy, fast and a reliable application. This application was launched in February 2016 in Punjab (includes Chandigarh, Mohali and Panchkula). Punjab was the first to be tested because of a higher penetration of smart phones in the state. It is said that more than 8000 downloads and around 20-25 transactions takes place on a daily basis. m-Health can also bring populations who are underserved under the umbrella of health systems. Women can use mobile devices to contact health providers unanimously for culturally sensitive issues such as family planning.

### Room for Improvement

Although e-Health and m-Health have a broad range of potential uses and benefits, a common set of barriers also exists. Firstly, many users might have a hitch as they have been seeing a doctor physically and the seconcepts are new to them. They might not be comfortable sharing personal problems without physical presence of the doctor. Also, patients demand privacy and confidentiality of their records. There is a need to have stringent access control procedures to ensure safety, confidentiality and integrity of patients' record. Further, there is a requirement to regularly audit these procedures. India has been facing scarcity of well-trained doctors. Medical practitioners must keep themselves up-skilled and educated about the new technology. Another biggest challenge that our country faces is the non-availability of doctors in the rural and remote areas. Most of the doctors prefer to practice in urban areas and so rural population has to face lot of hardships for getting medical treatment.

Connectivity is another major hindrance in the use of cloud platform. There is also a need to educate the rural masses about the functioning of the technology and coach them to make use of the same. Lastly, as e-Health and m-Health are technology driven, it is critical to ensure that the hardware and software are reliable and updated.

### Conclusion

The healthcare industry is continuously looking to new technology to improve patient care and efficiency. e-Health and m-Health could improve the quality of healthcare while reducing the cost of care delivery. m-Health can help providers reach people at the base of the socioeconomic pyramid. These health applications can help consumers and health workers become better informed, tech savvy, and proactive in seeking health services. These medical innovations are likely to benefit people living in urban areas more as they would be more open to new technologies and greater willing to adopt new technology. Patients would how evers witch from traditional healthcare services to e-Health and m-Health services if it is convenient, personalized, ubiquitous, secure and offers better medical services.

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