

# Mobile Healthcare Apps in India: A Study on Adoption by Consumers

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**Abstract**— India among all developing countries studied for mHealth adoption ranks 2nd. Widespread adoption of mobile technology in healthcare, or mHealth, is now viewed as inevitable by more than half of doctors and healthcare payers in developed and emerging markets around the world, including 60% in India. Consumers have high expectations for mHealth, particularly in developing economies as mobile cellular subscriptions there become ubiquitous. In emerging markets, consumers perceive mHealth as a way to increase access to healthcare while patients in developed markets see it as a way to improve the convenience, cost and quality of healthcare. The use of mHealth and speed of adoption will be determined in each country by stakeholders' response to mHealth as a disruptive innovation to overcome structural impediments and align interests around patients' needs and expectations. Despite demand and the obvious potential benefits of mHealth, rapid adoption is not yet occurring. The main barriers are not the technology but rather systemic to healthcare and inherent resistance to change. For full adoption of m-health in India, people have to come out of their inherent shell about the traditional way of healthcare delivery and embrace this new and innovative chance of easier way. For m-health to become a boon for India everyone from doctor to patients to payers and government has to work coherently.

## **Objective:**

The study was carried on to observe the adoption of consumer towards mobile healthcare apps. Technology has brought a heavy change in the healthcare sector, Consumers are more conscious for their health and maintaining the quality of life. Mobile healthcare apps customers can get maximum satisfaction without doing it the traditional way. In India, the growth of mobile healthcare app is significantly escalating. Though India will have to work harder at convincing people about the advantage of mobile healthcare apps, the scope of mobile healthcare apps in India is still vast. The Market of mobile healthcare apps can certainly grow in India if the providers can lure its local audience by the following:

- 1) Making it cost effective.
- 2) Making it secure.
- 3) Convincing customers about its benefit.
- 4) Creating awareness about it.
- 5) Joining hand with Government.

**Key words:** mHealth

## I. INTRODUCTION

In this rapidly changing tech-savvy world where physical and virtual environments are converging and where close to 45% of 7 billion people in the world are exchanging and leveraging the World Wide Web, the dynamic role of digital technology in improving the way businesses operate, grow and scale is becoming quite prominent which is no different for healthcare industry as well.

Digital technology seems to have clearly disrupted healthcare by changing the way the healthcare services are provided, harnessing data to drive decisions and automating processes so that they keep up with the pace of business.

India's digital connectivity is expected to grow from 15% in 2014 to 80% access in 2034; with rural Internet users increasing by 58% annually. This trend can drive the adoption of telemedicine and other digital technologies, thereby increasing access to healthcare. With this growing digitally literate population, India has set the stage for the next wave of digital disruption and investments in healthcare in the world.

M-health is probably one of the largest sectors of digital healthcare in India, with an estimated market size of 2,083 crore INR in 2015—which is set to rise to 5,184 crore INR by 2020. Acceptance of m-health is increasing simultaneously. A study showed that 68% of doctors in emerging markets recommend m-health and 59% of patients are already using it. Mobile apps, especially those connecting doctors to patients and enabling remote consultations, are a major segment within m-health.

A mobile phone is a multipurpose and powerful device capable of performing a number of tasks that are beyond its primary purpose of communication. There is a lot of hype around mobile technology, especially smartphones, and a number of new and innovative functionalities and/or apps which are capable of addressing needs in new areas are being launched daily. People have started using mobile phones for a large number of activities: banking, shopping, communication, watching games, movies & videos, listening to music, surfing for news, travel information, etc.

Clearly, the impact of mobile technology on our day-to-day lives is growing every day. Smartphones and mobile apps are a powerful combination that has made it very easy and convenient to perform various routine to complex tasks. Mobile technology is making huge inroads even in the healthcare space.

mHealth (or mobile health) is commonly defined as the provision of health services through mobile technologies. mHealth is about leveraging mobile and wireless devices to improve health outcomes.

In India, there is considerable potential to leverage mHealth as an alternative healthcare delivery channel. Structural, financial and behavioral factors have created a significant need for such a channel.

### A. *The structural issues are basic:*

The Indian patient base is rising and distributed. Access to even basic healthcare is a challenge because the supporting infrastructure and resources are inadequate.

### B. *Financial constraints:*

Like rising healthcare costs and limited budget allocation for healthcare by the government further, constrain the healthcare ecosystem in India.

### C. Behavioral factors:

Such as a change in lifestyle have resulted in newer types of diseases which require access to specialists who are few in number and cannot be reached through traditional means of healthcare delivery. Also, the population is getting more tech-savvy and demanding

The scope for leveraging mHealth as an alternate delivery channel in India is substantial. As of January 2017, the global average for mobile Internet traffic as a percentage of the total web traffic is 50%. India ranks second on this parameter at 78%. Clearly, more and more Indians are accessing the Internet on their mobile phones. This significant behavioral change is an important factor for mHealth adoption.

## II. METHODS

Research Type	Primary Research
No. of Respondents	188
Type of Form	Google Forms
Analytical Tool	MS Excel

## III. ANALYSIS

The analysis of the survey gave out key points with regards to the m-health adoption in India which are:

- Out of 188 total responses, 65% are not aware of any m-health apps and have never used it before
- Out of 35% who have used it in their lifetime, a majority of the people have used it for booking an appointment with the doctor with 40% of the total. The second most service for which it is used is for ordering medicines online.
- Physicians may play a big role in creating awareness about m-health but the current scenario is lagging behind with only 14% of the people has been recommended by their physician for using m-health.
- The key reasons for people not adopting and using m-health the way it should be used are –
  - 1) No awareness
  - 2) Concern about m-health apps being insecure
  - 3) Considering them hectic and complex to use
  - 4) No proper internet facility
  - 5) Improper support from the government

## IV. CONCLUSION

M-health market is still in its nascent stage and growing. Customers are getting attracted to m-health apps for its convenience and cost-effectiveness.

Hence as per the quick market research on the target population, it is observed that Awareness about m-health is low but remaining People who are aware of it have developed a positive perception towards m-health and can motivate others to go for m-health apps.

Although the model is promising great opportunity for the business, it has some drawbacks also and a number of hurdles in its way of success. Some of it is lack of awareness, security concerns, and traditional way of delivering healthcare services.

The m-health aligns very well with the national development objectives and has clear and tangible benefits to the consumers as well as the industry. Meanwhile, it has

also been observed that growth of e-Commerce and retail are complementary and reinforce each other. By leveraging the technology in a smart way and under stringent regulatory control, the m-health apps has a scope of adding immense value to the existing traditional healthcare industry in India.

Providers can play an important role in making the mHealth story a reality in India. While there are cases where providers have taken the lead in implementing mHealth initiatives and the results are encouraging, there is a lot of room for growth. Patients need guidance from their providers to decide which mHealth apps to use. Given the sheer variety of mHealth apps and the lack of clear criteria to determine their reliability and appropriateness, patients are likely to get confused and give up on health apps. Also, there is a risk of patients perceiving mHealth apps as a waste of time if they encounter average, if not worse, apps. Therefore, as domain experts, providers can play the role of influencers and promote mHealth adoption by helping patients to identify the right apps.

The government is serious about improving healthcare outcomes in the country by leveraging new and innovative ways like mHealth solutions. A number of mHealth initiatives have been started by the government. It is also collaborating with leading healthcare institutions and foundations to develop solutions for improving the healthcare ecosystem in India. The Ministry of Health and Family Welfare has notified electronic health records (EHRs) standards for India<sup>10</sup> in consultation with stakeholders. The government will look at providing tax benefits or financial incentives to providers who adopt and then demonstrate the benefits of the mHealth. This will help in increasing mHealth adoption.

## REFERENCES

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