



# DIGITAL HEALTHCARE MARKET SIZE IN INDIA

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## ABSTARCT

The healthcare industry in India is one of the fastest expanding industries, and it has made significant contributions to the country's economy both financially and in terms of employment. There are hospitals, medical facilities, medical equipment, health insurance, telemedicine, clinical trials, medical tourism, and medical equipment all included. Let's take a closer look at the present situation of healthcare in India and then at these digital health projects being undertaken there. Fitness and wellness applications and diagnostics solutions are predicted to boost the growth of the preventative healthcare market in India to a value of \$170 Bn by 2025.

**KEYWORDS:** India, digital, telemedicine, Markets, technologies.

## INTRODUCTION

With an increase of 90% in the digital adoption index between 2014 and 2017, India has quickly become one of the world's leading digital economies. India's healthcare system has gone digital in an effort to raise standards and broaden access. With a compound annual growth rate (CAGR) of 27.41% between 2019 and 2024, the Indian digital healthcare industry is expected to increase from a 2018 valuation of INR 116.61 Bn to a 2024 valuation of INR 485.43 Bn.

The Indian healthcare system is evolving in response to the introduction of novel health technology including wearables, telemedicine, genomics, VR/AR, robots, and AI. The Indian market is poised for a 'digital health' revolution similar to those occurring in many other countries. Delivering value-based care throughout India's healthcare continuum is greatly aided by digital health technologies. Particularly in India's tier II and tier III cities, adaptive intelligence solutions may assist decrease the barriers between hospitals and patients, increasing access to treatment and boosting patient satisfaction overall. In order to effectively guide new-age, technologically driven business strategies by attracting customer attention, healthcare firms are prepared to embrace innovation and developing trends. Opportunities for healthcare providers and medical device makers in India to participate in the digital health field will grow in the coming years as the pace of digital innovation in healthcare quickens.

The healthcare market is expected to grow at a CAGR of 22% between 2016 and 2022, according to the India Brand Equity Foundation (IBF). This means that the market would grow from US\$ 110 billion in 2016 to US\$ 372 billion in 2022. In a similar vein, India's hospital sector is projected to grow from its 2017 total of \$61.79 billion to \$132.84 billion by 2022, a CAGR of 16-17%. Lifestyle illnesses, an aging population, more incomes, greater access to health insurance, and a more health-conscious public are all factors in this expansion. As the population ages and the need for healthcare rises, so does the pressure on healthcare providers, insurers, government agencies, and other organizations to provide that demand at an affordable price without compromising on quality or access. The telemedicine market in India is anticipated to grow at a CAGR of 20% between 2016 and 2020, reaching US\$ 32 million by 2020.

Meanwhile, by 2020, it is projected that digital healthcare interventions would propel the market at a CAGR of 23%. As a result of AI's increasing popularity, the Indian healthcare industry is undergoing dramatic change. According to Research & Markets, by 2021, the use of artificial intelligence in India's healthcare system would generate revenue of US\$ 6 billion (INR 431.97 Bn), an increase of 40% from 2017. The Indian healthcare ICT industry was valued at US\$ 1 billion in 2014, according to the National Association of Software and Services Companies (NASSCOM). According to the 2015 study, the industry would increase by 1.5 times by 2020. Digital health startups are anticipated to fuel a significant share of the predicted increase. Future Health Index (FHI) 2019 reports that 76% of healthcare professionals in India are already adopting DHRs in their practice, making it the world leader in the use of digital health technology. Primary research in 15 countries is the basis for the FHI. The research inquiries into the perspectives of medical staff and patients. With 46% AI healthcare adoption, India is on par with the average of the top 15 countries.

## LITERATURE AND REVIEW

**Sita Madhavi (2021)** Communication and advertising are increasingly moving into the digital realm. Most of the educated population has resorted to staying hooked to their phones and computers throughout the current curfew due to covid-19. These days, it feels like you can't do anything without the internet, whether it's a serious academic pursuit, a retail transaction, a leisure activity, or even a way to improve your health. This piece is an attempt to catalog the social media campaigns run by related healthcare startup applications. By analyzing the research on these applications in online publications, it illustrates the function of digital marketing.

**Olena Pryiatelchuk et al (2020)** A new sector, the digital media market, has emerged because to the proliferation of technology like mobile computers and the internet. Over the last 15 years, technology has evolved dramatically inside the media and entertainment industry, bringing forth new competitors, novel business models, and new product landscapes in the film, television, publishing, music, and video gaming sectors. As a result of its disruptive nature and enormous development potential, the digital media industry needs an in-depth analysis and characterization. The essay brings up the issue that the digital media business is not well conceptualized in the context of the global economy. This article summarizes the current state of the digital media market and gives a comprehensive review of the research conducted on it. The authors provide the following definition of digital media as they see it at the present time: According to The Global Industry Classification Standard, "digital media relate to goods and services in the digital format, generated by the media and entertainment industry group, and able to be made, watched, disseminated, updated, and stored using various digital devices." The following is a summary of the current digital media market structure: You may break it down into 7 categories: SVoD, VG, E-Pub, Digital Audio, SM, SE, and Ads.

**Gian Fulgoni et al (2015)** In this study, we examine the success of digital marketing campaigns targeted at Hispanic Americans. According to the authors, marketing and advertising professionals often make the mistake of believing that the best method to reach Hispanic customers is via Spanish-language media channels, and of associating Latino with Spanish-speaking. While acknowledging that many Latinos speak English as a first language, they present data on issues such as the linguistic habits of digital media consumers of Hispanic descent and the disparities between Hispanics and non-Hispanics in their use of social media and other forms of mobile-based entertainment.

**Tarika Nandedkar et al (2019)** ABSTRACT Because of technological advancements, young people now have unfettered access to digital media, which has become a major source of knowledge in addition to enjoyment. These two events serve as the focal points of our study. Can young people cope with this kind of knowledge? Do they grasp the true nature of communication? Can kids understand the nuanced meanings of media portrayals? Such inquiries drive the field today. Understanding the level of media literacy among today's youngsters is crucial. To be media literate is to be able to answer the question, "What messages are revealing? Whose idea was it to send that? Why are we getting this message, exactly? The present study used W. James Potter's "Cognitive Media Literacy Model" to analyze data from interviews with 490 young people across a wide range of ages and educational backgrounds. The model's components are used to evaluate respondents and determine whether or not they have the skills necessary to effectively digest information obtained from a variety of media. T-test and One-Way ANOVA are also used to analyze the effect of age and gender on media literacy.

**Sarah Edney et al (2018)** Background social media is a widely used and widely accessible tool, making it a great place to disseminate health promotion campaigns. Because a higher level of participation and exposure has been shown to have a favorable impact on treatments, increasing participation will increase the efficacy of

these programs. Objective In order to learn which creative elements (message content and design) are most effective in communicating with their audience, which social media platforms attract the most engagement, and which creative elements prompted the most engagement, this study analyzed the social media activity of leading commercial activity tracker brands. Methods Over the course of three months, we coded the Facebook, Twitter, and Instagram posts (n=509) from Fitbit and Garmin to see how many had creative aspects. The number of times each post was liked, commented on, or shared was tallied. The creative aspects that were shown to be connected with better engagement were determined using negative binomial regression analysis. Results Instagram's engagement rates were 30-200 times greater than those of Facebook and Twitter. Both Fitbit and Garmin used unique creative aspects, although they were not always the same. Product picture posts, feature highlight posts, and self-improvement-themed posts all had better engagement rates ( $P < .01$ ). Conclusions The results indicate that Instagram has great potential as a medium for disseminating interesting health information. Inspirational health messages that center on a useful end result tend to have the most impact. There was a clear divide in the creative approaches used by Fitbit and Garmin, which presumably reflects the dissimilar audiences they're going for. As a result, it's clearer than ever that health promotion initiatives must take into account different target audiences.

## INDIA'S DIGITAL HEALTH INITIATIVE: WHERE IT STANDS RIGHT NOW

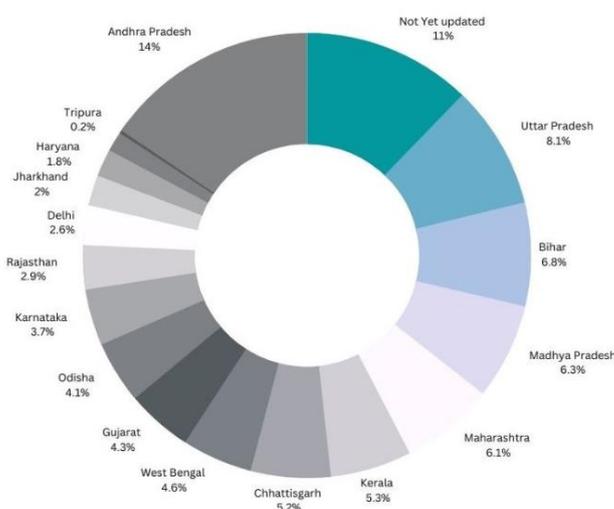
The Prime Minister of India recommended the launch of the National Digital Health Mission on August 15, 2020. (NDHM). Since its inception in April 2020, the pilot program has evolved into the Ayushman Bharat Digital Mission, and although much has been learned in those two years, there is still plenty to discover.

The National Digital Health Mission (NDHM) has as its goal the centralization of all Indian residents' health records in a single database. In order to provide individuals with access to standardized digital healthcare services, the mission has developed an online portal.

Digi Doctor, the Health Facility Register, Individual Health Files (IHF), and Electronic Medical Files (EMFs) are just a few of the many exciting new additions.

An individual's Health ID card serves as both a form of identification and a key to their personal medical information. The patient's medical records include of their medical history, medications, diagnostic findings, and discharge summaries.

There have been 24,54,39,322 registrations for Health IDs since its inception. An estimated 1,49,02,351 medical files have been connected.



**Fig 1. the percentage of ABHA's created by state**

Numerous nodes and isolated data sets contribute to the health ecosystem's disarray. Patients are personally impacted since they do not have access to a unified digital health experience from beginning to finish. It has a systemic effect on the healthcare industry as a whole since it stymies public health research. To this end, it is crucial to provide an open and interoperable network that facilitates natural communication between hospitals and their patients.

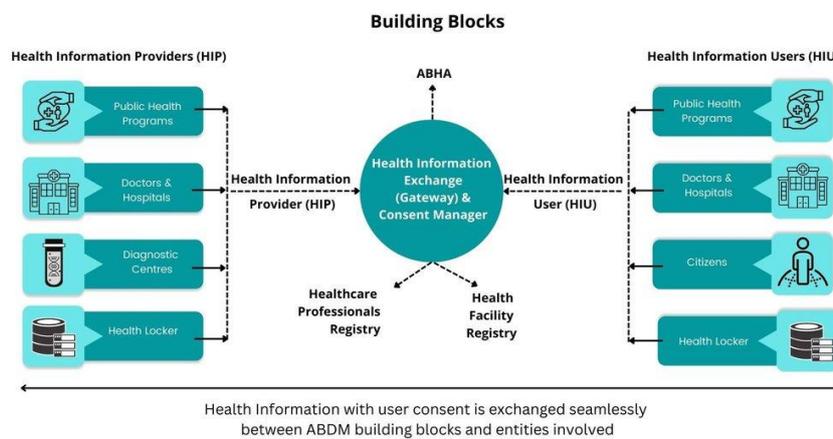
## Allocation for Vertical/Division Heads (figures in ₹Crores)

Financial Year	2021-22*	2022-23	2023-24	2024-25	2025-26	Total
Funding to each state / UT**	0.24	0.72	0.72	0.72	0.72	0.72
Total Funds to all States / UTs	8.64	25.92	25.92	25.92	25.92	112.32

### Benefits of a digital health (ABHA) card

Citizens may access their health information quickly and easily with the ABHA Health ID, since they won't need to enter their ID number in several times. Digital documents, such as test results, medications, and diagnoses, are immediately accessible.

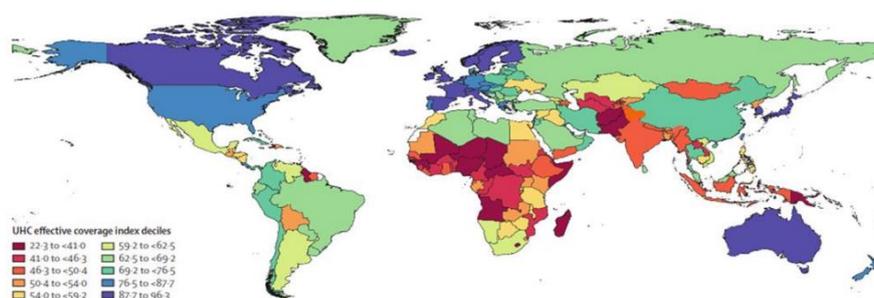
After being active, a Health ID may be obtained from any public or private healthcare facility included in the National Health Infrastructure Registry.



### Current state of healthcare in India

An intricate system with several obstacles It's not simple to meet the healthcare needs of the world's 1.4 billion inhabitants. Indicators of health and longevity in India have steadily increased over the years, while others, such as the country's low newborn and maternal mortality rates, have steadily decreased. India has made progress over the past three decades on the indicator of Universal Health Coverage (UHC), defined as the provision to all of the health services they require, of high quality, without causing financial hardship. The UHC index value has risen from 27 in 1990 to 42 in 2010 and 47 in 2017. (2019). India, however, has to make significant strides in all of these areas. In 2019, India's universal health coverage (UHC) score of 47 was below the global average of 60, with scores ranging from 95 or higher in Japan and Iceland to lower than 25 in Somalia and the Central African Republic.

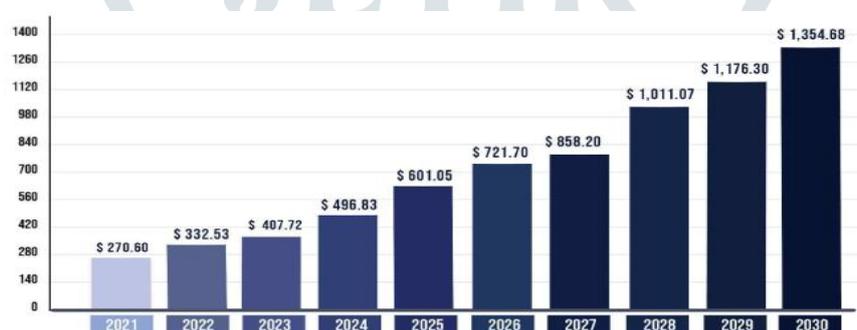
There are a number of significant problems with Indian healthcare. due to a deficiency of available means, Health care is of varying quality and cost, and access is not uniform.



**Fig 2: Universal Health Coverage (UHC) across the world**

Source: Adapted from 'The Lancet'

According to Precedence Research, the global digital health market was valued at USD 270.60 billion in 2021 and is expected to reach over USD 1354.68 billion by 2030, growing at a CAGR 19.2% during the forecast period 2022 to 2030. The proliferation of health and fitness-focused apps for smartphones is anticipated to be a major driver in the expansion of this market.



**Fig 3. the global digital health market USD 270.60 billion in 2021 to USD 1354.68 billion by 2030**

Market expansion is predicted to be aided by the increasing funding for healthcare IT infrastructure, especially in emerging and developed countries. In order to recuperate from the USD 5 billion disaster caused by COVID-19, the Asian Infrastructure Project Bank (AIIB) granted its first health infrastructure investment in April 2020. As a result, the public and commercial sectors that are struggling as a result of the epidemic may anticipate receiving assistance.

In addition, governments throughout the world have implemented strict social distance regulations and lockdowns in response to the COVID-19 epidemic. When dealing with patients in a lockdown scenario, digital health technologies like telemedicine provide huge opportunity for care service providers. All of this bodes well for the future of the market, and is likely to spur product acceptance and industry expansion in the years to come.

The term "digital health" refers to the use of information and communication technologies in various healthcare settings to improve the health and well-being of patients. Wearable gadgets, mHealth Apps, ingestible sensors, and artificial intelligence, among others, are being rapidly adopted by the healthcare business, marking a revolutionary shift that has boosted market growth.

Incorporating software, hardware, and services, digital health is a healthcare paradigm shift that leverages the transformative power of digital technology. The umbrella term "digital health" encompasses a wide range of medical advancements, including but not limited to: mobile health (mHealth) applications; wearable devices; electronic health records (EHRs); electronic medical records (EMRs); telemedicine; telehealth; and customized medicine. An aging population, rising rates of disease and death among children, prohibitive costs, financial hardships, and racial discrimination in access to health care all played significant roles in driving the demand

for medical innovation. Throughout addition, epidemics and pandemics have given digital health a heightened degree of relevance, which is continually evolving and supporting market expansion in the projected future.

### **Insights into the Digital Healthcare Market in India (2019 to 2024) - CAGR of 27.41% Expected**

Market expansion in digital healthcare has been propelled by India's large online presence and government initiatives that encourage its development. The healthcare sector has benefited from the Digital India program's efforts to improve the country's digital infrastructure, which began in 2015. From 2014 (251.59 Mn) to 2018 (493.9 Mn), there was a significant growth in the number of people with Internet access. Alternatively, there were 904.52 million mobile phone subscribers in 2014, but in 2018, that number climbed to 1,188.99 million.

The digital biometric identity program (Aadhaar) and other government-led digitization efforts in India have fostered a dynamic environment for the country's burgeoning digital healthcare industry. The National Health Portal, e-Hospital, and the Integrated Health Information Program (IHIP) are just a few examples of the many e-Gov projects that have contributed to the expansion of the healthcare IT business. The digital healthcare sector has been stabilized by the consistent influx of FDI, which has helped to alleviate stakeholder worries.

Despite promising prospects, widespread adoption of digital technology in India's healthcare industry is being stymied by a number of obstacles. Adoption is slowed by the fact that patient information and prescriptions are not yet fully digitalized. The digital healthcare business faces hurdles from factors including inadequate technical infrastructure and a lack of established rules. Problems with value proposition are also caused by the ecosystem's complexity and the high cost of client acquisition.

The digital healthcare industry is broken down into submarkets such as telemedicine, mobile health, EHR/EMR, and others based on the services provided (remote diagnostics and healthcare analytics). In 2024, mHealth is expected to generate 40.64 % of total market revenue, with telehealth coming in second. Patients are more likely to use mHealth services and solutions like healthcare applications and wearable devices because of their increased availability and convenience.

The development of the digital healthcare industry has been aided by the introduction of cutting-edge technologies including artificial intelligence (AI), machine learning, Blockchain, IoT, IoMT, and Big Data analytics. The sophisticated AI and machine learning-based technology has the capacity to examine intricate medical data and forecast patients' treatment and care plans. The emergence of smart bands, smartwatches, smart glasses, linked medical equipment for remote monitoring, and location-based trackers are all examples of how the Internet of Things and Internet of Medical Things have boosted the digital healthcare industry.

Strong rivalry exists between businesses competing to provide digital healthcare services. There are a wide range of enterprises competing in the Indian market, from new entrants to well-established multinationals looking to increase their presence there. An oversaturated market is the result of several competitors. The market's unrealized potential has attracted a lot of interest from wealthy people looking to capitalize on it. Even though the market has seen the implementation of successful pilot projects, scaling up the pilots to satisfy industry objectives presents a number of obstacles.

### **Preventive Healthcare Is the Need of The Hour**

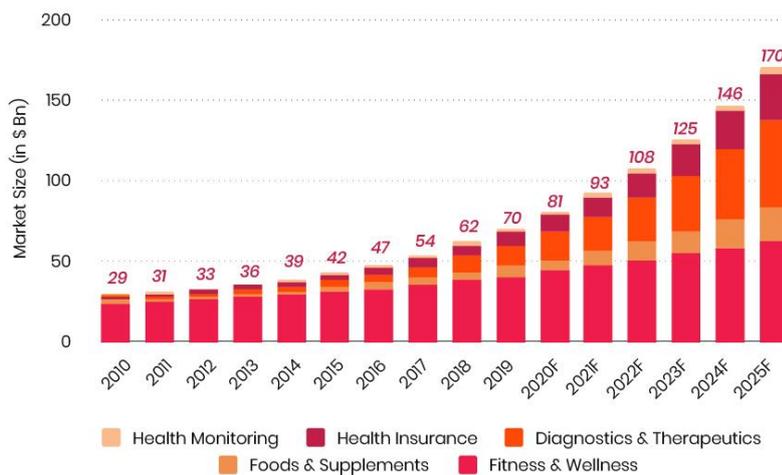
The prevalence of potentially fatal conditions such as cardiovascular disease, hypertension, cancer, and diabetes has increased in recent decades due to modern urban lifestyles. From 2017 to 2018, NCD data shows an increase in the prevalence of diabetes (3.18 percent), cardiovascular disease (47.1 percent), hypertension (10.5 percent), stroke (46.2 percent), and common cancers (324.18 percent).

The high rates of poor eating, excessive drinking, smoking, drug use, and lack of exercise among city dwellers are major contributors to this problem. However, the coronavirus pandemic has refocused attention on healthy living behaviors and food, which is predicted to increase the use of preventative healthcare solutions.

By 2025, fitness and wellness applications, as well as the diagnostics and therapeutics divisions, are predicted to propel India's preventive healthcare industry to \$170 billion. In metropolitan regions, there has been an uptick in the use of fitness and yoga applications as well as a general increase in the number of people signing up for gym memberships and making healthier dietary choices.

The ever-increasing price of medical care is encouraging more people to invest in health insurance. There will be an immediate increase in the health insurance market as a result of the government's announcement of required coverage for employees. Business owners in India are responding positively, which would hasten the introduction of required health insurance.

Higher adoption of fitness & wellness platforms as well as diagnostics solutions will fuel the growth in preventive healthcare



**Fig 4. Preventive healthcare to reach market size of \$170 Bn by 2025**

The Covid-19 has shed light on the shortcomings of India's conventional medical system. Due to inefficiencies caused by poor management, the healthcare industry will increasingly look to technological solutions. The Covid-19 epidemic is a wake-up call for India's healthcare system and will provide health IT firms the motivation to provide novel solutions to the challenges of serving the country's vast population.

### Future of Digital Healthcare in India

Both the demand and supply sides of the digital health industry are forecast to see meteoric growth in the near future. India can address many of its problems by concentrating on developing a healthcare environment supported by technological advancements. Intelligent patient monitoring, supply chain difficulties, clinical inefficiencies, claims settlements, and patient safety may all benefit from the combination of Health IoT, AI, 3D printing, and robotics.

Even if they have already shown promise, startups need to prove that their ICT solutions can be implemented successfully throughout the healthcare ecosystem before they can expand. Scaling up digital healthcare activities will demand more investment in the health startup ecosystem.

### CONCLUSION

Public sector employees in India, whether Indian citizens or foreign nationals, have access to a wide range of benefits, including health care (public and private), dental care, vision care, and prescription drugs (with few exceptions and no cost sharing). Let's take a closer look at the present situation of healthcare in India and then at these digital health projects being undertaken there. By 2025, preventative healthcare in India may be worth \$170 billion because to the proliferation of fitness and wellness applications and diagnostics solutions. Let's take a closer look at the present situation of healthcare in India and then at these digital health projects being undertaken there. Fitness and wellness applications and diagnostics solutions are predicted to boost the growth of the preventative healthcare market in India to a value of \$170 Bn by 2025.

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