



Health Management in Rural India: Role of Healthtech Startups

To improve India's healthcare sector infrastructure and ensure access to quality healthcare across the country, there is a need for a healthcare model that provides 24x7 healthcare services in remote areas of the country. A system that is sustainable, cost-efficient, effective, and safe so that every village in the country can get city-like healthcare services as an inclusive healthcare industry. Technology-based start-ups are emerging as a key solution to bridge the gap between urban and rural healthcare services.

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he healthcare sector is emerging as a key player in the Indian economy, comprising various components such as hospitals, medical devices, telemedicine, medical tourism, health insurance, and especially rural healthcare services. With the increasing coverage

of healthcare services, investments in healthcare are increasing in the public and private sectors. In this era of change, Healthtech startups are growing rapidly and playing a vital role in rural healthcare. Today, patient care and health operations are being improved by integrating technology in rural healthcare.

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Healthtech startups are making healthcare more accessible, efficient, and patient-centric. These startups use cutting-edge technologies such as artificial intelligence (AI), machine learning, telemedicine, and data analytics. Various innovative experiments by Healthtech startups are finding effective solutions to the problems of rural patients. The coming together of health, technology, and innovation has revolutionized patient-centric services and the rural healthcare system as a whole.

Factors such as the rapid growth of healthcare technologies and India's huge market are encouraging investors. Healthtech startups in India are leveraging their strong IT expertise to develop healthcare technologies, such as telemedicine platforms, health monitoring tools, AI-based diagnostics, and health information systems. Nearly 65% of the population resides in rural

India, which is a large untapped market for healthtech businesses. As smartphone usage and internet access is increasing in rural areas, the potential to reach people in remote areas using technology and digital solutions is also increasing. Healthtech startups are expanding their customer base and developing viable business models by targeting the rural population.

According to the Economic Survey 2022-23, India's public health expenditure is set to reach 2.1% of GDP in FY23 from 1.6% in FY21. However, India still lags behind the global average public health expenditure as a percentage of GDP. The Government of India's Ayushman Bharat Yojana, launched in 2018, is the world's largest government-backed healthcare scheme. The Government of India operates more than 2.5 lakh healthcare centres that provide services such as telemedicine, e-pharmacy, and e-diagnosis. Despite these facilities, access to medicines for common diseases by the rural population sometimes faces problems in remote areas.

To improve India's healthcare sector infrastructure and ensure access to quality healthcare across the country, there is a need for a healthcare model that provides 24x7 healthcare services in remote areas of the country. A system that is sustainable, cost-efficient, effective, and safe so that every village in the country can get city-like healthcare services as an inclusive healthcare industry. Technology-based start-ups are emerging as a key solution to bridge the gap between urban and rural healthcare services.

Healthtech startups are revolutionizing the way healthcare services are conducted. Their vital role extends to providing innovative solutions that streamline operations for doctors and hospitals from patient management to surgical procedures. Startups

national health authority

NATIONAL DIGITAL HEALTH MISSION
TO CREATE A NATIONAL DIGITAL ECOSYSTEM, WHICH IS

EFFICIENT **ACCESSIBLE** **INCLUSIVE** **AFFORDABLE** **TIMELY** **SAFE**

KEY BUILDING BLOCKS

- HEALTH ID
- Digi Doctor
- Health Facility Registry
- Personal Health Records
- Telemedicine
- E-pharmacy

Digi Qure startup makes access to doctors all year round in rural India

To improve primary Healthcare services in rural areas, Akanksh Tandon started a Healthtech startup called 'Digi Qure' in 2020. The startup provides tele-consultation services for just Rs 1. The startup has served more than 20,000 people in rural areas of Madhya Pradesh.

Akanksh Tandon, a resident of Madiyado village in Damoh district of Madhya Pradesh, lost a seven-year-old friend he used to play with as a child. She was the daughter of his house help who died of a stomach disease. He was told that the girl could not get treatment in the village and her mother did not have the money to go to the city for treatment. Until then, Akanksh had only heard of deaths of the elderly, not of children. This incident shook Aakansh's young mind deeply.

A few years later, Akanksh realized that if the right medical infrastructure is established in rural areas, the lives of village children and thousands of others can be saved. Akanksh, who grew up in a rural environment, completed his engineering from NIT Bhopal and worked in a government job for some time. He did not like the job because he had made rural Healthcare his life's goal. Akanksh founded the Digi Qure startup along with his friends Saket Asati and Ankur Chourasia.

The Digi Qure startup connects rural residents to health experts through video consultation, and provides this service through a subscription card worth one rupee. Apart from this, Digi Qure also provides digital prescriptions, lab test services and referrals to partner hospitals. Akanksh took the risk of improving rural healthcare by leaving his government job. He launched a subscription-based 'Saksham Card',

which costs Rs 365 for a year. That is, at the rate of Rs 1 per day, four members of a family can get video consultation as per their requirement throughout the year.

Currently, Digi Qure startup has more than 2,500 members in five telemedicine based e-clinics in Sagar and Bhopal centers. Apart from this, their services are also available in Fatehpur in Bihar and Aizawl in Mizoram. In Digi Qure, patients come to the e-clinic with their Saksham card and book an appointment. Here trained health workers do the initial test, and after connecting with the doctor, the patient gets a digital prescription and patients are given complete treatment support and consultation through follow-up calls. Digi Qure has established a network of 50 doctors in 10 hospitals and two district level labs.

Recently, in Season 2 of Shark Tank India, Digi Qure startup has received an investment of Rs 40 lakh from Emcure Pharmaceuticals. Emcure Pharmaceuticals has made this investment to support Digi Qure's business. This type of investment helps startups to grow their business and take it to new heights. Shark Tank India is an Indian reality TV show based on entrepreneurship and investing. In this show, new and emerging startups get a chance to present their business ideas and plans. They have to present their plans in front of successful investors from different fields, called "Sharks".

The managers of Digi Qure startup are investing Rs 2 lakh per month. They are investing their savings of Rs 60-70 lakh in the startup and are providing solutions to the health challenges of rural India. Digi Qure startup is continuously receiving support and encouragement from the country and the world.

are improving clear disease diagnosis and resource allocation using data analytics, artificial intelligence and thermal sensing devices. Startups are playing a vital role in reducing administrative burden and improving the efficiency of healthcare.

India has witnessed significant growth in Healthtech startups in recent years, primarily due to the increasing

popularity of telemedicine and its reach in remote rural areas. Expansion of insurance coverage and wider access to telehealth services by patients and providers during the COVID-19 pandemic have also encouraged Healthtech startups. By overcoming geographical barriers and using digital platforms, telemedicine has provided remote access to expert medical advice to the

rural population, improving the availability of quality healthcare.

According to the Department for Promotion of Industry and Internal Trade (DPIIT), the healthcare management and life sciences sector has emerged as a major industry in the year 2023, with over 10,000 startups recognized by DPIIT. Notably, 47% of these startups are from Tier 2 and Tier 3 cities of India, reflecting a wide geographical expansion. The total number of healthcare startups has recorded a cumulative annual growth rate of 127% between 2016 and 2023. Of these startups, 1002 startups are actively engaged in the Healthtech sector.

According to an Ernst & Young (EY) report, the telemedicine industry in India is projected to grow at a robust annual growth rate of 31% by 2025. The Indian e-pharmacy industry is also projected to grow

rapidly, with an expected annual growth rate of 44% by 2025. Based on these figures, the telemedicine and e-pharmacy industry is expected to reach US\$4.5 billion by 2025. This robust growth will see an increased reliance on digital health solutions in healthcare. This growth will create a positive environment for Healthtech startups. With these trends, the Indian Healthtech startup industry is set for major expansion, with a potential market size of US\$50 billion by 2033, indicating an annual growth rate of approximately 26%.

Various initiatives and policies have been launched by the government to encourage remote healthcare services which are helping in the growth of health technology and related startups. These digital facilities have reduced the cost of healthcare with secure data management and are leading to better health outcomes.

Healthtech startup success story-2

Cure Bay takes healthcare to remote rural areas

When 63-year-old Basanti Das, a resident of a remote village Alipingal in Puri district, was struggling with a wound on her finger that was not healing, she did not realize that it could be a sign of diabetes. Due to the lack of healthcare services, she was having difficulty getting the right treatment. During this time, Cure Bay startup helped her and got her treated by a doctor. With the right diagnosis and treatment, Basanti's glucose level became normal. Basanti's story is a glimpse of the change brought by Cure Bay startup in rural healthcare.

Healthtech startup Cure Bay was founded in 2021 by Priyadarshi Mohapatra, Shobhan Mohapatra and Sanjay Swain. The Bhubaneswar-based startup aims to make medical services accessible and affordable, especially in remote areas where there is a lack of healthcare services.

The startup was born during the COVID-19 pandemic, considering the lack of healthcare services for 65 percent of the country's people. Cure Bay's model brings doctors, hospitals, laboratories, pharmacies and medical equipment on one platform with the help of technology. Additionally, Cure Bay has set up e-clinics in rural areas where there is no

adequate health infrastructure.

Cure Bay provides healthcare services at an affordable cost. The initial consultation fee is just ₹99, which brings doctors to patients living in remote villages without having to travel from village to city for medical treatment. Apart from this, an annual membership program starts at ₹399 in which patients get free consultations throughout the year, diagnostic tests, discounts on medicines and ambulance services. Cure Bay offers tele-consultation to patients, wherein patients can connect with doctors via video chat, followed by a process of diagnosis, health check-up and hospitalisation if required.

Each Cure Bay e-clinic has two trained healthcare professionals who connect patients to the doctor and help them arrange for their medicines. Apart from this, the company has also arranged trained staff to collect test samples from the doorstep of the patients. Currently, Cure Bay has empanelled 50 hospitals and around 100 medical professionals. The areas selected for e-clinics are those where there is a lack of medical facilities within a radius of 10 km. Currently active in Odisha and Chhattisgarh, Cure Bay aims to set up 150 e-clinics in Jharkhand as well.

Telemedicine Platforms: Telemedicine has emerged as a major change in rural health management, using telecommunication technology for remote diagnosis and treatment. Telemedicine platforms facilitate remote healthcare consultations between patients and health providers. These platforms use telecommunication technology to allow individuals to consult physicians from any location. It covers a range of medical services such as regular checkups, follow-up tests, prescription renewals, and consultations with specialist doctors. Healthtech entrepreneurs are building platforms and apps that allow patients in rural areas to consult doctors in cities. Patients no longer need to travel long distances and can receive instant medical advice and medicines from the convenience of their homes or villages.

Digital Health Monitoring: Digital health monitoring platforms are designed to collect, track, and analyze personal health-related data. These platforms monitor various health parameters using digital tools, sensors, and devices. Digital health monitoring aims to enable citizens to actively participate in their own health management. This facility provides real-time data to health providers for informed decisions.

Electronic Health Records: Electronic health records systems are digital versions of paper patient charts, reports of diagnostic tests, health consultations, etc., which compile comprehensive health information about an individual. These services are designed to preserve, manage, and make health records easily accessible in a secure and electronic format. Electronic health records include a comprehensive view of patient care in addition to standard clinical data.

Health Data Analytics: Health data analytics systems are involved in analyzing health-related data to extract health details, identify patterns, and make informed decisions for better health outcomes. It processes large volumes of health data, including electronic health records, clinical data, and patient data generated from wearables and other sources, using advanced analytics techniques and technologies. It aims to improve patient care, optimize operational efficiency, and support strategic decision making within the healthcare ecosystem.

Artificial Intelligence-based Diagnostics: Artificial Intelligence-based diagnostics helps interpret and analyze medical diagnostic data using artificial intelligence or AI technologies, especially machine



learning algorithms. The aim of this service is to increase the accuracy, efficiency, and speed of medical diagnoses, ultimately improving patient outcomes and optimizing the healthcare process.

E-pharmacy: E-pharmacy is an online platform for the sale and purchase of medicines and pharmaceutical products. It allows consumers to order medical consultations and medicines online through websites or mobile apps. It is a convenient and accessible service that allows individuals to receive medicines at their doorsteps. The popularity of e-pharmacies has grown due to its convenience, wide product range, and ability to reach consumers in remote areas.

Health ID: Under Health ID, citizens are given a unique health ID that makes their health information available to health workers in a secure manner with their consent.

Digi Doctor: Under the Digi Doctor initiative, a detailed database of doctors has been created, including their qualifications, specialization, and affiliations with Healthcare facilities. This ensures accurate mapping of available medical resources.

Health Facility Register: The Health Facility Register is a national centralized database of health facilities that facilitates seamless data exchange between public and private Healthcare providers, which is updated regularly.

Personal Health Records: Personal health records are electronic repositories that store an individual's health information, which can be accessed anytime and anywhere. This gives individuals the freedom to manage and update their personal health data.

Electronic Medical Records: Electronic Medical Records is a web-based system containing patients'

health records and treatment information, which assists physicians in patient management, health monitoring, and preventive Healthcare recommendations.

The National Digital Health Mission of the Government of India aims to establish a strong system to manage digital health data and ensure its smooth exchange. Under this, a strong mechanism of health facilities, service providers, laboratories and pharmacies is being created. The mission aims to improve clinical decisions and telemedicine services, making the health system more evidence-based, transparent, and effective. With the government's emphasis on digitization, patients will be able to share their health records with the doctor from their village or remote area. Along with this, accurate information about the authenticity and cost of health services can also be obtained. According to an estimate, in the next decade, various components related to the National Digital Health Mission can create additional economic value of more than US \$ 200 billion for the health sector. These conditions will create favorable opportunities for Healthtech startups.

India's large and rapidly growing population makes it an attractive market for healthtech investors. Investors are attracted to healthtech startups that offer affordable and accessible solutions. These startups can provide healthcare services at a lower cost than traditional methods using technology. Also, the structure of digital platforms allows them to reach many consumers simultaneously, increasing their effectiveness. The possibilities of expansion and cost-effectiveness make healthtech startups an attractive investment prospect.

The healthtech startup ecosystem in India is witnessing a significant increase in funding and investment. Investors are being attracted to Indian healthtech startups for several reasons. The first reason is the expansion of the Indian market and financial support to provide startups with the necessary resources to develop their operations with strong technology. The second reason is the government's increased emphasis on health awareness programs and healthcare services. Many schemes like Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, National Health Insurance Program are giving startups opportunities to grow. The third reason is that India has a huge pool of talent. India has a large number of

engineers and scientists working on startups that offer innovative health technology solutions. The deeptech startup ecosystem in India has already begun. A draft deep-tech startup policy is available on the website of the Office of the Principal Scientific Adviser of India. Several incubators and accelerators are supporting Healthtech startups, and the Indian government has taken several initiatives to enrich the startup ecosystem.

The rural healthcare industry in India has huge growth potential. With a large rural population and rising health awareness, the need for accessible and affordable healthcare services is increasing. To meet this need, healthtech startups are focusing on rural healthcare and have strong growth prospects. Investors are eager to enter this potentially lucrative sector.

Investing in the future of rural healthcare through Indian healthtech startups is an attractive prospect for investors. These startups are revolutionizing healthcare in rural areas by using technological advancements such as telemedicine, data analytics, and AI. Digital solutions are attractive for investment due to their scalability and cost-efficiency. In addition, government support and huge market potential further increase investment interest in this sector. Investing in health tech startups gives investors the potential for financial gains as well as the satisfying feeling of making a significant difference in the lives of millions of people by improving access to excellent healthcare in rural India.

The Healthtech startup ecosystem in India is growing at a rapid growth rate. The growth of Healthtech startups has led to significant improvement in the reach, accessibility, and quality of healthcare services in rural India. Using innovations like telemedicine and AI, startups are revolutionizing healthcare delivery and increasing work efficiency. The National Digital Health Mission is dedicated to digitizing health systems. With the growing popularity of telemedicine and digital health solutions, the Healthtech startup market is projected to expand to US\$50 billion by 2033, reflecting its critical role in driving positive health outcomes. The synergy between technology and health management will spur further innovations, improve access to care, and ultimately lead to better health standards across the country. □