

HEALTH CARE APPS REDEFINING HEALTH – INDIA

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ABSTRACT: Over the past three decades, while India's GDP has constantly grown at about seven percent, the country's healthcare sector continues to lag. According to the Indian Medical Association, India's healthcare spending remains low at 1.2 percent of the GDP. This is dismal, when compared with the US's 17 percent or China's 5.5 percent. Presently, India has just 0.7 doctors and 1.1 beds for every 1,000 of its citizens.

The government aims to increase the healthcare spending to 2.5 percent of the GDP by the end of its 12th five year plan, and to 3 percent by 2022. Much of this will be done through public private partnerships and using tech to increase the reach and multitude of healthcare services.

KEY WORDS – Thermography, Adipose tissue, Retinopathy, Portea

INTRODUCTION

There's only one doctor for 1,700 people in India, according to World Bank's 2012 data. Mobile and Internet technologies are being seen as the means to address India's deficit of doctors, through innovations in technology and telemedicine. Globally, digital health startups attracted \$5.8 billion (roughly Rs. 39241 crores) in funding in 2015, according to venture capital database insights. Three companies - Chinese medical platform Guahao, US-based Zocdoc and 23 and Me acquired unicorn status (were valued at over a billion dollars) in 2015.

Based on a list of India's highest funded healthcare startups 2015 provided by startup data tracker , we can surmise that funding activity in India is centered mainly around appointment booking, cloud-based healthcare information systems, and online pharmacy providers, with a couple of startups engaged in cutting edge hardware and genomics research. Here are ten Indian healthcare startups you should know about¹

RISING DEMAND - With a fast-growing middle class and increased usage of Internet and mobile broadband, there is a high demand for quality and affordable healthcare in India. Healthcare market in India is poised to grow from \$100 billion in 2016 to \$280 billion in 2020, creating huge opportunity for healthcare and health tech companies and startups.

While most health tech startups in India are still in their nascent stage, there are larger trends emerging in preventive healthcare, analytics, pathology, emergency services, among other things. We share below a list of 10 startups and discuss the larger trends emerging. The list in no way is exhaustive, but is representational of the larger trends being witnessed in the sector.

1. LIVE HEALTH – MAKING MEDICAL REPORTS SMARTER

Founded in 2013, the Pune-based startup works as a Management Information System (MIS) for healthcare providers. From collecting samples, managing patient records, diagnosing them and generating reports, to billing and inventory; Live Health intervenes at each step, making the process smarter and more efficient. Using AI to process millions of medical records and ERP transactions, Live Health soon plans to help doctors and patients make informed decisions.



2. LYBRATE – PROVIDING INSTANT SUPPORT FROM DOCTORS USING PHONE

The Delhi-based startup helps patients find doctors near their location, and connect with them instantly. Founded by Saurabh Arora and Rahul Narang in 2013, Lybrate helps patients communicate with a network of doctors, while keeping their anonymity intact. Born out of the need to eliminate the practice of chemists and pharmacists prescribing wrong medicines to patients, Lybrate has over 1,00,000 doctors across different specializations connected with its service, providing instant support to patients over phone or through appointments.

3. NIRAMAI – USING ARTIFICIAL INTELLIGENCE TO FIGHT BREAST CANCER



The Bengaluru-based startup uses Artificial Intelligence for pain-free breast cancer screening. Detecting breast cancer in its early stage, Niramai's screening device can detect tumors five times smaller than what a clinical exam can catch. The startup uses machine learning and big data analytics over thermography images to develop reliable and low-cost diagnostic methods. Founded in 2016, Niramai is among the leading startups using tech to fight cancer.

4. PRACTO – BUILDING A ONE-STOP HEALTHCARE PLATFORM

What started in 2007 as a SaaS platform for doctors has, over the past 10 years, evolved into a one-stop destination for appointments, consultations, health records, insurance, and ordering medicines online. With a team of over 1,500 people, the Bengaluru-based health-tech company is today active in 38 Indian cities, and in Singapore, Indonesia, the Philippines, and Brazil. With over 1,00,000 doctors supporting the massive scale of operations, Practo currently caters to 25 million patients every year.



5. MURGENCY – BRINGING MEDICAL EMERGENCY SERVICES UNDER ONE APP

Mumbai-based MURgency is a healthcare mobile app that connects people who need emergency responses with qualified medical, safety, rescue, and assistance professionals. On the supply side, MURgency acts as an aggregator bringing together varied emergency services – doctors, nurses, paramedics, ambulances, and first-aid assistants – all on one platform. On the demand side, users can call for emergency medical response and assistance with just one tap on the mobile app. So far, the app has responded to over 3,00,000 emergencies, helping patients during the critical hour.

6. PORTEA – BRINGING DOCTORS AND MEDICAL PROFESSIONALS AT THE PATIENT’S DOORSTEP

The Bengaluru-based startup offers home visits from doctors, nurses, physiotherapists, and technicians for patients. Using remote diagnostics, point-of-care devices, and remote monitoring equipments; doctors and medical professionals can monitor patients who can't travel to hospitals. The patient data is uploaded using smartphones to an EMR platform, which uses predictive analytics to understand health trends in the patient. Started in 2013, Portea currently operates across 21 cities in India.²

7. ADVANCELLS – MAKING STEM CELL THERAPY AFFORDABLE

Started by serial entrepreneur Vipul Jain in 2013, the Noida-based startup provides stem cell therapies in India. Stem cell therapy, also known as regenerative medicine, is considered the next big thing in potential in organ transplantation. The technology has been found capable of treating various diseases such as diabetes, Parkinson's, Alzheimer's, arthritis, stroke and heart diseases. With a team mostly consisting of scientists, Advancells processes the bone marrow or adipose tissue from a patient and separates the stem cells. These are further processed in a laboratory for treatment procedures. Currently, around 55 hospitals use the therapies devised by the startup.

8. FORUS HEALTH – FIGHTING BLINDNESS WITH TECH



Started in 2010, Forus Health is using technology to fight the skewed ophthalmologist-to-patient ratio in India. With its portable innovative product 3nethra, screening of common eye problems which can lead to blindness is just a few minutes affair. With over 1,300 installations across 26 countries, the Bengaluru-based startup has impacted over two million lives in a

positive way. Their newest product aims at detecting Retinopathy of prematurity (ROP), a disease that leads to blindness among premature babies, due to excess of oxygen or the effect of drugs used to save them.

9. ADDRESSHEALTH – MAKING PEDIATRICS AFFORDABLE AND HOLISTIC

The Bengaluru-based startup provides primary paediatric healthcare service to schoolchildren. Taking a holistic approach, children are screened for hearing, vision, dental health, anthropometry, alongside a complete medical examination. With four standalone clinics across the city and numerous school-based clinics, AddressHealth makes use of tech at each step to make healthcare holistic and affordable for children. The startup has also designed curriculums for students to instill healthy behaviours, both mental and physical, in their formative years.

10. MITRA BIOTECH - DEVELOPING LOW-COST PERSONALISED CANCER CARE AND DRUGS

Originally conceived as an academic project between Massachusetts Institute of Technology and Harvard University, Mitra Biotech was established in India in 2009 by Dr Mallik Sunderram and Dr Pradip K. Majumdar. The very well-funded startup uses proprietary technology to research and develop cost-efficient personalized cancer care and drugs. Their trademark product is CANScript, a multi-dimensional platform allowing investigative procedures within the patient's tumour with high specificity.³

11. WelcomeCure

WelcomeCure is an online homeopathic tele-consultation platform that claims to treat over 80 common and 20 uncommon clinical conditions on live chat and Skype, enabling patients to consult from anywhere in the world. The startup claims to have the world's largest homeopathic database of cured cases and patient management systems.

12. 1mg

1mg provides a web portal, along with apps for Android and iOS for searching drugs. 1MG delivers medicines in Delhi NCR, Bengaluru, Chennai, Hyderabad, Lucknow, Agra, Indore, Bhopal, Ludhiana, and Jalandhar, users can shop and choose cheaper generics on the platform. The company also lets users book for diagnostic tests and appointments, and claims to have over 3.5 million downloads.

13. Relisys

Relisys is a Hyderabad-based startup that develops and manufactures stent systems and angiographic catheters for treating life-threatening diseases including cardiovascular, peripheral vascular, neurovascular (stroke) and structural heart disease. The company has a manufacturing facility with a production area of 35,000 square feet, and was the first to have a catheter manufacturing facility as per the USFDA norms in Asia. Its first product, the Kalam-Raju Stent, was developed by former the former President of India, APJ Abdul Kalam.

CONCLUSION

Last 2 to 3 years have seen significant activity in the Health space, Startups have mushroomed by dozens, all of them adding one or more apps to what is fast becoming a crowded, and even confused Healthcare space. By making healthcare accessible to people on their phones and even their doorsteps, mobile app-based healthcare services are trying to address these issues & Hospitals offer these services through their own apps, or through tie-ups with other apps. These apps are filling up for the lack of immediate access to hospitals or doctors in vicinity.

CONFLICT OF INTEREST: There is no conflict.

SOURCE OF FUNDING: Self

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