

"We are building a robust ecosystem using our solutions to have an accessible and affordable healthcare system available for all"

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CliniVantage Healthcare Technologies Inc. is a comprehensive healthcare platform that delivers various PaaSbased healthcare solutions for clinical, non-clinical, radiology and administrative services.



BioSpectrum recently got in touch with Pune based health tech startup CliniVantage Healthcare Technologies Inc. **Nilesh Jain** – Managing Director & Co-Founder – CliniVantage spoke in detail about the company and its plans ahead.

What is so unique about your start-up CliniVantage?

CliniVantage Healthcare Technologies is a smart future-facing healthcare solution. A digital data mobility platform that is designed and developed to transform the way healthcare stakeholders interact with each other. An end to end PaaS-based solution that integrates operational, clinical, administration, financial and consumer-centric services to not only deliver efficient healthcare but also enhance the patient experience. We offer:

- A modular solution which can complement or replace an existing solution
- Plug & play with an existing software solution (with API)

- Completely integrated clinical (Practice management system), operation theatre (OTIMS), scheduling (my scheduler), administrative, financial and management dashboards (Business Intelligence and Analytics)
- A unique SAAS solution with no Capex, easy customization & very low transactional cost
- Extremely innovative future-facing IoT devices & AI Algorithms
- Completely Agnostic to any OS

CliniVantage brings together connected devices, artificial intelligence and consumer-friendly technology that helps formulate solutions to address challenges facing the health, social and wellness care. Our solutions are based on the foundation of SCORE model: Safety, cost, outcome, research & experience. By improving Safety and reducing the Cost of care delivery, our solutions emphasize on Outcome-driven practices that aid Research to enhance the Experience of providers and patients alike. By choosing the CliniVantage platform, the hospitals can offer maximum flexibility and easy integration to their technology capability and strategy for growth & differentiation. As healthcare providers continue with their digital transformations, taking advantage of CliniVantage platforms is key to utilizing resources & can help their organizations cut back on wasted resources and take advantage of their strengths. CliniVantage connected health enables a collective ecosystem for telecare, mHealth, remote care, and digital health services. CliniVantage brings the convergence of connected devices, health technology, digital accessibility, artificial intelligence, and machine learning and is increasingly enabling solutions to many of the challenges facing the health, social care, and wellness sectors, especially in enabling more effective integration of care for the providers.

How many collaborations or partnerships has CliniVantage developed since its inception in 2017? Are you also collaborating with the government?

1) WEF

How a platform like Clinivantage can help the healthcare industry adapt to the new reality of digital health. World Economic Forum, published a [study](#) on Clinivantage showcasing our ability to deliver long term care.

2) DigiVillage:

[DigiVillage](#) is program executed by the Village Social Transformation Foundation (VSTF), a not-for-profit state-run organization that channelizes various CSR funds for upliftment of the rural population of the state. VSTF has partnered with Clinivantage for its various schemes for rural health & nutrition development; health being a major concern due to unavailability of suitable facilities, resources and clinicians in the remote parts. The exercise has received immense acceptance & support from the villagers who have benefitted from these Digital OPD & online health consultations, conducted with help of local ASHA workers with minimal training to operate the IoT devices and connect with the doctors online via telemedicine.

3) StartUp Health:

CliniVantage has partnered with StartUp Health, – a global platform where Health transformers, partners, customers, investors, patients, and caregivers connect and accelerate the progress of the health moonshots. CliniVantage has joined the community of Health Transformers, to partner on the Access to Care Moonshot. The Access to Care Moonshot aims to deliver quality healthcare services to everyone, regardless of location or income, which sits squarely with CliniVantage's mission to bridge the gap between the providers and consumers and making the service accessible to all when they need. The platform empowers its consumers and enables them to have a complete solution under one roof.

How much funding has the start-up raised so far and how are the funds being utilized?

1 million USD

- Scaling the business
- Resource acquisition
- Product Development

What are the major projects CliniVantage is working upon currently?

Chronic care & Remote Care:

CCM program helps providers prevent hospitalization by effectively and comprehensively managing patient's health as a continuum. This seamlessly connects (digitally) patients, healthcare providers, and care teams. It improves access to medical records, updates caregivers on how their loved ones feel, monitors treatment adherence and works in countless other ways to manage chronic conditions on a continuous basis v/s episodic incidents. We currently building solutions to support several chronic care conditions.

Integration of IoT devices:

In the vast ecosystem of healthcare, the application of IoT is redefining people's interaction to delivering healthcare solutions. The use of IoT devices has been instrumental in delivering more valuable, real-time data to doctors and lessening the need for direct patient-physician interaction. It has a major impact on reducing healthcare costs and improving treatment outcomes. Through the integration of IoT devices, the quality and effectiveness of service has been improved to bring high value of care for the elderly, patients with chronic conditions, and those requiring constant supervision.

Before the application of this paradigm, patients' interactions with doctors were limited to visits, telecalls, and text but with the full application of IoT, medical centers can now function more competently and offer better treatment to the patients. The Internet of Things (IoT) has massive potential for bringing diagnostics and disease management into the modern age, empowering the user and enabling truly person-centered care.

Solutions for Public Health

Clinivantage offers set unique tools to control epidemics and pandemics by early detection and control and a "NoC" – National Healthcare Operations Center (National Healthcare Operations Command & Control Center – "NoC") to address current challenges in the healthcare ecosystem: Safety, Cost, Access, Prevention & Governance

Clinivantage technology deployment across the national healthcare system will help build a NHTS – National Healthcare Technology Stack ensuring the following advantages.

Raise national healthcare standards and safety through technology

Ensuring high quality of care through implementation of standard framework for healthcare records and a national health system for all citizens. Clinivantage can create a transparent, efficient & low-cost healthcare system.

Improve Access to healthcare and bridge equity gaps,

Ensuring sustainable & affordable care delivery that provides equal quality of care across all demographics & geographies. Clinivantage has developed unique health kiosks, health ATMs and IoT devices that allow individuals to monitor basic wellness parameters and checks without need for doctors. In event of any abnormal findings, the same platform can open an advanced telemedicine facility to connect with clinicians, specialists and super specialists (present anywhere in the ecosystem) who can then review live data with the patients' health record to deliver care remotely and offer prompt intervention without delay. This has very significant impact in allowing rural population access to care without having the need to travel to urban centers.

Strengthen governance, efficiency and effectiveness of care delivery.

Rwanda, through unified standards in recording healthcare episodes mandated by regulatory support can create a significant impact on lowering costs and raising quality of care. Advanced technology implementations like artificial intelligence and

machine learning tools on Clinivantage platform can detect fraud and false claims to ensure transparent usage of funds.

Improve access to maternal, neonatal, child and adolescent care service.

Clinivantage has unique low-cost solutions to monitor pregnant women and foetus regularly. Using innovative technology without the need for clinicians except in complex cases. This tool can significantly impact maternal and foetal mortality and can attract funding from global development funds.

Prevention and control of communicable and noncommunicable diseases.

Access to large scale data using Clinivantage, provides early warning indicators for communicable diseases to prevent their spread. This real time data can offer us a significant time savings and ensure early quarantine and preventive intervention. Similarly, non-communicable.

How does the start-up intend to address the issue of healthcare affordability and accessibility in India?

We are building a robust ecosystem using our solutions to have an accessible and affordable healthcare system available for all. The integrated ecosystem will educate, enable and empower the healthcare stakeholders with the right kind of resources to make informed decisions. One of the most important elements is to ensure that the care delivery system is clinically relevant and aligned to the standard clinical workflows. This is further augmented with the right kind of clinical decision support tools to enable care providers to deliver high quality, evidence-based and standardized care. A healthcare provider investing in CliniVantage's technology has access to current, credible, evidence-based information to not only elevate health care delivery but helps reduce variability, which in turn will reduce the cost of healthcare while improving patient outcomes.

How much revenue has been generated by the start-up so far?

The revenue generated is in Millions of USD.

What are the major plans in store for 2020?

Clinivantage started as a portfolio of products to help hospitals and providers improve their processes, tools, and technology. In the last 12 months, we've transformed to a Platform as a Service, where every part of the ecosystem in healthcare is address and the potential to develop a partnership to deliver improved patient outcomes.

We see, processing 500,000 txn/day with over 100M consumers and 1000+ customers (providers) BY 2020

Clinivantage to drive the technology in the hospital of the future

- Imagine a surgeon in front of a telecommunications console in San Francisco City while his patient lies on an operating table in Mumbai
- The virtual doctor is in - provide virtual care to underserved areas and places where demand for specialists is especially high
- Telemedicine monitor patients with chronic illnesses and even save lives. For example, stroke patients' chances of recovery depend greatly on rapid diagnosis and treatment.
- Connected Devices - Emergency vehicles outfitted with edge diagnostics devices - scans and telemedicine devices

can allow neurosurgeons to evaluate potential stroke sufferers and recommend a course of treatment en route to the hospital

- Live & real time data - Clinivantage inserts a layer of technology between physician and patient, which can be used to seamlessly insert sensors and computational algorithms that provide a more comprehensive and enabling way to diagnose and treat patients

- Smart connected MIoT devices capture real time data/conversations between devices, physicians and patients; upload key data – relieving providers from mundane work. Clinivantage voice enabled PMS , today allows the doctor to converse with the PMS system. It's not about what technology can do, but it's about what the practitioners don't have to," explains Nilesh Jain . "at Clinivantage we are building solutions that free up physicians' time & help focus on delivering personalized care."

As Clinivantage platform ecosystem advances the technology in the healthcare industry; moves toward more outpatient procedures, telemedicine and self-monitoring will increase and transform the way care is delivered and managed.

Clinivanage solutions will help improve precision diagnosis and effective treatment plans; possible by bringing quantitative data to the point of care with deep learning algorithms; this can never replace what happens on the human-to-human level but will improve what we call - "assisted medicine" . By 2050, we will only go to hospitals for complicated surgeries and emergencies.