# Enhancing Healthcare Accessibility: Factors Driving Success in Telehealth Clinics in Rural India



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## Executive summary:

This white paper explores the dynamics of implementing telehealth solutions in rural India, with insights drawn based on the researchers' visits to telehealth clinics in Rajasthan being run by a private telehealth service provider. Combining quantitative analysis with field visits, patient and nurse interviews, and observation notes, the paper focuses on determining critical factors that influence the success of these telehealth setups.

The paper emphasizes the significance of nurses' backgrounds and attitudes, strategic clinic placement, and tailored marketing strategies in driving the success of the telehealth clinics in rural India. The paper also highlights the central role of managing patient expectations and ensuring nurse retention in sustained operations of these clinics. Based on these findings, the study proposes solutions, ranging from meticulous clinic infrastructure management to strategic nurse hiring, retention efforts, and segmented and localized marketing approaches. In essence, this paper offers practical insights, serving as a valuable guide for telehealth service providers navigating the unique challenges of delivering healthcare to rural India.

## Introduction

Access to quality healthcare in rural areas has been a persistent challenge in India, where geographical and infrastructural barriers often limit the reach of medical services.<sup>1</sup> Telehealth, emerging as a potential solution, holds the promise of bridging this gap by leveraging technology to connect healthcare providers with remote communities.<sup>2</sup> This white paper delves into the dynamics of telehealth in rural India, with a specific focus on the elements that contribute to the success of telehealth setups.

The challenges in administering healthcare initiatives in rural India are evident from multiple studies in the past.<sup>3</sup> As part of a research initiative by the Centre for Healthcare at the Indian Institute of Management Udaipur (IIMU), we visited three telehealth clinics in being operated by Karma Healthcare, a partner organization. This white paper aims to shed light on the nuances of telehealth implementation in rural India and identify the key components that contribute to a telehealth setup's efficacy in rural geographies. By examining the perspectives of both healthcare providers and the communities they serve, we aim to uncover valuable insights that can be useful for the private as well as government led telehealth service providers, thereby enhancing healthcare accessibility for rural populations.

## Context

Accessing healthcare in rural areas is fraught with challenges, particularly for seemingly routine medical needs. Residents face significant hurdles, from the inconvenience of minor illnesses to the critical requirements of maternal health and ongoing management of non-communicable diseases (NCDs). In many villages, getting treatment for even common health issues such as fever and cough becomes a major challenge. For individuals dealing with chronic conditions such as diabetes and hypertension, the routine check-ups for continued medication necessitate traveling long distances to the cities. Even essential services, including specialist consultation visits, are a significant concern. Patients, in some cases, have to traverse over 50 kilometres on rough and poorly maintained roads with no public transportation to access basic but crucial medical examinations. The absence of common, but specialized services, such as ophthalmology or dentistry, further compounds the challenges faced by rural residents.

Amidst these challenges, telehealth emerges as a ray of hope. By utilizing technology, telehealth set-ups offer a convenient alternative for the rural population to access the healthcare consultations. The potential benefits extend beyond just convenience, encompassing quicker access to medical advice – especially specialist consultations – reduced travel burdens, and improved overall healthcare outcomes.

<sup>&</sup>lt;sup>1</sup> Balarajan, Y., Selvaraj, S., & Subramanian, S. V. (2011). Health care and equity in India. The Lancet, 377(9764), 505-515. <sup>2</sup> Singh, R., Mathiassen, L., Stachura, M. E., & Astapova, E. V. (2010). Sustainable rural telehealth innovation: a public health case study. Health Services Research, 45(4), 985-1004; Jarosławski, S., & Saberwal, G. (2014). In eHealth in India today, the nature of work, the challenges and the finances: an interview-based study. BMC medical informatics and decision making, 14(1), 1-12.

<sup>&</sup>lt;sup>3</sup> Mohanan, M., Hay, K., & Mor, N. (2016). Quality of health care in India: challenges, priorities, and the road ahead. Health Affairs, 35(10), 1753-1758; Chatterjee, S., Singh, A., & Kar, S. K. (2022). Service bonds in rural health care in India-Challenges and the way forward. The Lancet Regional Health-Southeast Asia, 6.

In the subsequent sections, we delve into our research methodology, insights from nurse and patient interviews, findings from observations and interactions with the local residents and possible solutions for the sustained success of telehealth clinics in rural India.

# Methodology

Understanding the dynamics of telehealth in rural India needs a multi-faceted research approach. Our methodology in conducting this particular exercise aimed to capture diverse perspectives from clinics with differing levels of footfall and proximity to essential services. While the key to this study lies in the interviews, we utilized data to identify the clinics to be visited and leveraged observation notes to bring richness to the study.

To ensure an appropriate selection of the clinics, we employed data analysis to identify sites based on footfall. This step allowed us to target clinics with varying levels of engagement to better understand the factors influencing patient visits. Among the three clinics we visited, the first was identified as a successful setup, demonstrating effective telehealth practices and considered a model in its operations. The second clinic represented an average setup, allowing us to explore both successful and moderately performing clinics. As a unique aspect of our research, we conducted a surprise visit to a clinic with notably low footfall. This surprise visit allowed us to derive some insights into potential challenges faced by a telehealth provider.

As a second component of our methodology, we prepared detailed interview guides for interviewing the nurses operating the clinics, patients visiting the clinics, and the residents of the villages. The nurse interview guide focused on the day-to-day operations, challenges faced, and successes achieved in providing telehealth services. The patient interviews aimed at understanding the on-site and post-visit experiences, expectations from the clinics, challenges faced by the patients, and any suggestions they might have. Lastly, the interviews with local residents aimed at an assessment of awareness and understanding about the clinics and the services being provided, alternatives available in the villages, and key deterrents to the clinics' success. Interviewing these three sets of key stakeholders helped us in getting a holistic picture about each clinic.

For comprehensive research, it is important that the researchers do not rely solely on interactions with the informants, but also observe and absorb the environment. To facilitate this, we used a structured observation guide that enabled us to spot competition, understand people's perceptions and observe nurse behaviour. This understanding aided us in bringing robustness and authenticity to our study.

# **Findings**

Our research highlights various determinants crucial for the success of telehealth setups in rural India. This encompasses critical factors such as the significance attached to the nurses or the clinic operators, the importance of clinic layout, and the role marketing strategies. The subsequent section presents a detailed exposition of these key findings, shedding light on the essential elements that define success in providing healthcare services to underserved communities.

#### Nurse Attitude and Experience

Our study presents strong evidence that the success of telehealth clinics is closely attached to the attitude and experience of the nurses who operate the clinics. Nurses having background in working in large pharmacies, drug administration, and sample collection (for diagnostics) bring skillsets critical to running the clinics smoothly and efficiently. We observed that the nurse experience brings with it the confidence required to carry out the essential tasks at the clinic such as dispensing medicines, checking patients' vitals, or administering a drip. This confidence eventually reflects in the patients' trust in the clinics.

Furthermore, the nurses' understanding of patient comfort levels and the ability to tailor conversations accordingly play a vital role in building a rapport between nurses and patients. During our conversations, the patients acknowledged that meaningful pre- and post-consultation conversations, such as listening to the patient before the consultation or taking out time to give a detailed explanation of the doctor's advice, result in a positive patient experience.

Lastly, we witnessed that nurses who exhibit the motivation to continuously learn and adapt, such as understanding new terms mentioned by the doctors or reading about the health issues common in the villages, can hold engaging conversations with patients, improving the stickiness of these patients and the popularity of the clinic.

Surprisingly, we found that the nurse demographics such as age, gender, or caste/religion do not matter as much. In two of the three clinics we visited, we observed that female patients were comfortable with male nurses, and a nurse belonging to a different community than the majority one in a particular village did well in managing the clinics.

#### **Clinic Layout and Location**

In line with the intuition, we find that the success of a telehealth clinic is significantly influenced by its location. Our findings emphasize that clinics situated on main streets or in high-activity areas, such as markets, enjoy better visibility and footfall. The proximity to competitors, especially quacks or unlicensed practitioners, can lead to negative publicity through deliberate spread of misinformation about the clinic's operations, medicines, and doctors. While avoiding competition entirely may be challenging, this underscores the importance of strategically choosing the 'right competition' when establishing a new clinic.

We also found that the size of the clinic matters significantly. Larger clinics not only present a more appealing appearance but also have the capacity to accommodate more patients. This not only enhances the overall look and feel of the clinic but also provides flexibility for better layout design, contributing to a positive patient experience. Patients perceive clearly segregated areas and sufficient seating space as a conducive and comfortable atmosphere, encouraging them to visit the clinics.

#### Marketing

While it is common knowledge that marketing strategies play a crucial role in establishing and sustaining the presence of telehealth clinics, it is important to deploy the right channels at the right time. Through our interactions with patients and the nurses, we found that word of mouth acts as a low cost, yet powerful channel for a clinic's long-term success. However, it does not work in the initial days after the clinic is set-up. Active outreach programs and advertising prove to be effective tools to achieve this. We observed that in

absence of a structured outreach program in a competitive environment, the clinic could not get off the ground in the desired way, leading to consistent low footfalls.

Another critical aspect that our study unearthed is the importance of tailoring the marketing activities based on the overall village characteristics. As an evidence to this, we witnessed that if a clinic caters to a more educated population then a lower degree of outreach and a higher degree of digital communication works better. On the other hand, in geographies with relatively uneducated / undereducated populations, the patients expect traditional marketing activities such as outreach, pamphlets, and announcements.

#### **Patient expectations**

Effectively managing patient expectations is crucial for any healthcare business, including telehealth clinics. In rural India, where these clinics primarily operate, our interactions indicated that the patients appreciate basic hygiene and expect three main things: sufficient and comfortable seating, adequate staffing to avoid long wait times, and the availability of prescribed medication at the clinic's pharmacy. Patients explicitly express dissatisfaction when these basic requirements are not met, emphasizing the importance of operating clinics with the right infrastructure.

In addition to these, patients highly value a warm and friendly experience at clinics, emphasizing the importance of the feeling of 'being listened' to. In contrast to the quick consultations experienced with doctors from larger cities, patients appreciate the thorough attention and conversation provided by nurses and doctors at the studied healthcare provider's clinics. This close connection significantly encourages regular clinic visits and contributes to fostering a positive healthcare environment.

Finally, patients who have already utilized clinic services highly value the balance achieved in delivering costeffective yet high-quality care. They anticipate the clinics evolving into comprehensive healthcare providers, offering additional essential services like ophthalmology and radiology. This expectation underscores the opportunity in specific regions where satisfactory services meet the needs of the population.

#### Nurse expectations

As discussed earlier, nurses significantly impact clinic success. Our analysis reveals a correlation between nurse tenure and clinic popularity, with footfall decreasing when nurses are changed. This underscores the importance of nurse retention for sustained clinic success. Interviews with nurses reveal their expectations from employers, shedding light on potential reasons for attrition.

In essence, nurses desire three things: attentive leadership, efficient tools for their work, and recognition for their efforts. Our interactions with three nurses highlighted the importance of active engagement from senior staff, emphasizing the value of site visits to understand daily operational challenges. An enabling work environment is important for the nurses, with nurses emphasizing the significance of having their suggestions for operational improvements acknowledged and implemented.

Nurses also underscored the need for having structured tools – such as a platform to raise inventory needs, share challenges, or give specific feedback – that will enable them to work more effectively. In addition, while nurses appreciate the monetary rewards against their works, they also emphasize on the need of a holistic

recognition platform encompassing multiple facets of their works including patient footfall, clinic level initiatives, patient testimonials, or manager appreciation.

In essence, the nuanced understanding and fulfilment of these nurse expectations would not only foster a conducive work environment but also play a pivotal role in nurse retention, eventually translating to the clinic's success.

# Solutions

The findings from our study highlight both process and people related characteristics of a telehealth setup that are critical to the success of its clinics. It is critical that the teams managing such setups address these concerns proactively. However, some of the potential solutions present unique challenges, which need to be taken into consideration while prioritizing and implementing the solutions. Following figure gives a brief overview of key considerations important for sustainable operations of telehealth clinics and potential solutions, as explained in this section, to address these challenges.

	Theme	Key Considerations	Potential Solutions
ଷ୍ଟ	Hiring Right	<ul> <li>Timely hiring to maintain undisrupted operations</li> <li>Hiring nurses with right mindset and aptitude</li> </ul>	<ul> <li>Continuous scouting and maintaining a pipeline</li> <li>Constituting a hiring checklist, combined with situational interview questions</li> </ul>
Ē	Setting Up Clinics	<ul> <li>Opening up the clinic with basic infrastructure in place</li> <li>Maintaining the hygiene and basic infrastructure in longer run</li> </ul>	<ul> <li>Constituting a 'clinic set-up checklist' and periodic clinic audits by regional managers</li> <li>Hiring adequate staff in larger clinics to maintain clinics and operations</li> </ul>
Þ	Managing Marketing	<ul><li>Managing Visibility</li><li>Creating right perception</li><li>Outreach for promotion</li></ul>	<ul> <li>Opening clinics in busy village areas with adequate space</li> <li>Creating uniform, appealing environment at the clinics to create a positive perception</li> <li>Implementing segmented, localized marketing strategies</li> </ul>
R <sub>o</sub> ;	Meeting Customer Expectations	<ul><li>High wait time</li><li>Holistic services</li></ul>	<ul> <li>Hiring more nurses based on defined footfall threshold</li> <li>Implementing token-based queue management system</li> <li>Expanding the service portfolio to offer holistic healthcare</li> </ul>
Ĩ	Catering to Nurse Expectations	<ul> <li>Listening to the nurses</li> <li>Managing nurse motivation &amp; retention</li> </ul>	<ul> <li>Scheduling regular visits by regional managers to understand nurse constraints, feedback, or suggestions</li> <li>Constituting a recognition platform at both peer and community levels</li> </ul>

The most basic, yet the most critical facet to manage is the basic infrastructure at the clinics – managing sufficient seating, availability of drinking water, placement of fans, and ensuring privacy during consultations, is crucial. A 'set-up checklist' and periodic audits and certification by regional managers offer a simple solution. Similarly, recruiting teams can constitute a hiring checklist, combined with situational interview questions to shortlist and hire the right set of nurses who demonstrate empathy towards the patients and motivation to learn and thrive in the specific set-up. Despite these possible solutions, nurse hiring presents a set of challenges for the telehealth providers. Since location plays a key role in employability, especially in rural geographies, the recruiting teams may not always find right candidates at the time of hiring / new clinic set-up. Continuous scouting and maintaining a pipeline can possibly mitigate this challenge.

To better manage the footfalls at the clinics without compromising on patient experience it is crucial that larger clinics deploy multiple nurses. Although seemingly easy, this comes with the challenge of balancing cost against the experience. As a possible solution, the healthcare providers can adopt threshold based hiring strategy – hiring the second (or third) nurse once a clinic has sustained, high footfall for a specific period. This can be complemented by employing a simple token-based queue management at such clinics. Such a solution can give better clarity to the nurses and the patients on wait times and improve patient experience without incurring any significant cost.

To enhance nurse satisfaction and retention, it is crucial for leadership to instill a sense of belonging in the nurses. Three key measures can assist management and HR teams in achieving this goal. Firstly, regular visits and conversations by regional managers would allow nurses to share observations and feedback, thus instilling a sense of being heard. Secondly, recognition at both peer and community levels would lead to improved nurse retention, although it requires a carefully designed, inclusive recognition platform to avoid potential perceived fairness issues. Thirdly, offering periodic training as an additional benefit can lead to boosting nurse motivation while also providing opportunities for coaching them on patient interactions, enhancing the overall patient experience.

For sustained clinic success, visibility, marketing, and diverse services are crucial. Despite rural infrastructure challenges, healthcare providers must secure spacious locations in busy village areas for new clinics, countering existing and future competition and enhancing visibility and footfalls. Larger clinics also offer flexibility to create a more appealing look and feel to create a positive perception among patients. In terms of marketing, healthcare providers may find it tempting to carry out popular marketing activities, such as camps or outreach, across the clinics. However, our findings suggest that segmented, localized strategies can be more efficient and cost-effective for telehealth providers. Tailoring promotion channels to village demographics, utilizing nurses for outreach, and customizing content based on geography, language, culture, and competition are recommended. For example, clinics in low-competition, high-literacy environments can focus on SMS/WhatsApp channels, while those in high-competition, moderate-literacy areas may benefit from physical flyers. Additionally, patients expect holistic services, so telehealth setups should continuously expand their service portfolio based on feedback and market trends, actively promoting new offerings. This comprehensive approach creates a true one-stop-shop for the underserved population in rural India.

## Conclusion

This white paper delves into the dynamics of telehealth implementation in rural India, offering insights into key determinants critical for the success of telehealth setups in these geographies. The study emphasizes the pivotal role played by nurses' attitudes, clinic location, marketing strategies, and the fulfillment of both patient and nurse expectations as essential components in shaping the efficacy of telehealth initiatives.

The research findings advocate for proactive management strategies to address fundamental infrastructure concerns, nurse hiring and retention, marketing initiatives and improve patient experience. The study also recommends solutions to address these findings through checklists, clinic visits by the management, nurse engagement and localization of marketing campaigns. The study also emphasizes the critical importance of offering holistic healthcare services to cater to the varied needs of the rural population and positioning the clinics as comprehensive healthcare solutions.

By presenting findings grounded in both process and people-related characteristics, this white paper serves as a valuable guide for telehealth service providers, urging them to adapt their strategies to the specific challenges and opportunities inherent in delivering healthcare to rural India.