

Providing primary and specialized health care at HWCs

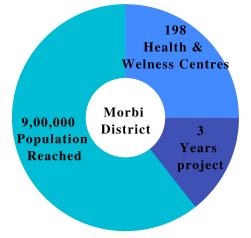
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India has 1 doctor for every 1,456 persons as against WHO's 1:1000 recommendation. The Economic Survey 2019-20 found that rural areas have only 33 doctors for every 1 lakh population as opposed to 133 doctors in the urban areas. While the government is taking steps to increase the number of doctor and specialist posts, many of these positions at Primary Health Centres (PHC), Community Health Centres (CHC), and Sub-district and District Hospitals are vacant. This results in patients traveling long distances to seek private-sector care, incurring heavy out-of-pocket expenditure. Under the Ayushman Bharat Yojana, Sub Health Centres are upgrading to Health and Wellness Centres (HWC) equipped with a Community Health Officer (CHO) who provides primary health care. However, the CHOs need the support of doctors to manage complex cases of certain chronic conditions and non-communicable diseases like hypertension and diabetes, which can be facilitated over telemedicine.

Telemedicine at every HWC, Morbi

Morbi district in Gujarat, predominantly an industrial rural area has about 30% of its population living below the poverty line with a severe lack of formal health services. The rural areas are poorly connected to the main district forcing patients to travel long distances to manage infectious diseases and non-communicable health conditions like diabetes, hypertension resulting in delays in care-seeking and heavy out-of-pocket expenditure.

To address these challenges the Health Department of Morbi along with Intelehealth has initiated My Teledoc, a technological platform, and implementation model that will connect Community Health Officers (CHOs) at Government-run Health & Wellness Centres (HWCs) with general physicians and specialist doctors through Telemedicine. This initiative will be implemented at 198 Health & Wellness Centres (HWCs) covering a population of 9 lakhs of the Morbi District providing access to primary and specialist medical care to a population of over 9 lakhs. Phase 1 of the project began with 22 HWCs across 2 talukas Maliya and Tankara.



Geographic coverage: 198 HWCs of 341 villages, 5 Talukas in Morbi District, Gujarat

Implementing organisation: Morbi Health Department & District Panchayat, Intelehealth

Funder: The Nudge Foundation

Implementation Model

ASHAs and ANMs spread awareness of the newly available teleconsultation facilities to the villages. During their home-visits and meetings, they also identify patients needing medical attention and refer them to HWC. Once the patient visits the center, the CHOs examine the patient. If the patient needs medical care that is beyond the level of training of the CHO, he/she initiates a teleconsultation with a doctor or specialist, depending on the chief complaint and clinical findings.

The CHO collects the patient history, physical examinations, and vitals on an intelligent technology platform - My Teledoc. The app is powered by a digital health assistant, called Ayu that has in-built evidencebased protocols for clinical decision support. Ayu guides CHOs in capturing detailed signs & symptoms to generate a high-quality clinical note. Remote doctors and specialists, based in Morbi city, access the patient records and clinical notes through an electronic health record (EHR) system and provide a treatment plan for the patient. The CHO counsels the patient on the treatment plan, dispenses prescribed medication, and schedules follow-up.

Thus, the technology supports CHOs in collaborating with a remote doctor for decision making, diagnosis, and management of cases. The secure cloud-based platform works on low-cost mobile devices and can be contextualized to local languages

Focused Health Conditions

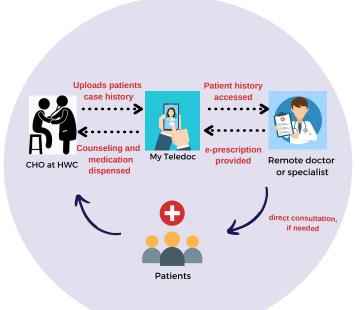
- Early detection and management of
- Non-communicable diseases
- Infectious diseases
- Dermatological conditions
- Obstetrics & Gynaecological conditions
- High-risk Antenatal Care
- Paediatric conditions
- Geriatric care through Physiotherapy

Technology Used

- 'My Teledoc' platform powered by 'Ayu', an evidence-based digital assistant with 88 clinical history-taking and physical examination protocols
- Longitudinal case management and electronic health record (EHR) using OpenMRS
- Salient features include:
 - Offline functionality
 - Low bandwidth operability
 - Real-time as well as asynchronous consultation

Expected Impact

- · Reduction in time, cost and distance traveled to reach health facilities
- · Reduction in out-of-pocket expenditure of patients in availing private medical care
- Curtailing the need to move out in risk-prone areas in light of Covid-19 epidemic
- Reduction in loss of daily wages of patients when they travel to District places for treatment
- Improvement in health-seeking behavior leading to early diagnosis of diseases.
- Access to quality medical care closer to their home.
- Capacity building and increased confidence of CHO in offering treatment.



28-year-old Vimla (*name and identity changed*), is a tribal migrant agricultural laborer, seasonally employed in Bangavadi village in the Tankara block of Morbi, Gujarat. A few weeks ago, she had developed a serious reproductive tract infection and was dire in need of special medical attention which was not available at medical facilities in the vicinity. The district health facility at Morbi or Rajkot is 50 km away. Her make-shift shelter near the farm is outside the main village, reaching there means walking down a few kilometers on foot. Due to geographic, financial, and social constraints, she was forced to visit local quacks to treat her infection. As days passed, her condition worsened leading to loss of wages for the already marginalized. Such infections, if not treated timely lead to complications like ectopic pregnancy, sterility, and even life-threatening peritonitis. Her condition required specialist medical attention.



(Paitent image differs from the description)

Around the same time, the Mobi district administration with Intelehealth launched MyTeledoc, a telemedicine project to connect CHOs with doctors and specialists. Vimla came to know of this through her ASHA and she visited HWC where the CHO examined her and recorded her symptoms on MyTeledoc platform. Her case was seen by a specialist gynecologist, and she was provided with the right treatment plan and medication at no cost. With this timely and accurate medical intervention through telemedicine, Vimla has completed her treatment and has fully recovered without having to travel to far-off health facilities.



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