

The background of the cover features a woman in a red sari holding a baby, with a mural of a girl reading a book and a snake in the background.

# Annual Impact Report

2022-2023

**We deliver quality  
healthcare where  
there is no Doctor**



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## CEO Speaks

As the needs of the COVID-19 pandemic fade, we are glad that health systems continue to invest in telemedicine as a vital tool to improve health access, and particularly to improve health access for women! Strong and vibrant health systems must be the legacy of this pandemic. Persistent systemic challenges continue to exist for women – in India, 90% cannot take independent decisions about their healthcare, 52% are not allowed to go to a facility alone, and 17% struggle to find someone to go with them (NFHS-5). Overall, 60% of women in India report trouble accessing healthcare services. 23% cite that distance is a challenge and 24% cite limited access to transport as a challenge (NFHS-5).

Intelehealth's work is rooted in the need to change the status quo for women and to make sure they do not have to live with entirely preventable and treatable illnesses.

This year was one of enormous growth and scale for Intelehealth and I would like to thank each and everyone who helped make this possible. From just 127,000 people receiving health services in 2021-22 we made a huge 10x leap to 1.4 million people receiving health services in 2022-23! What's more important that this 10x jump was achieved by only a 3x increase the number of primary care providers we work with. We grew from 2000+ frontline health workers supported to 6000+ health workers supported and from 440+ doctors supported to over 1500+ supported! The continued engagement of healthcare providers and the growing adoption of telemedicine in the provider and healthcare community continues to fuel our growth.

We're grateful for all the partners, donors and Ministry of Health leaders we worked with this past year across our 11 projects spanning 13 states and 3 countries. Thank you for believing in us, choosing to work with us and for the opportunity to be a part of your impact journey. Together we can achieve our shared vision to deliver quality healthcare where there is no doctor!

**Dr. Neha Verma**  
CEO & Co-Founder  
Intelehealth



### Digital Public Goods Alliance

Intelehealth is recognized as a Digital Public Good by the DPGA



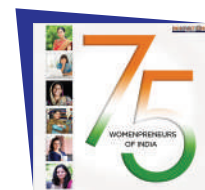
### 7<sup>th</sup> Annual Goldman Sachs Analyst Impact Fund

Intelehealth won the annual Goldman Sachs Analyst Impact Fund for leveraging open source technology for healthcare accessibility



### Global Digital Health Innovation Awards 2022

Intelehealth won the "Developing Innovative, Accessible & Affordable product/service to transform healthcare" award at the Global Digital Health Innovation Awards 2022



### 75 Womenpreneurs of India

Dr. Neha Verma, CEO featured among the Top 75 Women Entrepreneurs across India in the coffee table book by AIM Mission- NITI Aayog Official Compendium.



### How Telemedicine Safeguards Women's Health

The Quint spotlights Intelehealth's achievements in their article titled "Digital India: How A US Based Telemedicine App Safeguards Women's Health In Rural Areas."

## Impact at a glance



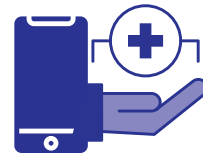
**1,403,226**

People Receiving  
Health Services



**1,251,580**

Teleconsultations  
Enabled



**136,196**

Health Service  
Consultations Enabled



**6,648**

Frontline Health  
Workers Supported



**1,565**

Doctors Supported



**96**

Clinical Protocols



**13**

Specialties Offered



**3**

Countries



**13**

States\*

## Product Metrics



**85**

Product Releases



**16**

Repositories



**12,719**

Code Commits



**15**

Contributors

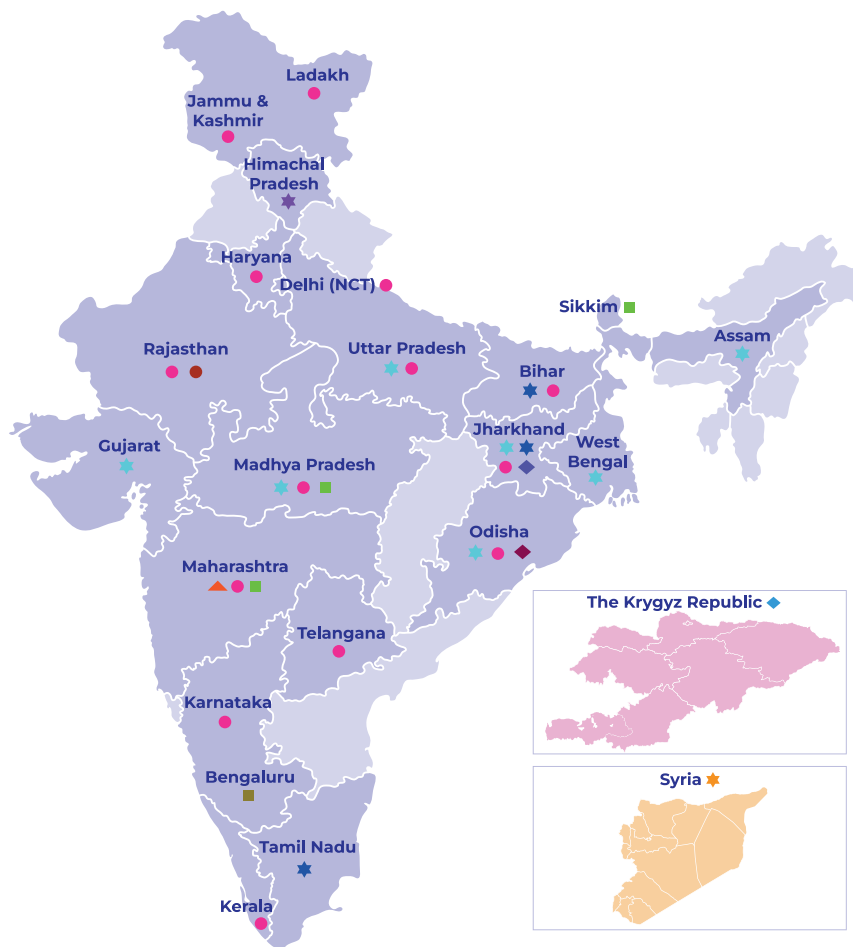


**1,158,000**

Lines of Code



## Our Project Locations



### Projects with Government

#### Provider-to-Provider (P2P)

##### eSanjeevani Jharkhand

Government of India's National Telemedicine Initiative

##### eSanjeevani Odisha

##### Telemed KG

Healthcare within reach for Children with Disabilities

#### Direct-to-Patient (D2P)

##### eSanjeevani Bengaluru

Telemedicine services for the urban poor population

##### NISHTHA Swasthya Sampark

A helpline caring for people with post-COVID-19 conditions

### Projects with NGOs

#### Provider-to-Provider (P2P)

##### Ekal Arogya Telemedicine

Women microentrepreneurs powering last mile healthcare in tribal areas

##### Sila

Compassionate care for conflict-affected communities in Syria

##### MySmartCareDoc

Improving pan-India remote access to healthcare using an end-to-end telemedicine solution

##### Hand in Hand

Overcoming healthcare access challenges to provide doorstep services at rural areas

#### Direct-to-Patient (D2P)

##### MSF Diabetes Helpline

Dial 180030 94144 for diabetes care at your fingertips

##### Vikalp Helpline

Overcoming domestic violence and sexual reproductive health issues through 'Vikalp Helpline'

### Direct Intervention

#### Provider-to-Provider (P2P)

##### Nashik Arogya Sampada

Reimagining how tech can transform last mile healthcare

## The Problem



The inability to access healthcare is a problem across the globe. In nearly every country, those living in poverty and/or in rural areas struggle daily to decide whether to see a medical professional. In many places, visiting a medical facility means hours worth of travel, money spent for public or private transport, and missing days of work. This means not only money spent, but income lost since most people living in poverty live hand-to-mouth. In some cases, missing their daily wages could mean not being able to eat that day. Women face even more hardships than men, often needing permission or a companion for the journey. Not only do women and men suffer - so do their children and the elderly, as their family members are often not able to take them to medical visits. Not only is poverty and rural living challenging to healthcare systems, there are also many indigenous and nomadic populations that cannot consistently visit clinics.

Regardless of why a family cannot visit medical professionals, the results are the same: preventable illnesses and mortality, high maternal and infant death rates, spread of communicable disease, disability caused by lack of healthcare, and community stigmas around health issues. These issues affect everyone, even those who do have the resources to access healthcare. They cost societies billions of dollars, they add to the global burden of disease and hamper economic progress.

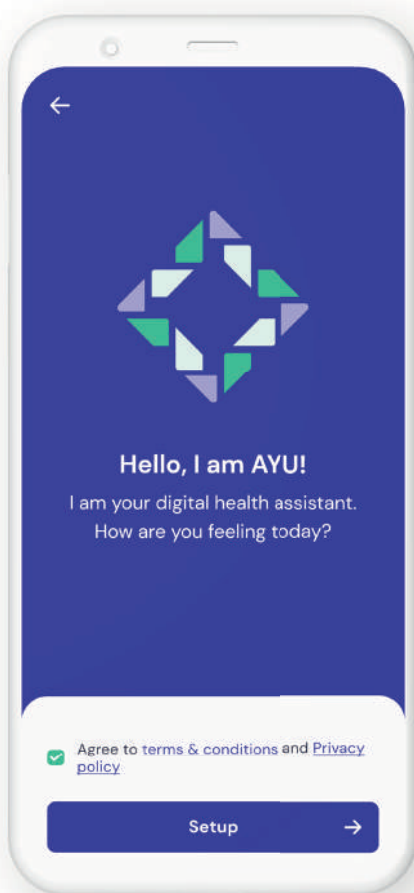
Intelehealth firmly believes that everyone needs and deserves access to healthcare, no matter where they live or their income level. We aim to deliver healthcare via telemedicine to the populations that need it most.



## Our Solutions

With Intelhealth's technology platforms, patients and/or caretakers can overcome the challenges of travelling to visit medical professionals. Patients need only visit a Frontline Health Worker (FHW) at their Primary Healthcare Center (PHC), or use their personal mobile phones to access healthcare providers virtually.

Intelhealth aligns this platform with the World Health Organization's (WHO) 10 best practice recommendations. In recent years, partly due to COVID-19, WHO has repeatedly stressed the importance of telehealth (WHO, 2022). Powered by its novel digital assistant, Ayu, Intelhealth's telemedicine platform offers a Provider-to-Provider portal, and a Patient-to-Provider portal.



## Ayu, Intelhealth's Telemedicine Platform

offers  
a Provider-to-Provider portal,  
and a Patient-to-Provider portal.



### About Ayu:

Ayu is a decision support system with 150+ evidence-based protocols for delivering high-quality health services and improving patient outcomes. It supports all three modes of communication- text chat, audio and video calls. Ayu helps shift the crucial task of clinical history-taking from a qualified doctor to a semi-skilled health worker. So, it supports FHWs to provide evidence-based health services. For conditions beyond the health workers' capacity, Ayu connects them and the patient with a virtual doctor over telemedicine, leading to a conclusive diagnosis.

## How We Work



We work with existing healthcare networks within a country to set up telehealth programs. Our teams engage with local governments, NGOs and hospitals that have established networks of community health workers referral hospitals and pharmacies.

To these existing systems, Intelhealth's platforms add virtual-care delivery, expand and ensure last-mile doctor availability. While our goal is to help our partners achieve their desired healthcare impact, our overall guiding vision is to bring accessible healthcare to as many people living in poverty in rural areas as possible. To this end, we work closely with each partner to set goals and assist them with incorporating telemedicine into their programs.

**Further, Intelhealth closely works with each partner to customize an execution plan based on their outcomes. This generally includes:**

- Training healthcare professionals on Intelhealths' platform and any partner-specific medical concerns;
- Getting software and hardware in healthcare facilities prepared to utilize telehealth;
- Creating a community communication plan to make families and medical professionals aware of our initiatives;
- Tailoring our platform to meet the partner's specific needs;
- Delivering the service of patient-to-provider and provider-to-provider consultations.



# How Telemedicine improves lives in **Remote Rural Areas**





## Stories of Impact



**Gonda Munda**  
Jharkhand  
Murhi Village,  
Khunti District

**eSanjeevani**

**The patient exhibited panic, excessive sweating, and nervousness. Despite normal vital signs, the patient felt uneasy. The health worker consulted Dr. SK Mishra, identifying acute withdrawal symptoms. Following initial first aid, the patient was swiftly transported via '108 ambulance' to Sadar Hospital for treatment. Subsequent follow-up confirmed the patient's complete recovery.**

It was another busy day at a HWC in Murhi. Health workers were preparing to head to a nearby village for Village Health and Sanitation Day (VHND). At 10 a.m., a patient from a nearby village arrived at the OPD, exhibiting signs of panic, profuse sweating, and nervousness. Santoshi Kumari, Health Worker, realized that the patient's health condition was concerning. She conducted a thorough check of his vitals, and to her surprise, they were all within normal ranges. Confusion set in as she struggled to understand the underlying cause of his condition. She swiftly connected to the specialist doctor, Dr. S. K. Mishra, stationed at the PHC Jharkhand eSanjeevani hub, using the eSanjeevani telemedicine platform. Dr. Mishra diagnosed the patient with acute withdrawal symptoms and prescribed primary treatment through an e-prescription. Given the acute nature of the symptoms, Dr. Mishra advised referring the patient to Sadar Hospital for observation and treatment.

Based on the e-prescription, Santoshi Kumari dispensed the necessary primary medications to the patient. With the assistance of the '108 ambulance service,' the patient was referred to Sadar Hospital. After receiving treatment there, patient returned home a few days later, having fully recovered. Santoshi Kumari conducted a follow-up visit to the patient's home, and the patient reported feeling much better. Gonda Munda and his family expressed their gratitude for the prompt treatment and timely referral.

Santoshi Kumari felt a sense of happiness and satisfaction as she listened to their expressions of gratitude. Through the eSanjeevani telemedicine services, patients were connected to specialist doctors who could diagnose their conditions early and provide guidance for proper treatment, ultimately saving lives. Santoshi Kumari extended her thanks to eSanjeevani, Intelhealth, and the TRIF team for providing health workers with training on the eSanjeevani platform.



## Stories of Impact



### Srishti & Family

Uttar Pradesh  
Danpur Village,  
Prayagraj District

### Ekal Arogya Telemedicine

**Srishti and her grandmother felt instant relief from dry cough after following the treatment prescribed by the doctor. This experience made Srishti a staunch believer and supporter of the Ekal Arogya Telemedicine.**

Telemedicine enables medical care not only for individuals but also the whole family. This client story is an illustration of the effectiveness of such a program.

Srishti and her grandmother were facing a serious health issue. On the one hand, they were simultaneously suffering from a week-long dry cough. On the other, they were unsure of how to get medical help for it. Neither of them were able to support the other in visiting a doctor at the distant healthcare centre. At such a time, it was Sangita didi, the sevika or FHW who ensured medical support. Sangita was trained in Ekal Telemedicine program implemented in Danpur village.

Srishti shared how this FHW visited her home, ensuring neither she nor her grandmother had to step out for treatment. Through her mobile phone, Sangita collated and shared details of both patients' health complaints with the doctor. The doctor evaluated the case to arrive at a diagnosis of an upper respiratory tract infection. Appropriate medicines were prescribed and advice was given, which the FHW received on her handset and then shared with Srishti.

Both patients felt instant relief after following the treatment prescribed by the doctor. This experience made Srishti a staunch believer and supporter of the Ekal Telemedicine. She knew she could now approach Sangita for any future health issues. Just like Srishti and her grandmother, numerous patients from remote tribal regions where Ekal Telemedicine program has been implemented have expressed their appreciation for the much needed healthcare support provided by this program.



## Stories of Impact



### Yamuna Bamhane

Maharashtra  
Kapurne Village,  
Nashik District

Nashik  
Arogya Sampada

**Being alone, she lay sick in her house because there was no one to transport her to the local hospital, and she did not have enough money to pay for her medical care.**

At 52 years old, a frail and weak Yamuna Bamhane finds it extremely challenging to move around on her own. As her family has moved to the city for employment, she is left to handle all the household chores on her own.

A few weeks ago, Yamuna experienced symptoms such as high fever, dry cough, chills, and severe joint pain/body aches. Being alone, she lay sick in her house because there was no one to transport her to the local hospital, and she did not have enough money to pay for her medical care.

When she learned about Intellehealth's Arogya Sampada program, she requested that her neighbors contact the health worker so they could come to her house to examine her.

The health worker immediately rushed to Yamuna's house, examined her, and shared the details with the doctor with the help of the 'Arogya Sampada' telemedicine app. The doctor diagnosed the acute respiratory infection and prescribed antibiotics and medicines to relieve the fever. This prescription showed up on the health worker's mobile and was shared with Yamuna. The local pharmacy delivered the medicines to her home. Yamuna was extremely grateful and pleased with the immediate medical assistance she received.

Like in Yamuna's case, Arogya Sampada has provided medical care to numerous elderly individuals from tribal regions near Nashik.





## Stories of Impact



### Lata Pandit Chaudhari

Community Health Worker  
Maharashtra  
Surgane Village,  
Nashik District

Nashik  
Arogya Sampada

**"It has also granted me financial stability and garnered respect within our community. I find great happiness in my work, as it allows me to contribute to a noble cause, serve the elderly, and enhance people's health."**

I reside in a small tribal village along with my husband and two children. My education was only up to the 10<sup>th</sup> standard. Our family faced significant financial challenges, with healthcare expenses and our children's education, often depleting our limited income. To manage our household expenses, we had to resort to borrowing money from others. I am immensely grateful to the opportunity presented by Intelhealth, which allowed me to acquire valuable skills in utilizing technology to provide healthcare to our community.

This opportunity has not only enabled me to generate a decent income to support my family and ensure my children receive a good education, but it has also granted me financial stability and garnered respect within our community. I find great happiness in my work, as it allows me to contribute to a noble cause, serve the elderly, and enhance people's health. I extend my wholehearted thanks to Intelhealth for the goodwill and respect I now receive from the people in my village.



## Stories of Impact



### **Dr. Rajeev Ranjan**

Medical Officer in Charge  
**Jharkhand**  
Lesliganj Village,  
Palamu District

**eSanjeevani**

**“I believe that eSanjeevani is a game changer as a healthcare solution for India’s rural and remote populations.”**

India’s public health system often faces the challenge of a shortage of doctors. This is especially a challenge in our rural remote areas. The government rolled out eSanjeevani’s telemedicine platform to provide medical and healthcare services where there are no doctors available.

Earlier, villagers had to spend time and money to access services at the Community Health Centre or at the district hospital. With eSanjeevani, they can avail free consultations from experts and experienced doctors closer to their homes – even at their doorsteps. This means better healthcare services for all patients. Yes, technological knowhow and upgradation is sometimes challenging. Yet, thanks to Intelehealth and TRIF, we receive training in the use of eSanjeevani platform. These teams provide real-time redressal of our queries and technical glitches. So, we can provide uninterrupted medical services to our rural population. I believe that eSanjeevani is a game changer as a healthcare solution for India’s rural and remote populations.





## Stories of Impact



**Dr. Ajit Xalxo**

Civil Surgeon  
Jharkhand

**eSanjeevani**

**“Earlier, the villagers incurred expenses and overall stress as they had no option but to travel to the CHC or district hospital for the treatment of general diseases.”**

Khunti is one of Jharkhand's many hilly and remote districts, surrounded by dense forest areas. Healthcare access for people here is very limited, due to such challenging terrains. The eSanjeevani telemedicine program by the Indian government is ably connecting patients from the state's remote rural areas to general and specialist doctors, via HWCs. Access to health services for the vulnerable population has improved through this program.

At first, CHOs and MOs were unaware and even hesitant about using eSanjeevani. Intelhealth and TRIF supported in orienting them towards the platform – creating spokes and hubs, providing appropriate training and creating a demand for services. They are supporting data analytics and regular monitoring of services in our district. All of this means a strengthening of eSanjeevani's services in Khunti.

Earlier, the villagers incurred expenses and overall stress as they had no option but to travel to the CHC or district hospital for the treatment of general diseases. Today, eSanjeevani has helped them to save time and money as well as access healthcare whenever needed. We remain thankful to Intelhealth and TRIF for the support they lend in strengthening eSanjeevani's telemedicine implementation in Khunti.



## Stories of Impact



**Dr. Nitya  
Balagopalan**

Evaluation &  
Research Officer, NISHTHA

**NISHTHA  
Swasthya Sampark**

**“Intelhealth's commitment to enhancing healthcare accessibility through telemedicine is truly commendable.”**

We had an extremely positive experience collaborating with Intelhealth for Swasthya Sampark platform for post-COVID-19 care and in evaluating its effectiveness. Intelhealth's commitment to enhancing healthcare accessibility through telemedicine is truly commendable. They have proven to be a reliable and motivated partner. The team's dedication has made this collaboration highly efficient.

Thanks to their efforts, we were able to implement and assess the platform in a rigorous manner and gain valuable insights and learnings. All this was achieved in the expected time frame. We extend our best wishes to the team for improving healthcare accessibility.





## Transforming healthcare access through Telemedicine





# eSanjeevani: India's National Telemedicine Initiative

eSanjeevani is a national telemedicine service, by the Ministry of Health & Family Welfare and Center for Development of Advanced Computing (CDAC) operational in 28 states & 7 union territories, as a step towards digital health equity. With a mission to achieve Universal Health Coverage (UHC), the eSanjeevani platform launched by the Government of India aims to provide healthcare services remotely.

eSanjeevani facilitates quick and easy access to doctors and medical specialists from a smartphone. Alternatively, one can access its quality remote health services by visiting the nearest Ayushman Bharat Health & Wellness Centre (AB-HWC).

## eSanjeevani offers two main telemedicine services:

- Doctor-to-Doctor (eSanjeevani AB-HWC) and Patient-to-Doctor (eSanjeevani OPD): The Doctor-to-Doctor service enables doctors and specialists to connect with each other to seek expert advice and second opinions.
- Patient-to-Doctor: This service enables patients to consult doctors remotely through audio or video calls.

Intelehealth is a proud technical support partner working to strengthen the implementation of eSanjeevani in the major Indian states of Jharkhand, Odisha and Bruhat Bengaluru Mahanagarpalike (BBMP).



# eSanjeevani: India's National Telemedicine Initiative

## Theory of Change eSanjeevani

### GOAL

Reduced mortality and morbidity of common communicable and non-communicable diseases among Indian population

### OUTCOME: CONSUMER BEHAVIOR

No. of DALYS saved

Improved access to healthcare services

Reduced delays in diagnosis and treatment initiation for common high burden communicable and non-communicable diseases, such as Diabetes, Hypertension, Cardio vascular diseases, Tuberculosis

Reduced out of pocket expenses for seeking healthcare services

### OUTCOME: MARKET AND SYSTEMS BEHAVIOR

Capacities of Government stakeholders improved at state, district level & facility level for implementing services

State Government adopts eSanjeevani platform for providing choice of services to the population

### OUTPUTS

#### Improved supply of comprehensive services through platform

4-5 fold increase in the no. of telemedicine consultations in implementation states from the baseline  
100% of HUBs and spoke facilities activated for providing eSanjeevani telemedicine services  
Acceptability for eSanjeevani among doctors and front-line workers improved  
80% of teleconsultations adhere to quality standards

#### Increased demand and community mobilization for eSanjeevani services

Awareness on the eSanjeevani telemedicine services increased by 40% among the target population  
Acceptability of telemedicine services improved among the target population  
Community structures leveraged to accelerate sustained demand for telemedicine services

#### Strengthening skills and capacity of health system at various levels in implementing eSanjeevani platform

Capacities and skills developed across health systems for implementing eSanjeevani model  
Resources are allocated to support eSanjeevani in urban areas  
A robust database on impact and cost-efficiency is disseminated

### STRATEGIES AND INPUTS

Improving acceptability, adoption of eSanjeevani National Telemedicine platform of GOI across 36 Indian states

#### Improving Supply of Services

Readiness assessment of Health Facilities to initiate eSanjeevani  
Training and capacity building of Doctors and Front-line workers on operating eSanjeevani platform  
Addressing barriers in acceptability of telemedicine platform among Doctors and Front-line workers  
Improving availability of specialist doctors services at HUBs for providing teleconsultations  
Ensuring quality of services provided through eSanjeevani  
Monitoring and evaluation for continued improvement

#### Improving Demand for Services

Behaviour change communication (BCC) to address the barriers in acceptability of telemedicine platforms  
Advocacy and awareness activities in community to increase the demand of the services  
Engaging community structures for sustainable demand creation

#### Building Enabling Environment for Telemedicine

Developing tools / institutional mechanisms within the Government systems for sustained implementation of eSanjeevani telemedicine platform  
Capacity building of State and district Government authorities for implementing the eSanjeevani platform  
Handing over key processes to the stakeholders in the system for sustainability

### ISSUES | PROBLEMS

Lack of access to quality healthcare for women, girls, vulnerable and marginalized population

High out of pocket expenses on healthcare

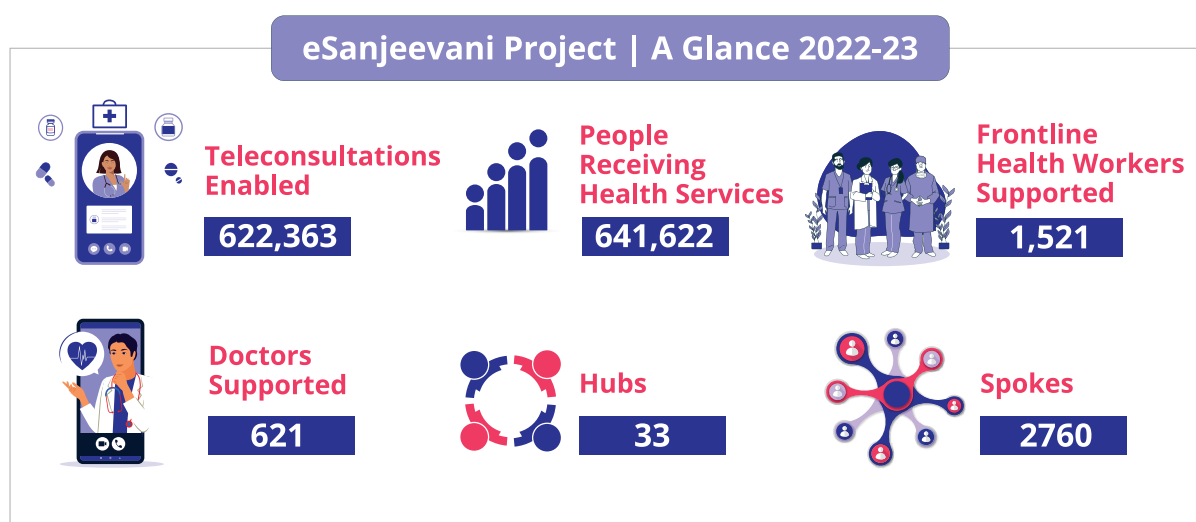
Delay in health seeking resulting in increased disease burden of communicable and non-communicable diseases

Lack of capacity and implementation know-how among government stakeholders at the States



## eSanjeevani Jharkhand

With the eSanjeevani Jharkhand project, a major Indian state is witnessing a gradual healthcare transformation in its rural regions. Jharkhand has a total population of 39.6 million, of which 75.95% live in rural areas. Intelhealth, in partnership with Transform Rural India, collaborates with the National Health Mission (NHM), Jharkhand, to strengthen eSanjeevani in the state. The aim is to enable telemedicine services for underserved communities and enhance rural access to specialized and quality healthcare.



### PARTNER ORGANIZATIONS

#### NHM Jharkhand

National Health Mission (NHM) was launched by the Government of India in 2005, subsuming the National Rural Health Mission and the National Urban Health Mission. NHM envisages the achievement of universal access to equitable, affordable and quality healthcare services that are accountable and responsive to people's needs.

#### Transform Rural India

TRI is a grassroots foundation, deeply focused on challenges faced by marginalized communities, particularly women, in the bottom 100,000 villages of India. It brings to the table deep knowledge and an inventory of working solutions for stranded India, along with mechanisms to scale up those solutions. TRI's rural model of development attempts transformation through better rural livelihoods, rural education and rural healthcare, skilling and by involving the community, the government and market place Samaaj-Sarkaar Bazaar.

## eSanjeevani Jharkhand Evaluation Study

During the evaluation period (March 2021 – June 2022), a total of 175,490 teleconsultations were conducted, marking 1000x increase from 50 per month to 50,000 per month. Intelhealth trained 1381 CHOs and 574 doctors. 1494 spokes were registered, with 944 activated. Intelhealth also supported the creation of 6 hubs.

### Methods and Approach

- Intervention was assessed using both qualitative and quantitative methods.
- Quantitative survey of 500 eSanjeevani HWC platform users and 116 CHOs and 13 doctors to understand technology acceptability.
- Qualitative interviews were conducted with 10 CHOs and 20 clients from 10 HWC in these districts.
- Five Jharkhand districts: Ranchi, Khunti, Lohardaga, Gumla, and Simdega, were specifically chosen due to their extended exposure to project's intervention, ensuring its stability.

### Findings

- 87% (n=437) of clients received a prescription from a remote doctor.
- 96.5% (n=435) of clients provided with a prescription or medical advice complied with treatment.
- 60% (n=302) patients reported having entirely recovered from their health problems, and 25% (n=127) reported partial recovery.
- Patient acceptability was high, with an overall score of 3.26 out of 5.
- 75% of respondents reported that they are likely to use eSanjeevani services in the future.
- There was high acceptability of providers towards telemedicine, with an overall score of 4.01 out of 5 among CHOs and 3.9 out of 5 among doctors.
- 437 (87.4%) patients were advised for in-person referrals following teleconsultation. This indicates over-referral within the system, requiring correction to address doctors' medico-legal concerns and lack of clinical protocols.
- Out of the referred patients, 59% (n=258) chose in-person consultations, suggesting room for telemedicine to enhance healthcare access, as 40% did not follow referrals.
- 54% of patients also consulted alternate health providers. This may indicate a lack of trust in the teleconsultation model.

In summary, we estimate that the telemedicine facility saved an average of 21.72 kms and INR 941.51 money saved per health visit. Also found that women tend to spend 1.5 times more than men on in-person healthcare services, highlighting the gender equity benefits provided by eSanjeevani in overcoming access barriers for women.

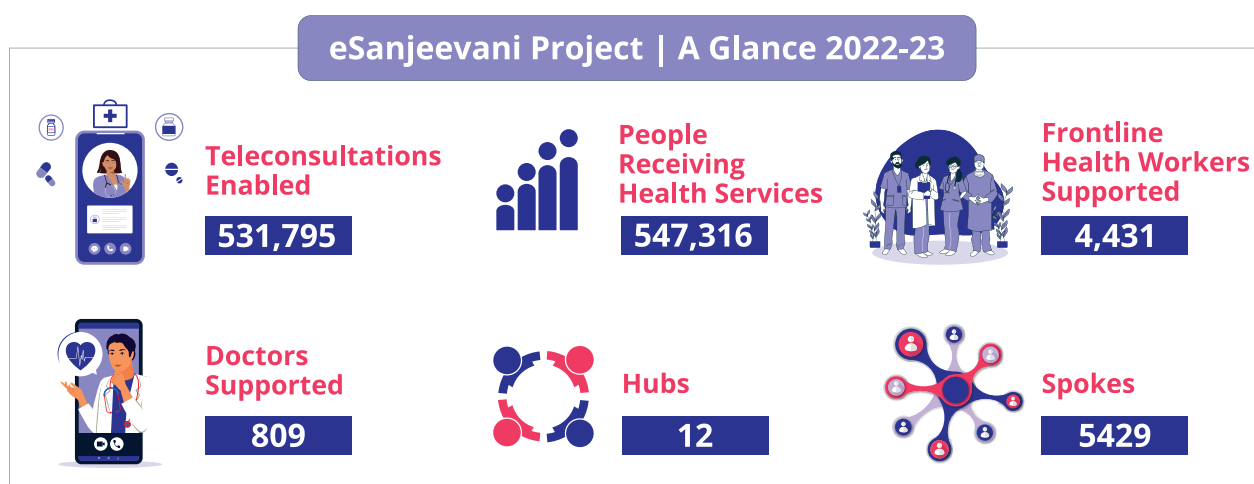


## eSanjeevani Odisha

The eSanjeevani Odisha project is enabling telemedicine facilities to this significantly large Indian state's rural communities. Odisha today has a population of 46 million, 83.3% of which lives in its rural areas.

Intelhealth, with support from ACT grants, is collaborating with the Directorate of Health Services (DHS)-Odisha to strengthen eSanjeevani in the state. The core focus is to enable telemedicine services to underserved communities, and ramp up access to specialized and quality healthcare.

More than 531,795 teleconsultations were facilitated, with approximately 31% of these consultations being delivered through the Intelhealth hub. Of the beneficiaries, 70% are women residing in rural and tribal regions, and an impressive 80% of patients received a doctor's response within 5 to 10 minutes.



### PARTNERS ORGANIZATION

#### Directorate of Health Services, Odisha

The Director of Health Services, Odisha, as the head of the department within the Health & Family Welfare Department of the Government of Odisha, holds a unique role in overseeing healthcare administration in the state. This includes addressing promotive, preventive, and curative aspects across its 30 districts with a population of 4.67 Crore, including a 38% tribal population. While the state government, through its Health and Family Welfare Department, develops healthcare policies, the Director of Health Services, Odisha, as the department head, is responsible for their execution.

#### ACT Grants (Donor)

ACT, founded in 2020 in response to the COVID crisis, is a non-profit platform driven by the belief in the power of collective action to create large-scale social impact. ACT aims to foster social change through collaboration among various stakeholders, including startup founders, donors, NGOs, expert advisors, government representatives, and the wider public. ACT grants serve as seed funding to incubate and accelerate innovations that have shown potential to address social gaps at scale.

## eSanjeevani Bengaluru

Bengaluru has total population of 12.3 million of which 16% reside in urban slum areas. eSanjeevani Bengaluru telemedicine platform has ensured that underserved populations can access specialized and high-quality healthcare services. To further enhance these efforts, Intelhealth with support from BOSCH CSR initiative collaborates with the Bengaluru Mahanagara Palike (BBMP) to expand its reach within the municipal corporation areas.

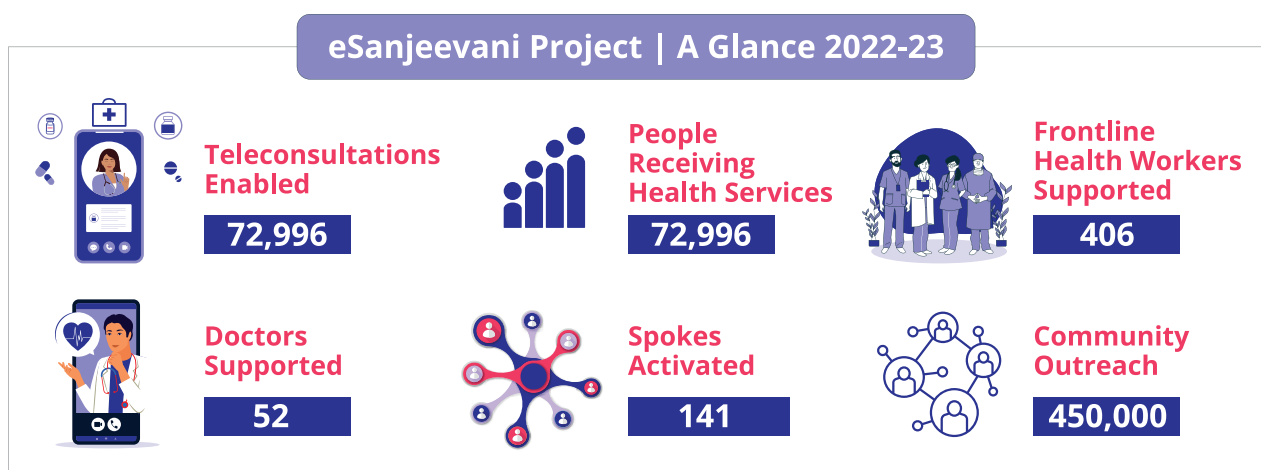
### Addressing the need for telemedicine services for the urban poor population:

- Inequitable access to public health services
- High cost of services in a fragmented and unregulated private sector
- Uncertain income sources and poor financial liquidity

All the above factors lead to delays in health-seeking behavior, increased morbidity and mortality and high out-of-pocket expenses in the urban poor population. eSanjeevani's OPD model (Patient-to-Provider) has emerged as an impactful technological solution for this Bengaluru demographic. It improves access to service delivery, at convenient hours of the day and at no cost. It can also help to decongest secondary and tertiary care levels, lowering bed occupancy rates and providing preventive and promotive care at the community level.

However, awareness is very low among the urban poor communities and there is a need for behaviour change communication to create potential user motivation. Intelhealth, in collaboration with BBMP, is implementing community-level BCC activities to increase the uptake of e-Sanjeevani OPD services among Bengaluru's urban poor population.

The initiative reached 450,000 urban poor residents through community outreach, collaborating with Mahila Arogya Samitis (MAS), Self Help Groups (SHGs), and Yuvak Mandals to promote awareness on the eSanjeevani OPD model. 15 MAS groups were trained as ambassadors to promote the program within their respective slum areas, resulting in over 72,000 teleconsultations.





## PARTNER ORGANIZATIONS

### **Bruhat Bengaluru Mahanagara Palike (BBMP)**

BBMP, the municipal corporation overseeing Bengaluru, partners with the eSanjeevani project to deliver telemedicine services. BBMP's responsibilities encompass supporting telemedicine infrastructure, connectivity, and promoting awareness of telehealth consultations throughout the city. This collaboration aims to enhance healthcare accessibility and enhance the overall health and well-being of Bengaluru's residents by harnessing the potential of technology and telemedicine solutions.

### **Bosch Limited (Donor)**

Bosch Social Engagement program is designed to create clear storylines as per the needs of society, to create long-lasting impact and change the lives of the people for the better. Bosch is a value-addition to the projects that they are involved in and ensuring their long-term sustainability and scalability. By choosing to focus its Corporate Social Responsibility (CSR) activities on the principal thrust areas of Vocational Training, Health, Hygiene and Education, and Neighborhood Projects, Bosch Limited is reinforcing its commitment towards creating a sustainable impact in the areas in which it operates.





## Healthcare within reach for Children with Disabilities





### Using telemedicine to enhance healthcare access for Children with Disabilities (CWD) in The Kyrgyz Republic

Telemed KG aims to create a platform improving primary prevention, early identification, early intervention, and provision of high-quality long-term well-coordinated care for CWDs & their families. It combines health check-up, telemedicine, and cross-sectoral collaboration. Family doctors can conduct child health check-ups and examinations to identify neonatal jaundice, HIV screenings and intervene early for children with developmental delays. They then use a digital tool with clinical protocols developed by the national clinical protocol working group. Children needing intervention are referred to secondary or tertiary level specialists, as needed. Here, the platform makes accessible for the child's long-term co-ordinated care. The specialist doctor uses Telemed KG to prescribe a treatment plan sent both to the family doctor and the caregiver.

Playing a key role, Intelheath has assisted the Ministry of Health (MOH), UNICEF, and local technology experts in designing, customizing, and implementing the Intelheath telemedicine systems at pilot healthcare facilities at a primary healthcare level. These are linked to secondary and tertiary levels for provider-to-provider communication, for consultations applicable to a range of health conditions.

Telemed KG uses a mobile app and a digital assistant (Ayu) for family doctors, with in-built evidence-based clinical guidance protocols for patient screening. This elicits clear signs and symptoms for sharing and collaborating with a remote physician to support diagnostic decision-making and management of cases beyond such a physician's level of training or support.

The Telemed KG platform is managed by the e Health center of the Kyrgyz Republic's Ministry of Health (MOH). It is entirely hyper-localised in context - to the local situation, requirements and languages. It functions even in low bandwidth or offline settings. Remote doctors and specialists access the patient record through a secure cloud-based electronic health record system. Patient care is managed by the Family Doctor, who helps connect CWDs & their families with the fragmented health system for access to required medicines and referrals.



# Telemed KG

## Telemed KG Project | A Glance 2022-23



## PARTNER ORGANIZATIONS

### Ministry of Health, Kyrgyzstan

The Ministry of Health of the Kyrgyz Republic and its institutes, represented by the Centre for Health Development and Medical Technologies, and the eHealth Centre, are the key organisations for the development of strategy, regulatory documents and programmes in the field of telehealth, as well as the development of health informational systems, telehealth platforms and digital solutions in the public health area.

### UNICEF Kyrgyzstan

UNICEF works at the policy level with the government to improve the social system and on the ground to make sure that this system reaches all children, with a particular emphasis on the most vulnerable.

UNICEF works across sectors of child protection, health, social policy, early childhood development and education, WASH (water, sanitation, and hygiene), response in emergencies, climate change and disaster risk preparedness, and children with disabilities and youth.



## Telemed KG | Key Results



### Methods & Approach

The study adopts a case-study methodology, utilizing program monitoring data and conducting in-depth qualitative interviews with various stakeholders. These stakeholders include two Family Medicine Centers (FMCs), specifically in Nookat and Suzak, two Family Group Practitioners (FGPs), the National Mother and Child Hospital (a tertiary hospital), the Center for Health Development (CHD), and the eHealth Center. A total of 26 key program stakeholders, comprising 17 family doctors, 2 FMC directors, 3 specialist doctors, 3 CHD members, and 1 eHealth Center member.

### Findings

- The Telemed KG platform is perceived to be very useful in providing care for children living in remote areas, expected to cut costs and travel for families seeking specialized treatment. It simplifies the process for families to obtain a second opinion and plan future treatments.
- The protocol was useful for family doctors, helping them assess the patient's health condition and improve the identification of neonatal jaundice and cerebral palsy. Furthermore, the training and continuous support from Intelhealth were identified as vital in improving the capacity of family doctors and specialists.
- The UI was perceived as easy to use. The appointment module feature is expected to make the process of receiving consultations more efficient.
- With improvements such as recovery from jaundice and improved motor skills for children with cerebral palsy, the recommendations from remote specialist doctors were perceived to be helpful.
- Key challenges and barriers:
  - The lack of specialist doctors in the country
  - The absence of doctors from secondary-level facilities on Telemed KG
  - Absence of a policy framework for stakeholders to operate
- Key learnings and future scope:
  - Increase the number of protocols on the app to engage more patients.
  - Increase efforts to enrol and train family doctors as well as doctors from secondary facilities.



## Reimagining how tech can transform last mile healthcare





## Nashik Arogya Sampada



### Improving tribal health in rural Maharashtra

India's tribal population forms 8.6% of the country's total population, or 104 million people. Situated on the border of Gujarat and Maharashtra, Peth and Surgana are 100% tribal talukas or districts. These lands belong to the Kokana tribe. They are tribal regions lacking health access. The main reasons being extensive forest cover, low-income groups, unemployment, migration, and a lack of ownership of agricultural land.

Intelehealth is implementing its own intervention in Nashik (Maharashtra) to support and preserve the health of Peth and Surgana's tribal communities. This project is an innovation lab to create an ideal model for how telemedicine can be used to improve the health needs of the 104 million tribal people that live in India.

Residents of Peth and Surgana face a daily healthcare dilemma, involving time-consuming travel, transportation costs, and workday disruptions. Women, in particular, face additional obstacles, necessitating permissions or companions for their trips. This burden extends beyond just men and women, impacting their children and the elderly, who often cannot accompany them to medical appointments.

### Arogya Sampada Nashik | Goals:

- Reduced expenses for healthcare access
- Improvement in health-seeking behavior
- Improvement in health awareness

The project is being implemented in 30 remote tribal villages that are grouped into four clusters. A Community Health Worker (CHW) has been selected for each cluster and trained in using a mobile-based telemedicine app to collect patient history, record vitals, and support teleconsultations with a remote doctor.

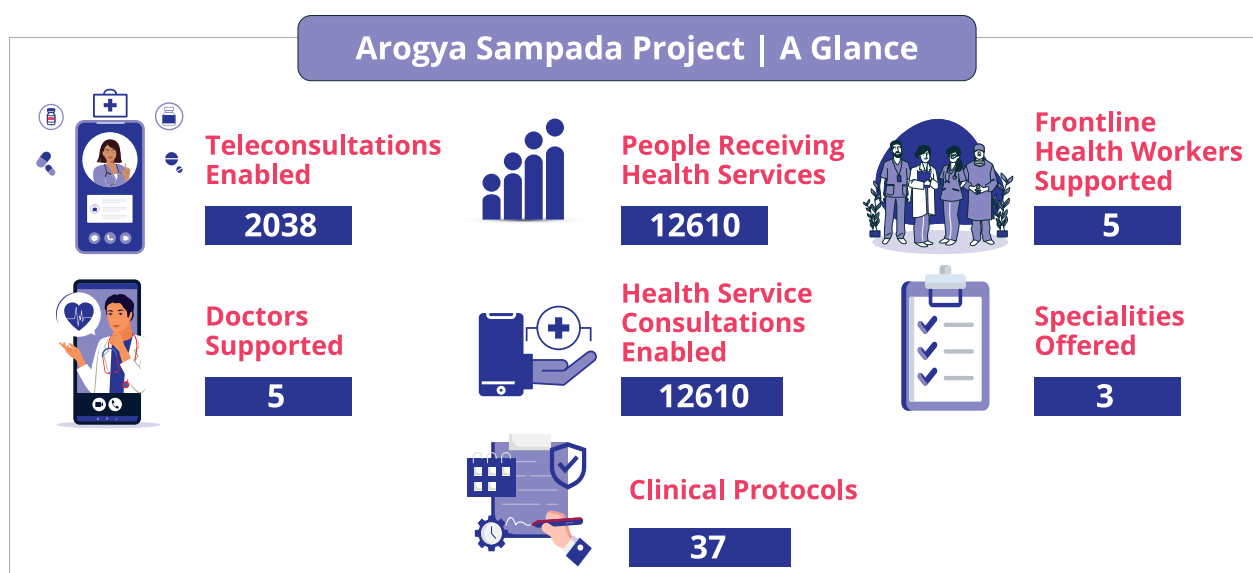
While the CHWs conduct house visits to provide healthcare, Intelehealth has also initiated model health kiosks in four villages. We envision these would offer access to diagnostics, consultations, and medicines all under one roof. The project further explores the possibilities of collaborations, targeted interventions, and community empowerment. It is aiming to effectively and sustainably improve access to healthcare in remote rural settings.

# Nashik Arogya Sampada

## Innovations explored:

- Instant printed prescription - instant prescription printing through a Bluetooth-enabled thermal printer for sharing patient health data and purchasing medications.
- Point of Care Diagnostic - it is crucial to gather real-time, accurate vital signs data while also accommodating various tests such as SpO2, blood pressure, blood glucose, total cholesterol, uric acid, and hemoglobin. This addresses the pressing issue of limited access to diagnostic services and the paramount importance of precise diagnosis and treatment planning.
- Remote Health Facility (Kiosk) setup- to facilitate smooth service delivery and foster doctor-patient interactions, thereby promoting a culture of seeking healthcare at the kiosk.
- Training - strengthening healthcare worker's capabilities with standardized training, incorporating a blended approach that includes pre- and post-training assessments and regular refresher sessions.
- Supporting medicine delivery - prescribed medicines are delivered to the patients at the doorstep ensuring the intended care reaches the beneficiaries and the teleconsultation loop is complete. The service primarily benefits the elderly, women, and children. The medicines are offered at subsidized costs, making them more affordable for the patients while the medicines are delivered free of cost.

Out of the 2038 patients who benefited from the program, over 1400 availed of healthcare services for the most common health issues such as Myalgia, Lower Respiratory Tract Infection, Arthritis, Viral fever, Gastritis, Disease of bone and joint, Upper Respiratory Tract Infection, Skin infection, Migraine, and Fatigue & Generalized Weakness.





# Nashik Arogya Sampada Baseline Survey Report

A baseline study was undertaken to better understand the demographics, knowledge, and practices of the households.

## Methods and Approach

The survey covered two blocks, namely Peth and Surgana, and reached a total of 30 villages situated in tribal areas. The baseline questionnaire had sections:

- Demographic details - housing conditions, food habits, water source, electricity access, and more.
- Health / service utilization - health concerns of each household member, the frequency of health episodes in a year, the initial place they sought care, the mode of transportation used and expenses to reach the facility.

## Findings

- The survey revealed significant findings about the living conditions and healthcare accessibility in the area. Survey included 2,278 households with 11,406 beneficiaries and assessed demographic composition.
- Demographic composition - 10% of the population was under 5 years, 11% above 60 years, indicating a vulnerable segment who may require specialized care and attention.
- Financial challenges- 1,287 households reported an annual income of less than INR 30,000/-. This socio-economic aspect further underscored the importance of accessible and affordable healthcare services in the region.
- Phone availability - 45% of households reported no phone access, potentially hindering timely medical advice or emergency assistance.
- Common morbidities - cough, cold, fever, joint pains, diarrhea, and injuries.
- Non Communicable Diseases (NCDs) - diabetes and hypertension were underdiagnosed and underreported, indicating a potential gap in disease management and surveillance.
- Sanitation issues - 71% of households reporting at least one member practicing open defecation. This finding highlighted the need for improved sanitation facilities and hygiene practices within the community.
- Access to healthcare - 86% over 20 km from Community Health Center, 71.5% over 10 km from Primary Health Center, and 90% over 70 km from District Hospital. These long distances highlighted the challenges villagers face in accessing higher levels of healthcare.

Common health issues, underdiagnosis of non-communicable diseases (NCDs), limited phone access, vulnerable populations, low incomes, geographical remoteness from healthcare, and poor sanitation were identified as major challenges for the local population. These findings would serve as a foundation for developing targeted telemedicine interventions to effectively address the community's healthcare needs.



**Dial 180030 94144**  
for diabetes care at  
your fingertips





# MSF Diabetes Helpline

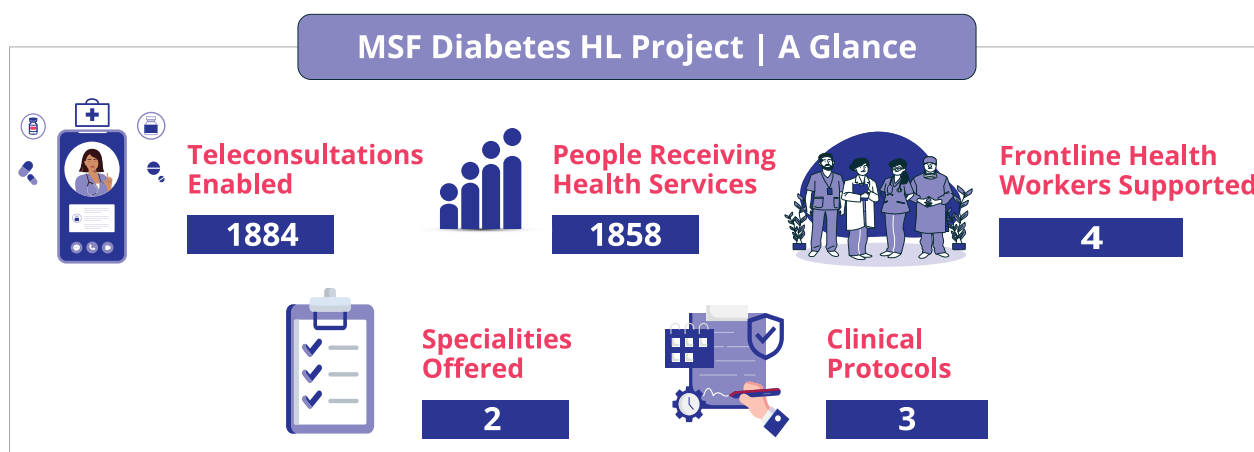
MSF Diabetes Helpline is a pan-India toll-free service that enhances access to care for type-2 diabetes patients from low income urban communities. Its services include assisting patients to effectively manage their diabetes by offering guidance on healthy meal plans; self-monitoring of blood glucose and overall well-being. This helpline provides counselling on lifestyle modifications and encourages regular patient follow-ups. MSF Diabetes Helpline operates from 9 AM to 9 PM, every day.

## Services:

MSF Diabetes Helpline helps patients with access to standardized, uniform and useful information about diabetes care that could be customized to their individual needs. It especially overrides the non-affordability challenge to help those who would postpone or forgo diabetes care due to this factor. 12-hour service, enables consultations at patient's convenience.

The helpline does not provide clinical advice or treatment for type-2 diabetes. Yet, accredited dietician and nurses provide appropriate counselling on healthy meal plans and lifestyle modifications. Risks of future complications can be potentially reduced with its service to increase awareness, promote self-monitoring routine follow-ups. It also provides options to seek psychological healthcare.

The project facilitated 1,884 consultations, during which the nurses effectively implemented all three modules. Module 1 involved on counseling patients about the helpline's objectives and imparting knowledge on Type 2 Diabetes. Module 2 centered on diet and lifestyle management, incorporating exercises and meditation. Module 3 was dedicated to delivering care for diabetes-related complications. Approx. 70% of individuals proactively contacted the helpline to seek answers to their inquiries, indicating that they perceive tangible advantages from the project.



## PARTNER ORGANIZATION

### MSF India

MSF is an international, independent medical humanitarian organization. It provides medical assistance to people affected by conflict, epidemics, disasters, or exclusion from healthcare.



## A helpline caring for people with post-COVID-19 conditions





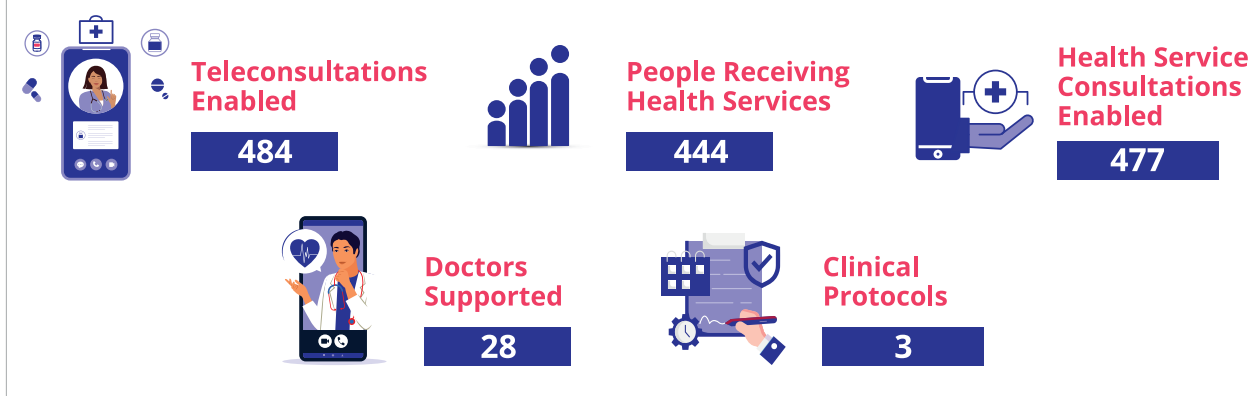
## NISHTHA Swasthya Sampark

10-20% of those who suffered from COVID-19 experienced a variety of mid and long term effects after they recovered from their initial illness. Some of the most common post-COVID-19 symptoms were shortness of breath, cognitive dysfunction and fatigue.

Being unaware of these symptoms and therefore of their treatment, patients were hesitant to seek appropriate medical attention. Identifying this healthcare problem, a helpline was devised to provide care and support to post-COVID-19 patients with telemedicine-based health services.

The NISHTHA Swasthya Sampark team was instrumental in following up with COVID-19 patients discharged from civil hospitals and in home quarantine. It helped those facing psychological issues and referred them to relevant health facilities. Working towards effective rehabilitation in the states of Jharkhand, Madhya Pradesh and Sikkim, the team also addressed mental health issues and encouraged a positive attitude towards recovery.

### Swasthya Sampark HL Project | A Glance



### PARTNER ORGANIZATION

#### Jhpiego

Jhpiego is a non-profit global leader in the creation and delivery of transformative healthcare solutions for the developing world. It aims to revolutionize healthcare for the planet's most disadvantaged people.

The NISHTHA project, funded by USAID and executed by Jhpiego, has a mission to revolutionize, redesign, and optimize comprehensive primary healthcare in India. The project's primary objective is to establish an inclusive, holistic, and patient-centered comprehensive primary healthcare system that enhances health outcomes for marginalized and vulnerable populations, particularly women and girls. NISHTHA is also actively involved in strengthening disease surveillance.

### Methods and Approach

The study used a mixed methodology of qualitative and quantitative measures to assess the impact of the Swasthya Sampark helpline in providing healthcare services for post-COVID-19 complications.

Quantitative survey of 259 clients from Jharkhand, and qualitative in-depth interviews with 11 health providers and 29 clients.

### Findings

- The Swasthya Sampark helpline supported 18 doctors and called 13,136 patients between June 2021 and July 2022. 4,940 teleconsultations visits were scheduled via the helpline, of which 4,917 (99.5%) were completed.
- The majority of patients were male and aged between 18-35 years, with fatigue, generalized weakness, mental health, body pains and breathlessness issues being the most common post-COVID-19 symptoms reported.
- Of 259 Jharkhand patients, 60.6% (n=157) received non-specialist consultations, whereas 39.4% (n=102) received specialist consultations.
- 64.10% (n=166) stated complete recovery while around 16.6% (n=43) stated partial recovery or no recovery after consultations with remote doctors.
- Providers reported high acceptability in terms of perceived usefulness (1.66), perceived ease of use (1.92), attitude (1.93), subjective norm (1.49), habit (2.68), and intention of use (1.39). (On a scale ranging from -3 to +3)
- Qualitative findings show that clients found the helpline useful due to its ease of access, availability, and affordability.
- Providers found telemedicine suitable for managing moderate health issues and post-COVID-19 symptoms. It was considered well-equipped, user-friendly, which improved the quality of care.
- Healthcare providers reported improvements in their technical skills and self-confidence, which were attributed to training, exposure to a variety of cases, and the development of soft skills aimed at enhancing their interactions with clients.
- Challenges and barriers to using the helpline were:
  - Doctors were not always confident about the diagnosis since post-COVID-19 health problems were new to them and they could not physically inspect the patient.
  - Patient hesitancy and compliance with follow-up
  - It was difficult for callers to communicate their health problems, medical history, and test results accurately.



## NISHTHA Swasthya Sampark | Key Results

### Future improvements:

- Enhancing healthcare provider skills, expanding protocols, improving patient tracking and referrals, and promoting telemedicine advocacy.
- Managing helplines should include troubleshooting protocols, quality assurance, and feedback mechanisms.
- Post-COVID-19 care involves highlighting warning signs, advising on lifestyle, and promoting self-assessment and follow-up.
- The app should store consultation history, simplify the user interface, enable appointment scheduling, and offer notifications to both patients and doctors





## Women micro-entrepreneurs powering last mile healthcare in tribal areas

एकल आरोग्य प्रकल्प (आरोग्य फाउण्डेशन ऑफ इंडिया)

501 टेलीमेडीसिन (दूर चिकित्सा)

आपका उत्तम स्वास्थ्य हमारी चिन्ता

उच्च गुणवत्ता और आनंदमय जीवन जियें  
निम्न जाँच कराएँ

1. तापमान जाँच 2. ऊँचाई लंबाई 3. वजन

4. रक्त के ऑक्सीजन का माप 5. रक्तचाप (ब्लड प्रेशर)

6. रक्त अल्पता (हिमोग्लोबिन) 7. ब्लड शुगर (डायबिटीज)

सरकारी चिकित्सको (डॉक्टरों) से घर बैठ सलाह

उपचार मार्गदर्शन के लिए सम्पर्क करें-

ग्राम-सेरगातु

आरोग्य सेविका-आशा देवी





# Ekal Arogya Telemedicine

The Ekal Arogya Telemedicine project is a collaborative effort between Arogya Foundation of India (AFI) and Intelhealth. Its implementation is within tribal communities of Assam, Gujarat, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh and West Bengal. This project mobilises women community health workers, called sevikas. These sevikas collect patient histories and conduct teleconsultations with remote doctors via smartphones and telemedicine kits. They counsel, screen and follow up on treatment plans, thus tracking patient health outcomes.

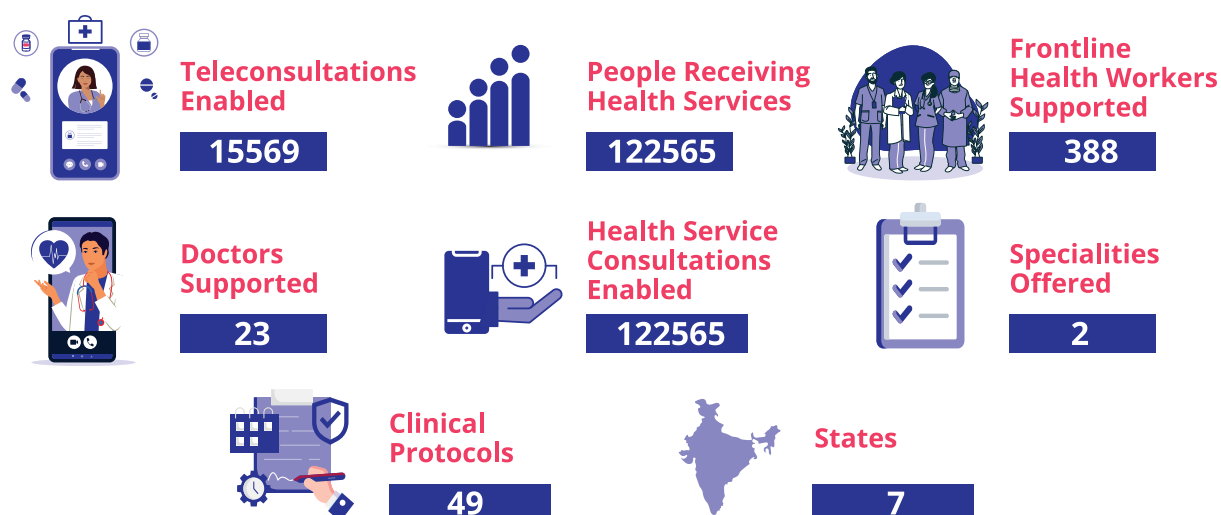
Started in September 2020, AFI has empowered and motivated sevikas, to participate in community engagement activities. They are localised frontline healthcare providers who have completed a minimum level of secondary school. They are fluent in the local languages, in both reading and writing abilities, and collaborate with AFI for health-related issues. This primarily involves preventive healthcare, focusing on hygiene, nutrition, home remedies and developing kitchen gardens.

## Ekal Arogya Telemedicine | Goals:

- Progress in patients' health, health-seeking behavior and health awareness
- Reduction in money spent to access healthcare

Out of the 10475 patients who consulted doctor, over 6200 availed healthcare services for most common health issues such as fever, cold, cough, respiratory illnesses, abdominal pain, headache, diarrhea, fatigue and general weakness, joint pain, and vertigo.

### Ekal Telemedicine Project | A Glance



## PARTNER ORGANIZATION

### Ekal Abhiyan

Ekal, a non-profit, aims to provide basic education to every rural Indian child. They believe in global engagement to embrace its cause and fulfill their mission. Ekal is active in over 10 countries.

## Compassionate care for conflict-affected communities in Syria





The Syrian conflict is one of the worst humanitarian conflicts of our time. It has resulted in 590,000 deaths, 5.5 million refugees, 6.6 million internally displaced persons, and 13 million locals impacted by the socioeconomic collapse and poor services, including healthcare. This is coupled with continuing inter and intra-community conflicts that break down socioeconomic relationships within Syria, further exacerbating the problem. Communities “compete” for resources, disrupting the historical flow of goods and services and resulting in an inequitable distribution of resources. Syriana, in collaboration with IntelHealth, has developed a novel technology-enabled equitable public home-healthcare program called Project Sila, which means “a link”. The project aims to improve access to basic health needs and reduce health expenditures by building local technical and organizational capacity, and catalyzing inter-community collaboration.

## As a novel solution, Project Sila has four key components:

- Training and employing local home-health staff linked with physicians using telemedicine technology
- Providing cost-effective home health care services in underserved communities that reduce suffering and improve health using innovative telemedicine solutions with diaspora support
- Building the capacity of residential Community-Based Organizations (CBO) to be self-sufficient in funding and operating such local service programs
- Enhancing intra-community collaboration using the shared training modules and mobile telehealth infrastructure across different communities to exchange services and build trust.

The health teams are provided with a novel telehealth mobile app with a backend electronic health record system that is customized to equip them to provide a comprehensive suite of home health services. The health teams can use the app to perform app-guided clinical assessments, communicate them with remote supervising doctors and making recommendations. They also use the app to assess humanitarian needs and determine cases eligible for assistance.

The technology facilitates effective needs assessment and offers the adaptability to customize the program according to operational factors such as transportation and community behavior, as well as humanitarian conditions.

## PARTNER ORGANIZATION

### Syriana

Syriana is a Syrian-led, Syrian-run, non-profit organization incorporated in Washington, D.C., United States of America, with a mission to utilize essential humanitarian projects. It aims to build the organizational capacity of Syrian communities at home and in the diaspora and integrate them through socio-economic projects leveraging the humanitarian-development-peace nexus.



### **Improving pan-India remote access to healthcare using an end-to-end telemedicine solution.**

MySmartCareDoc, with Intelhealth, introduced an end-to-end telemedicine solution – a virtual platform called MySmartCareDoc – to provide high-quality healthcare access in rural areas. The states benefitting from this platform are Maharashtra, Arunachal Pradesh, Uttarakhand, Haryana, Tamil Nadu, Himachal Pradesh and more. Through MySmartCareDoc, patient and provider productivity, efficiency, affordability, convenience and accessibility have been enhanced.

To achieve these results, community mobilizers (LHWs) conducted door-to-door visits and set up medical camps where, using the MySmartCareDoc mobile app they collected complete patient data. Once this data is assessed by a general practitioner or a specialist via the MySmartCareDoc portal, a prescription is duly provided.

The MySmartCareDoc mobile app is also integrated with a Rhemos point-of-care device, allowing health workers to monitor patients' vitals (blood pressure, ECG, HbA1c, etc.), leading to more accurate diagnoses. Additionally, if a doctor needs to directly talk to a patient, the video call and chat features fulfil this service. In the event of a patient or a doctor's unavailability, LHWs book an online appointment via the app.

Essentially an online smart clinic, MySmartCareDoc addresses over 80 health issues, including lifestyle diseases, menstrual hygiene-related challenges, etc. Thus, it has been a win-win for those needing good quality healthcare, without the undertaking the burden of traveling miles to PHCs

### **PARTNER ORGANIZATION**

#### **MySmartCareDoc**

MySmartCareDoc is an independent medical humanitarian organization. It provides cost-effective healthcare access for those in India's rural areas, from the comfort of their homes.





### Overcoming domestic violence and sexual reproductive health issues through 'Vikalp Helpline'

Domestic violence includes various forms of abuse, such as physical violence, emotional abuse, sexual assault, economic exploitation, and controlling behaviors. NFHS-4 data indicates that about 29% of ever-married women aged 15-49 in India have experienced some form of spousal violence. Notably, this includes 27.3% of women in rural areas and 23.4% in urban areas. It's essential to recognize that domestic violence is often unreported due to fear, stigma, and limited awareness of legal protections.

To address this issue, Vikalp Sansthan and Ibis Reproductive Health, powered by Intelhealth, launched the Vikalp Helpline. The helpline provides counseling for domestic violence survivors, counselling to prevent child marriage, general information about sexual reproductive health including safe abortion services.

The helpline witnessed a large number of calls from domestic violence survivors. The counselors educate these survivors about their legal rights and how to register a complaint and receive counseling. The counselors also work with local women's groups to ensure that women in the villages have the ability and courage to stand up to abuse and fight for their rights.



## Vikalp Helpline



### Vikalp Helpline Project | A Glance - 2022 -23



**Teleconsultations Enabled**

**547**



**People Receiving Health Services**

**100**



**Frontline Health Workers Supported**

**3**



**Specialities Offered**

**4**



**Health Service Consultations Enabled**

**6**



**States**

**5**



**Clinical Protocols**

**8**

### PARTNER ORGANIZATIONS

#### Vikalp Sansthan

Vikalp Sansthan works towards empowering youth to end gender-based violence and discrimination by creating alternative and creative ways to voice their opinions, integrating them into the process of social development and creating a future that is just and equal for all.

#### Ibis Reproductive Health

Ibis Reproductive Health drives change through bold, rigorous research and principled partnerships that advance sexual and reproductive autonomy, choices, and health worldwide.



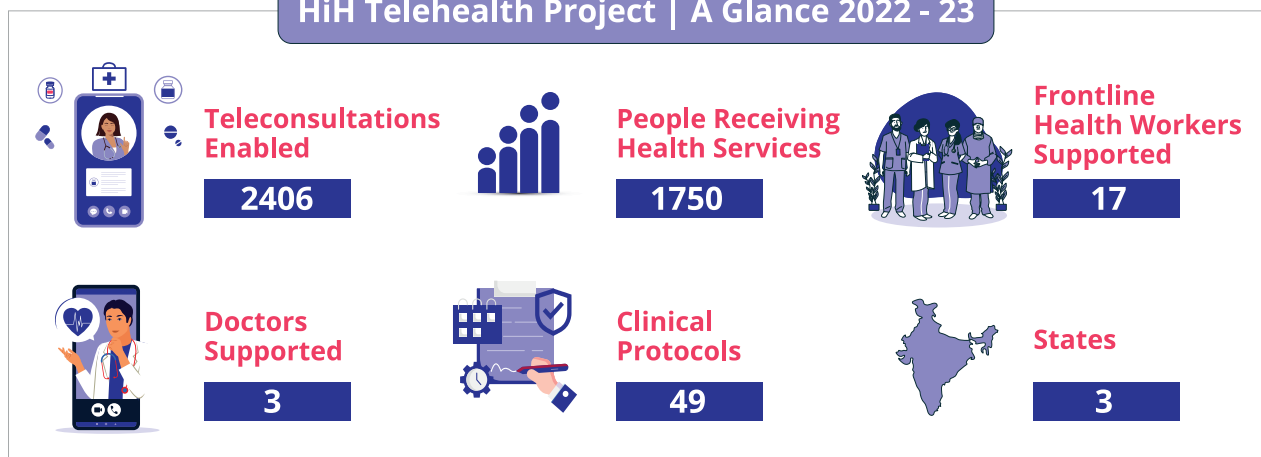
# Hand in Hand India Telehealth

## Overcoming healthcare access challenges to provide doorstep services at rural areas.

Hand in Hand India Telehealth is a telemedicine platform launched by Hand in Hand (HiH) India and Intelhealth. It is functional in rural Tamil Nadu, Bihar and Jharkhand. The population in these villages lacks access to high-quality healthcare in general and specialized care in particular. Due to the lack of proximal healthcare facilities, patients need to travel long distances to access trained practitioners, putting a significant strain on their finances. Reaching specialists is therefore even more challenging.

Hand in Hand India Telehealth addresses this health access gap in maternal and child care to provide primary health services for on-going, quality healthcare. An initiative connecting rural communities to general practitioners and specialists, it engages community mobilizers and LHWs. These resources conduct door-to-door visits and set up medical camps, assisting doctors by collecting patients' history for consultation.

### HiH Telehealth Project | A Glance 2022 - 23

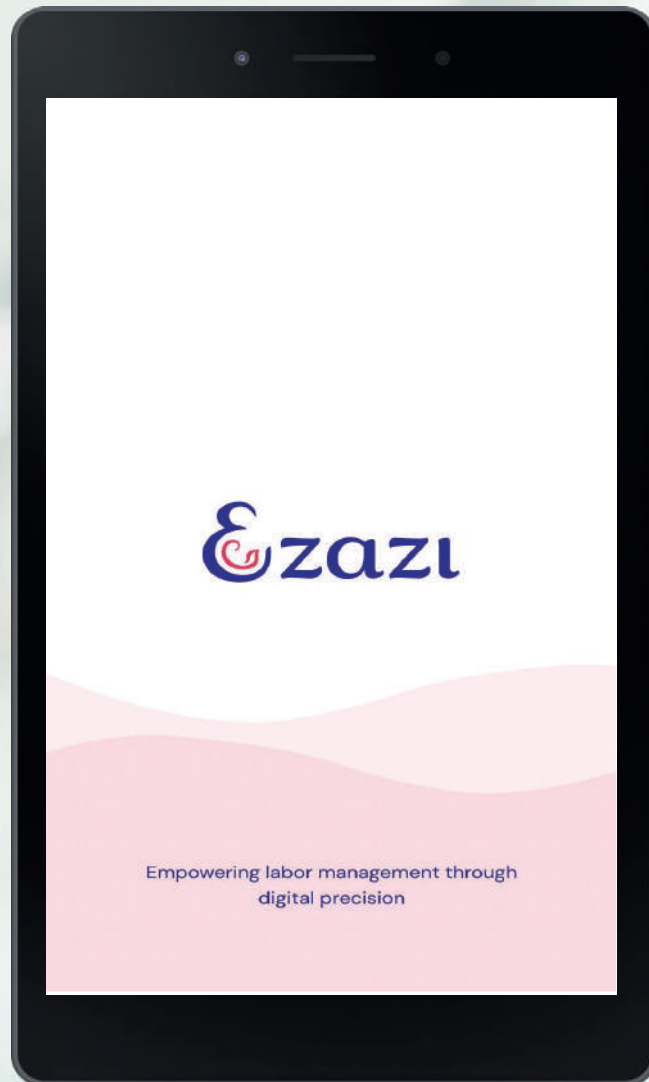


### PARTNER ORGANIZATION

#### Hand in Hand

HiH is a global network with operations in India. The organization focuses on empowering women, educating children, creating healthcare access, combating climate change and creating jobs. As an NGO, it also nurtures social entrepreneurship in India.

## Improving outcomes in 1 million births





### Improving outcomes in 1 million births – The eZazi digital labor decision support system

Labor management is complex, requiring skilled birth attendants to record periodic observations of maternal and foetal well-being, use these data to distinguish normal from abnormal progress, and predict and plan the next steps over the course of labor. Interpreting a single measurement, such as foetal heart rate, is relatively simple, but evaluating combinations of measurements, e.g., labor progression in relation to frequency and duration of contractions, is complex.

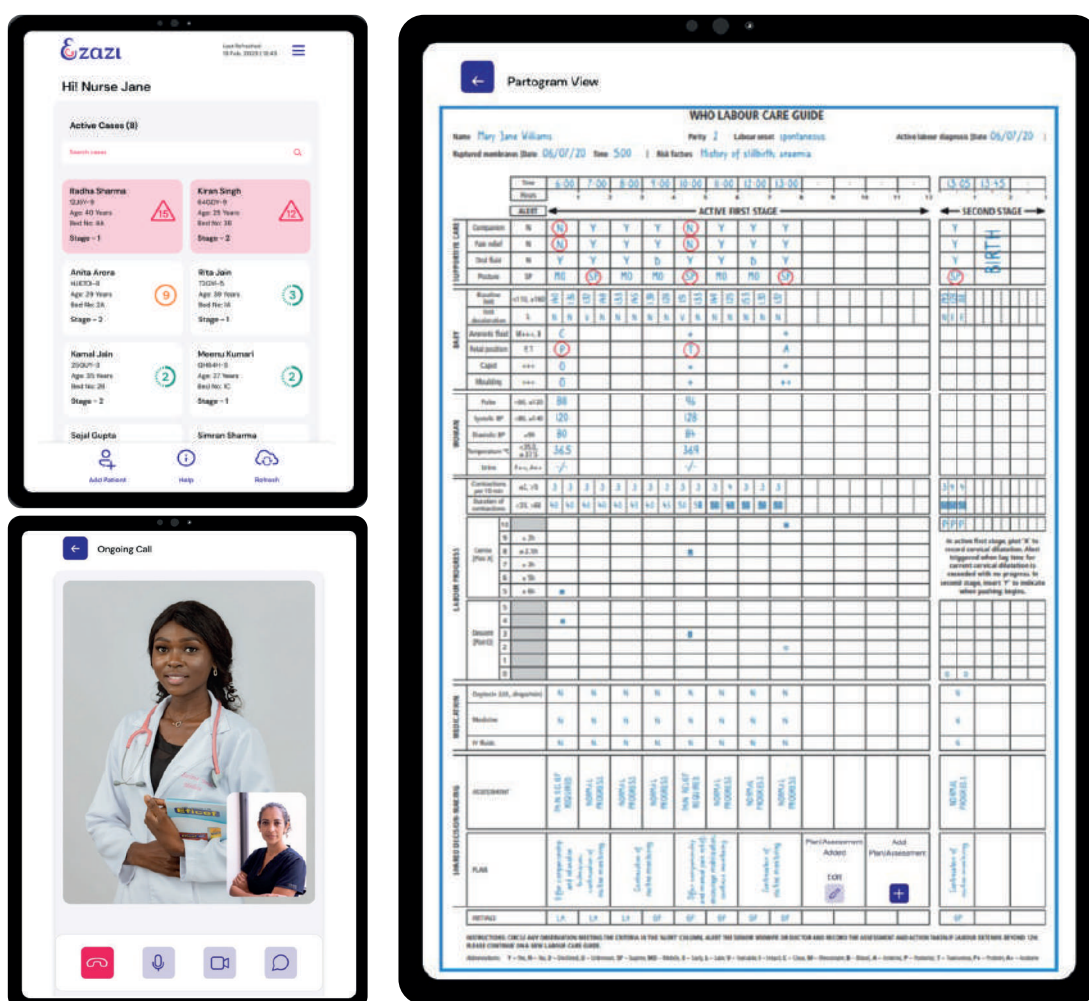
In 2018, WHO issued new guidelines for intrapartum care for positive birth outcomes and has subsequently replaced the WHO partogram with the Labor Care Guide (LCG).

#### Challenges Faced

- Maternity hospitals in LMIC continue to suffer from shortages of qualified human resources, large volumes of patients and insufficient access to senior professional support.
- Overworked or inexperienced midwives often conduct labor observations. Labor management is complex, requiring skilled birth attendants to periodically record observations of maternal and foetal well-being, use the data to distinguish normal from abnormal progress, and predict and plan the next steps during labor.
- In optimal labor management, women progressing normally are supported by ambulation, oral fluids, feeding and the presence of a companion of choice. At the same time, interventions such as artificial rupture of membranes and augmentation are restricted to those that are clinically indicated. When labor abnormalities occur, appropriate actions are taken, including augmentation, caesarean delivery and referral.

#### Solution: About the eZazi app

eZazi is a digital application for labor and delivery monitoring that incorporates WHO's new intrapartum care guidelines, and conforms to the WHO LCG guide. The aim is to enable frontline health providers to capture the vitals of pregnant women in labor and the foetus, as well as the progression of labor and provide decision-making support. The decision support tool is aimed at improving labor management, providing a better quality of care and supporting workable clinical governance systems.



## Salient features of eZazi

- The app works on a low cost tablet device
- Easy and accurate data entry with drop-down menus,
- Provides reminders when critical observations have to be made,
- LCG is auto-filled based on input by the provider
- The dashboard aids in prioritizing care for patients and highlights those needing timely observation and attention.
- If the tablet is online, an on or off-site supervisor can see exactly what the onsite provider is entering and can provide proactive advice in real-time.
- Should a referral be needed, a patient's complete records are already available at the referral site.

Stakeholders in many low and middle-income countries believe that such a decision support tool would dramatically improve labor management. It would provide better quality of care and support the desire to have workable clinical governance systems. In addition, the tool would advance the adoption of WHO's evidence-based guidelines on improving intrapartum care for better birth outcomes.







## Product Roadmap

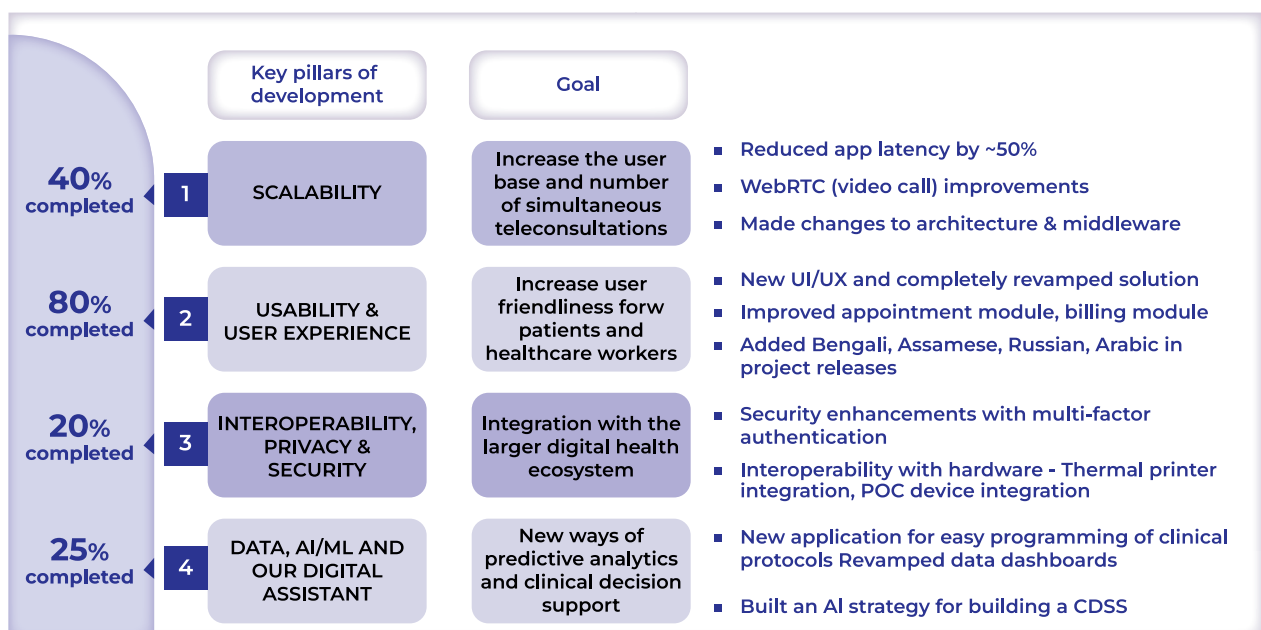


Our tech platform has been used in various projects at the scale of a few districts. As our projects scaled, we needed to be able to support state and nationwide deployments of the software.

We needed to improve the platform on core dimensions of scalability, usability and user experience, data use, clinical decision support, interoperability, privacy and security.

We identified the barriers to scale-up that needed to be addressed by making changes to our technology platform. These changes would directly result in an increase in usage and adoption – more teleconsultations, more health providers using the platform frequently and consistently, better diagnosis and clinical decision-making leading to better healthcare outcomes.

To make the major changes we needed in our product, we developed a 24-month product roadmap (see below) to implement these changes between April 2022-March 2024.





**The following key achievements during 2022-23 to delivering a robust, user-friendly, and secure telemedicine experience:**

### **Revamped User Interface (UI):**

We have revamped the UI of our telemedicine platform to deliver a delightful user experience. The updated UI empowers healthcare providers and patients with a more engaging and seamless interaction with these new features:

- aesthetically pleasing design
  - intuitive navigation
  - enhanced usability
- 

### **Responsive Design:**

We have implemented a responsive design approach that ensures our telemedicine app seamlessly adapts to various screen sizes, including mobile, tablet, and desktop devices ranging from 6 to 22 inches.

This enhancement guarantees an optimized and intuitive user interface, irrespective of the device used, providing a consistent experience for healthcare providers and patients.

---

### **Cross-Browser Compatibility:**

Recognizing the diverse browser preferences of our users, we have prioritized optimizing our telemedicine platform for popular web browsers such as Chrome, Firefox, and Safari. This ensures that healthcare providers can access our platform seamlessly across different browsers, eliminating barriers to delivering high-quality care.

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### **Upgraded to Angular 14:**

We have upgraded our codebase to Angular 14, the latest technology. This update enhances the overall performance, stability, and security of our telemedicine platform, providing an improved experience for users.

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### **Modularized Code Base:**

To enhance development efficiency and facilitate code comprehension for our developers, we have modularized our code base. This structural improvement enables faster development cycles, easier maintenance, and smoother collaboration among our development team.

### Optimized Page Loading Time:

Understanding the significance of quick and efficient page loading, especially for users on lower RAM mobile devices, we have strategically reduced page loading time. Lazy loading techniques have resulted in faster initial page load times and improved overall performance.

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### API Optimization:

We enhanced API architecture by breaking down a single API into four distinct APIs, incorporating pagination for efficient data retrieval. Additionally, we have implemented security measures using JWT tokens to ensure authorized access to APIs, augmenting the overall platform security.

---

### Improved WebRTC Integration:

WebRTC technology enables seamless video consultations on our platform. 80% reduction in call drops is an achievement made possible by significant updates to the open-source WebRTC codebase, including introducing features such as file attachment in chat, message delivery and read receipts, and core business logic improvements to enhance call stability.

---

### Integration of Livekit:

To improve video call quality, reduce call drops and introduce conference call capabilities and call recording features, we are currently working on integrating the Livekit open-source library - a renowned solution used by Gather, Spotify and others,. This will significantly reduce latency from 400-500 ms to 20-100 ms, facilitating video consultations even on unstable 2G connections.

---

### Enhanced Security Measures:

We have implemented OTP-based two-factor authentication, combining password authentication with email or SMS OTP verification. This additional security ensures confidentiality and integrity of patient data and platform access.

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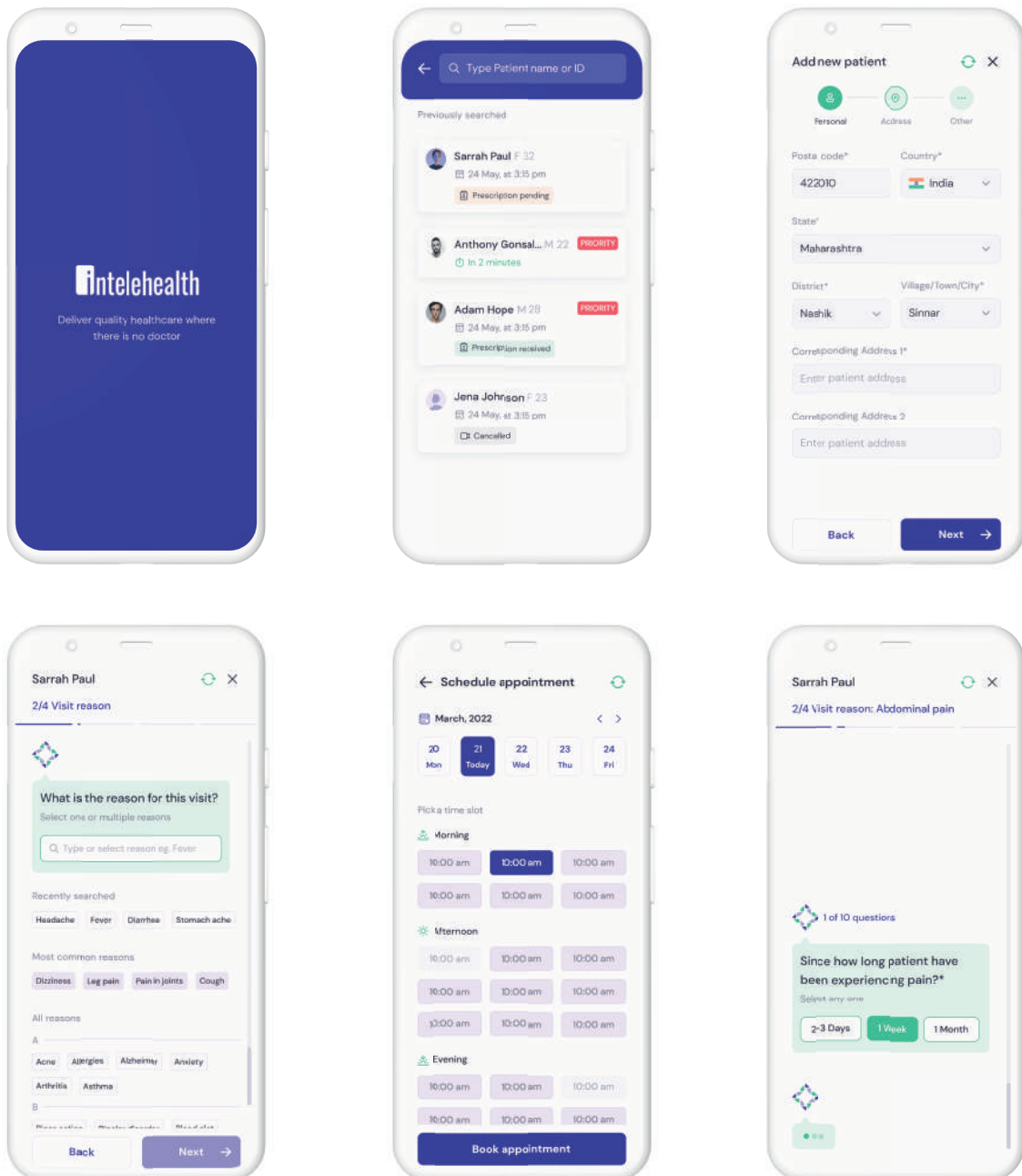
### Infrastructure Scaling:

Aiming to support 8,000 simultaneous consultations, we have increased the capacity of our AWS EC2 instance and optimized our business logic, allowing us to handle up to 4,000 concurrent calls. The ongoing implementation of Livekit integration and further infrastructure improvements will contribute to achieving this goal.



## Performance Optimization:

Through performance tuning exercises, we have significantly improved the average response time of our OpenMRS API, reducing it from 9,743 ms to 321 ms. This optimization has resulted in increased throughput, improved error rates, and a seamless experience for healthcare providers accessing patient data.



As we strive to make a lasting impact on patient outcomes, we remain committed to advancing our telemedicine platform through continuous technological enhancements.

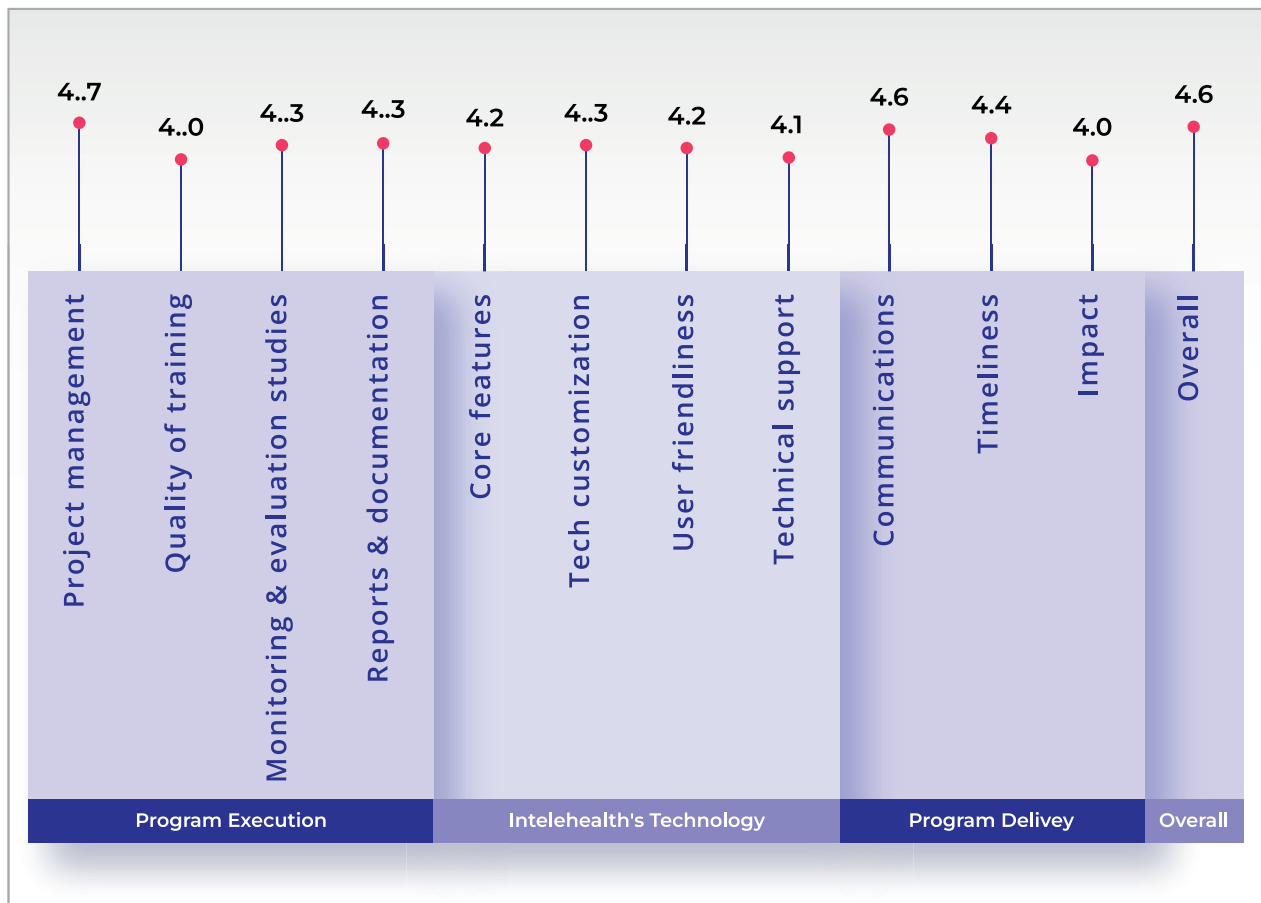
## Partner Satisfaction Survey Report





## Partner Satisfaction Survey Report

The partner satisfaction survey aimed to collect feedback from our NGO partners on their satisfaction with our project execution and implementation. It sought to gain insights into various aspects of our partnership, including communication, timeliness, deliverable quality, project management effectiveness, technology and support, and overall satisfaction. The survey aimed to identify strengths, areas for improvement, and any issues impacting partner satisfaction, ultimately enhancing collaboration and meeting partner expectations. A Google survey form was sent to 42 participants representing 18 partner organizations engaged in 12 projects. We have analyzed the survey responses received from 19 participants representing 12 partner organizations involved in 9 projects.



**Intelhealth products and services received a high likelihood of recommendation from partners, earning a rating of 9.3 out of 10.**

# Partner Satisfaction Survey Report

## Appreciation and Feedback

"The strengths of the INTELEHEALTH team is a strong commitment and passion to improve access of the most vulnerable children to the quality health services. This drives the team to provide the full support to the project beyond just outlined objectives and timeframe. The team makes sure that every partner not simply is involved into the process, but feels ownership and is a part of the team. This is a case when the project design and way of implementation is focusing on system change, but not only to implement the project and leave the field. The team is always expanding the skills and competencies of partners bringing global experience and skills and competencies of each member of the INTELEHEALTH team."

**Dr. Cholpon Imanalieva**

Telemed KG, UNICEF Krygystan

"Very dedicated and committed attitude. I am very impressed with your investment in the project. Keep this spirit."

**Dr. Majd Alghatrif**

Project Sila, Syria

"Responsible Communications and eagernesses to work together on issues"

**Dr. Rakesh Gupta**

Ekal Arogya Telemedicine, Arogya Foundation of India

"All the team members are very good at communication and response."

**Mr. Yogesh**

Vikalp Helpline, Vikalp Sansthan



## Partner Satisfaction Survey Report



### Improvement Points from Partner Survey:

A few improvement points from the partner survey outlined technological and resource related areas, for enhanced project success in the future. Partners endorsed the continuous leveraging of rapid technological advancements to fortify the health-tech connect.

A consideration to make the basic program modular for easier workflow, new additions and modifications was recommended. Emphasizing the simplicity of app design over appearance, and its easy accessibility to all users was also suggested. We noted feedback for proactive issue resolution via periodic self-checking procedures to resolve any app loading and dashboard issues. Protocol enlargement for greater effectiveness has also been noted. On completion, final bug fixing, delivery of a refined product and prompt backend support would meet our partners' end-to-end requirements.

Partners suggested that improved visibility and communication could be enhanced with a country-level presentation of results, especially in politically sensitive situations.

To address resource-related areas of improvement, team expansion to enhance project capabilities was presented as a consideration point. Telemedicine training to provide basic telemedicine information and share examples of best practices at the onset could also facilitate project flow. Finally, ensuring service availability including holidays was recommended.



## Financials



### Income & Expense

Revenue		Expense	
Philanthropic	\$1,266,257	Programs	\$473,475
Earned Revenue	\$123,836	Software Development	\$357,870
		Fundraising	\$152,047
		Management & General	\$194,876
<b>Total Income</b>	<b>\$1,390,092</b>	<b>Total Expense</b>	<b>\$1,178,268</b>
		<b>Net Surplus</b>	<b>\$211,824</b>

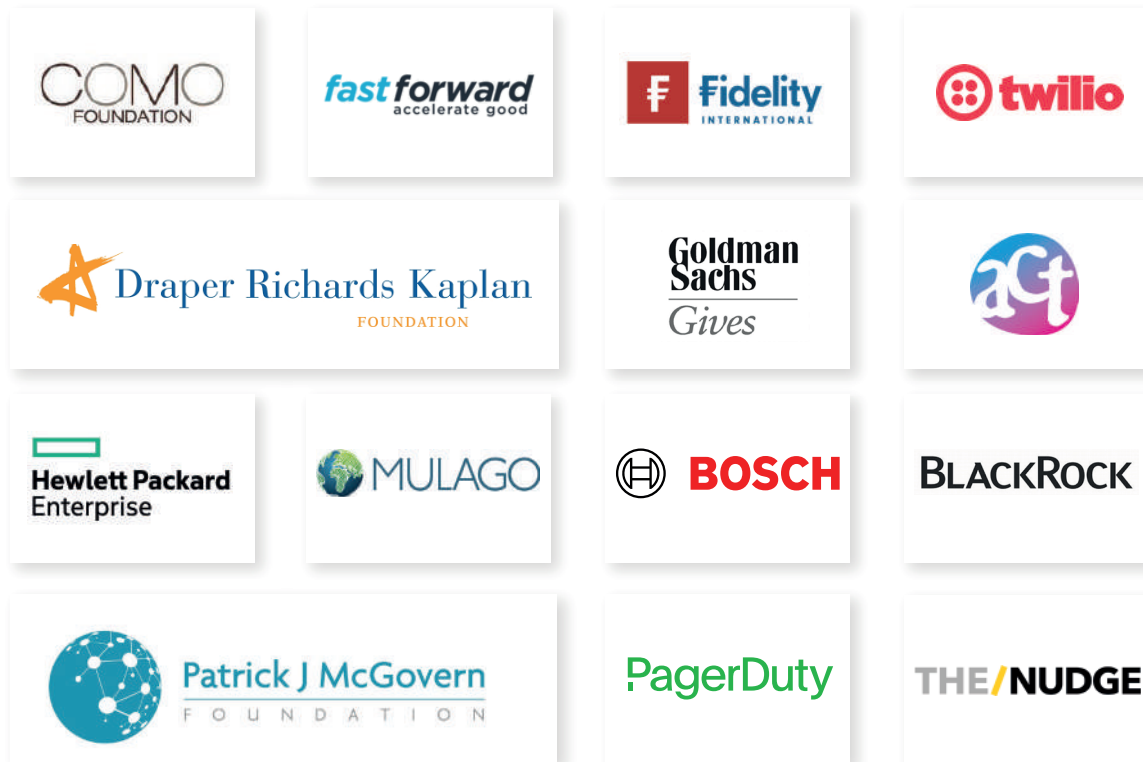
### Balance Sheet as at 31<sup>st</sup> - March, 2023

Assets		Liabilities	
Current Assets		Current Liabilities	\$94,775
Bank Accounts	\$921,487		
Cash in hand			
Accounts Receivable	\$51,051		
<b>Fixed Assets</b>	<b>\$15,379</b>	<b>Total Equities</b>	<b>\$893,142</b>
<b>Total Assets</b>	<b>\$987,917</b>	<b>Total Liabilities &amp; Equities</b>	<b>\$987,917</b>



## Our Donors & Partners

### Donors



### Partners



## Glossary

• AB-HWC	Ayushman Bharat - Health and Wellness Center
• ACT	Action Covid Taskforce
• ANM	Auxiliary Nurse Midwife
• ASHA	Accredited Social Health Activist
• AWW	Anganwadi Worker
• BBMP	Bruhat Bengaluru Mahanagara Palike
• BCC	Behaviour Change Communication
• BPM	Block Program Manager
• CBO	Community-Based Organizations
• CDAC	Centre for Development of Advanced Computing
• CHC	Community Health Center
• CHO	Community Health Officer
• COVID	Corona Virus Disease
• CSO	Civil Society Organisation
• CWD	Children with Disabilities
• DH	District Hospital
• DHS-Odisha	Directorate of Health Services – Odisha
• DM	Diabetes Mellitus
• DPM	District Program Manager
• FLW	Frontline Health Workers
• GOI	Government of India
• HBNC	Home Based Newborn Care
• HFWD	Health & Family Welfare Department
• HT	Hypertension
• HW	Health Worker
• HW2D	Health Worker to Doctor
• HWC	Health and Wellness Center
• IEC	Information Education and Communication
• IH	Intelehealth
• INR	Indian National Rupee
• LMIC	Low Middle Income Countries
• MBBS	Bachelor of Medicine Bachelor of Surgery
• MAS	Mahila Arogya Samithi
• MIS	Monitoring and Information System
• MNCH	Maternal, Neonatal and Child Health
• MO	Medical Officer
• MOiC	Medical Officer in Charge
• MTP	Medical Termination of Pregnancy



## Glossary

• NCD	Non-Communicable Disease
• NHM	National Health Mission
• OBC	Other Backward Class
• OPD	Outpatient Department
• PEU	Perceived Ease of Use
• PHC	Primary Health Center
• PIP	Project Implementation Plan
• PPP	Public Private Partnership
• PU	Perceived Usefulness
• SBCC	Social and Behavior Change
• SC	Sub-Center
• SC	Scheduled Caste
• SHG	Self-Help Groups
• SOP	Standard Operating Protocol
• SRMNCAH	Sexual, Reproductive, Maternal, Newborn, Child & Adolescent Health
• SRH	Sexual Reproductive Health
• ST	Scheduled Tribe
• TRIF	Transforming Rural India Foundation
• UHC	Universal Health Coverage
• UPHCs	Urban Primary Health Centres
• UNICEF	United Nations Children's Fund
• VHSND	Village Health Sanitation and Nutrition Day
• WASH	Water, Sanitation and Hygiene
• WHO	World Health Organization



Together we can make  
**QUALITY HEALTHCARE**  
reach the last mile

## GET IN TOUCH WITH US



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**India (Telehealth Innovations Foundation) :**

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Maharashtra - 400602



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