

[CASE STUDY]

## Building A Scalable Telemedicine Helpline Service For Pandemic Relief With Project StepOne



Vertical  
**Healthcare**



Location  
**India**



Client for  
**8 months**



Product  
**Voice | SMS**

The Indian healthcare industry is growing annually at 16.5% and is poised to touch \$280 billion in 2021. Despite its huge valuation, many healthcare organizations still use conventional phone systems as their primary means to communicate with stakeholders. Given the current scenario, where the world is fighting COVID-19, hospitals need to manage emergency calls efficiently without missing any urgent queries.

Cloud-based communication solutions can enable healthcare organizations to streamline their communication process and help health experts easily connect with their patients at all hours of the day.

This case study showcases how Project StepOne, an India-based non-profit healthcare organization, uses Kaleyra's cloud communication services to help the Government of India manage the COVID-19 crisis within the sub-continent.



Healthcare is one of the fastest-growing industries in the world. The global healthcare market reached a value of \$8,452 billion in 2018 and is expected to grow to \$11,908 billion by 2022. The expansion of the industry is owed to technological advancements and increasing consumer demand.

However, with the unforeseen spread of the COVID-19, state-owned healthcare helplines were ill-prepared for the pandemic and did not have the physical infrastructure to handle high-volumes of incoming calls.

Healthcare is one of those sectors where streamlined communication is not just an add-on but a requisite. Be it communication within the organization or with patients; it has to be efficient and smooth. Cloud-based communication solutions are ideal for healthcare organizations as it offers a scalable and flexible platform to meet patient care management's specific communication requirements.

## About Project StepOne



Project StepOne is a voluntary, non-profit organization in India, consisting of technologists, doctors, and creative problem solvers. It was formed to help the government manage the COVID-19 crisis within the sub-continent through best-in-class technology, people & processes.

Project StepOne was the first COVID-19 combat project to get a grant from the ACT (Action COVID-19 Team) Fund, set up by various venture capital firms and entrepreneurs to support initiatives fighting against Coronavirus.



# Project StepOne's Goal

Project StepOne wanted to launch a National COVID-19 Telemedicine Helpline and offer Indian citizens 24x7 access to healthcare experts, where citizens could connect with doctors from home without even having an internet connection or a smartphone.

With the spread of the coronavirus pandemic, state-owned emergency helpline numbers across India were flooded with almost **30,000 calls/day**, which led to a frequent breakdown of the helpline system. As the helpline numbers became overwhelmed, the average wait time increased. Many callers gave up before they could speak with the expert team of healthcare professionals. The government and healthcare providers were failing to facilitate pre-hospital triage to get the patient to the right care setting at the right time.

With limited bandwidth, testing kits, health workers, and other resources, there was an urgent need to triage COVID-19 cases, assess risk, and connect patients who needed immediate medical attention to doctors.

*With the launch of the National COVID-19 Telemedicine Helpline, Project StepOne aimed to reach every nook and corner of the country and extend its support to everyone in need.*

## Kaleyra's Solutions

Kaleyra's Cloud platform met the requirements of Project StepOne perfectly. Cloud telephony offers a more robust, user-friendly platform that does not require physical space like conventional PBX systems. Kaleyra offered three solutions - **Inbound IVR, Outbound calling, and SMS** - to ensure Project StepOne did not miss calls from citizens and also increased operational efficiency.



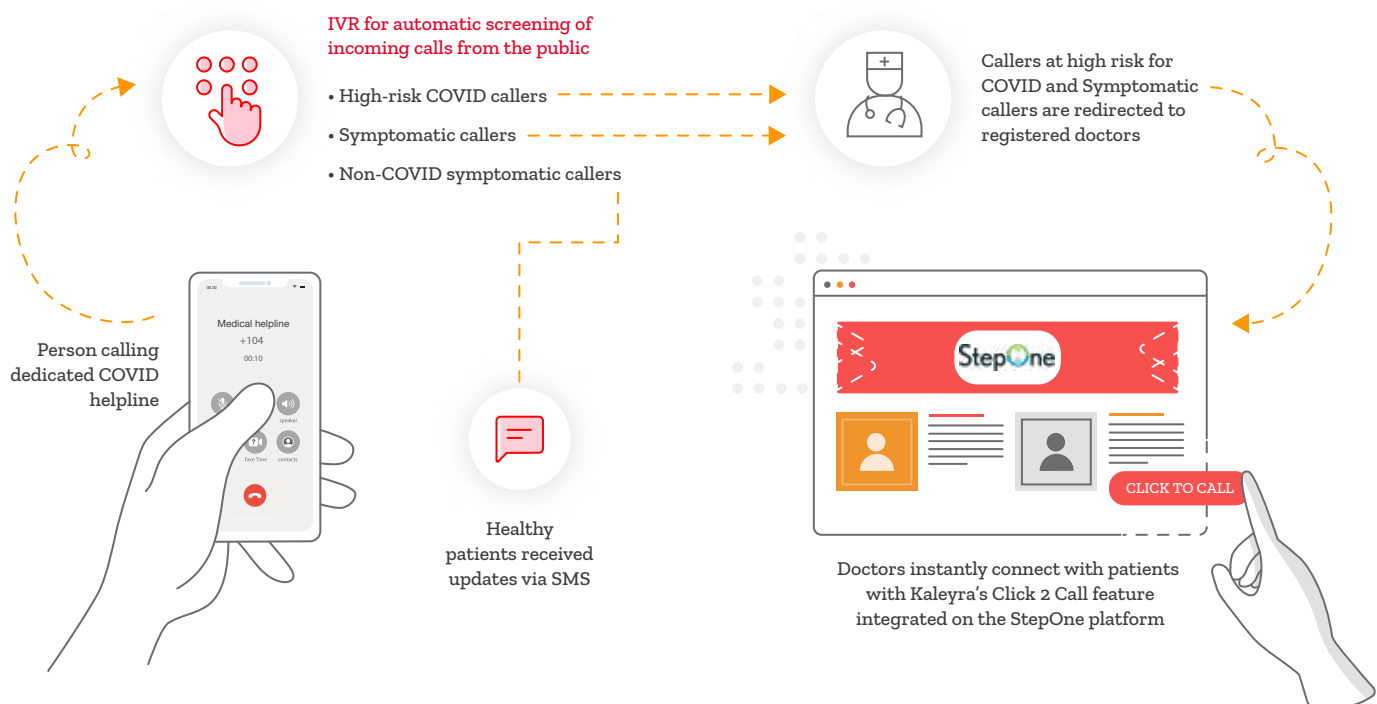
Kaleyra helped Project StepOne put together an effective system to prevent the overburdening of healthcare infrastructure by providing concerned citizens an easy-to-use recourse for finding out if they have COVID-19 or not.

Concerned citizens could call a dedicated helpline number and answer simple questions to determine if they had COVID-19. An automated IVR call flow helped citizens to verify if they had all symptoms necessary for their illness to qualify as COVID-19.

Citizens who had all symptoms of COVID-19 received a call back for assessment from health experts advising them on the future course of action.

## Enhancing the capabilities of Telemedicine Helpline Numbers with CPaaS

Kaleyra's CPaaS technology enhanced the capabilities of state-owned helpline numbers with features such as **Inbound IVR** for automatic screening of incoming calls from the public, queuing system for creating tickets, and the **Click-to-Call** function to support doctors who were handling the calls.



Kaleyra's **multilingual inbound IVR system** used questions based on a standardized screening protocol to identify high-risk COVID-symptomatic callers and Non-COVID-symptomatic callers. The system directed Non-COVID-symptomatic callers to listed government-approved call centers. High-risk COVID-symptomatic callers were redirected to registered volunteer doctors for further screening, counseling and sent to appropriate testing facilities.

Kaleyra's integration with the StepOne platform helped in generating tickets for each COVID symptomatic caller, allowing doctors to view and manage these live tickets or patient cases online. Kaleyra's **Click-to-Call** feature integrated with the helpline system enabled doctors to securely and instantly connect with patients at the touch of a button on the StepOne platform.

## Making emergency services accessible to critical patients with Kaleyra's IVR

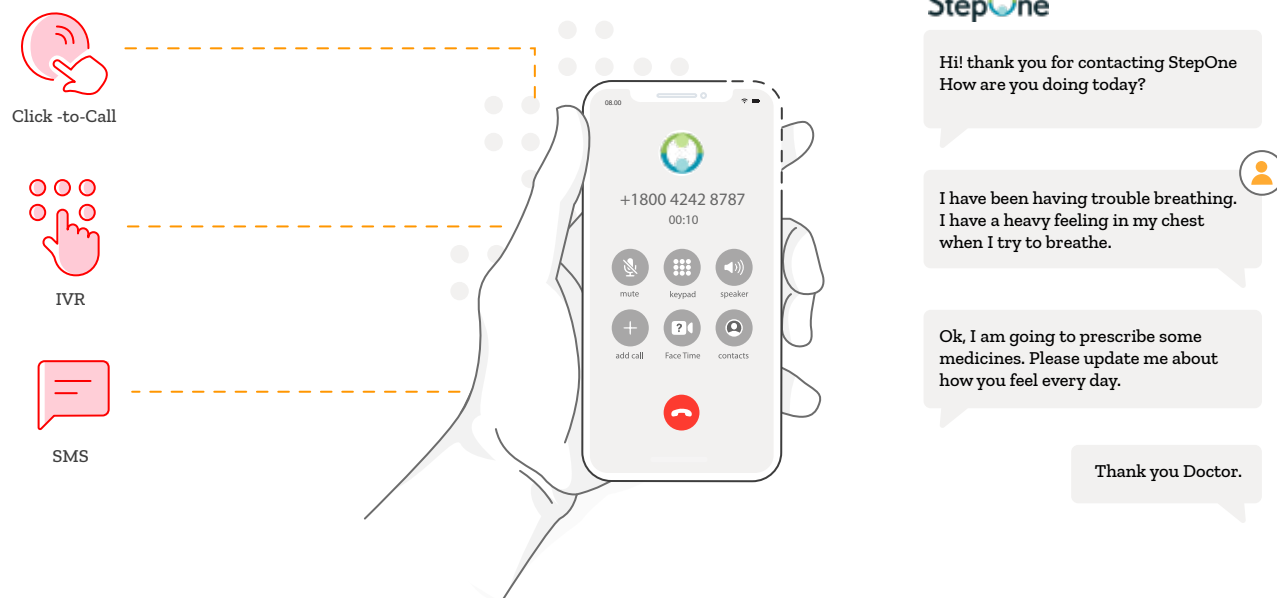
When citizens called the state telemedicine helpline number, they were greeted and screened automatically by Kaleyra's IVR. Based on their response to the screening questions, the system grouped them either as a high-risk COVID-symptomatic caller or a Non-COVID-symptomatic caller.

*Telescreening is the fastest and physically the most distanced way to identify suspects and guide them to self-isolate, so they don't infect more citizens or the healthcare workers.*

When a high-risk COVID-symptomatic caller ended a call, the system instantly created a ticket on the Freshdesk platform for the attending doctors to view and handle the case. The patient then received a call directly from the doctor handling their IVR ticket or query.



# Following up with patients through SMS services and Outbound Calling

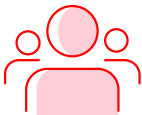


For volunteer doctors who devoted their time to handle the COVID-19 calls, the telemedicine helpline system provided an easy-to-use platform to view emergency cases and connect with patients for further diagnosis.

Kaleyra also enabled **outbound calling** and **SMS services** to help healthcare experts follow-up with their patients and monitor their progress. Project StepOne directed state helpline numbers through a scalable network of existing cloud telephony, queuing systems, and a network of doctors on call. Data generated from the IVR also provided valuable input to state administration on how and where to mobilize healthcare resources.

## Results of the Collaboration

### Impact to Date



Citizens touched  
**4 Million**



Teleconsultations  
**300K**



Contacts prevented  
**300K**



Using Kaleyra's cloud communication services, Project StepOne improved the response rate and provided quicker resolutions to patients. The inbound IVR solution helped Project StepOne assist patients during emergencies and made it easy for the government and healthcare professionals to efficiently handle the situation. Kaleyra's outbound calling and SMS services helped the healthcare experts follow up with their patients and monitor their progress.

*Project StepOne operates in seven states, including Karnataka, Punjab, Maharashtra, Odisha, Chhattisgarh, Madhya Pradesh, and Nagaland. The IVR has been localized for every state and is currently live in English, Hindi, Kannada, Marathi, Odia, Punjabi, and Nagamese.*

## Some achievements since Project StepOne opted for Kaleyra's cloud-based communication services:

### 1) Helped healthcare professionals tackle the crisis

Over **7000**, voluntary doctors could easily use the platform to connect safely and securely with critical patients using the Click-to-Call feature on FreshDesk. So far, they have handled **5 million** calls, provided over **400,000** teleconsultations, conducted over **25,000** mental health counseling sessions.

### 2) Helped the government to take action

Doctors were able to identify over **40,000** high-risk COVID-19 suspects, upon whom the respective state governments have taken appropriate action.

### 3) Managed high call traffic

Over **610,000** calls a day were processed through Kaleyra's Automatic Telescreening Service in the first week of its launch. Over **60,000** COVID-19 related queries/day were redirected to doctors.



#### 4) Provided actionable insights

Data generated from the IVR provided actionable insights to the state administration to effectively manage healthcare resources.

#### 5) Controlled the Covid-19 spread

With a robust screening system in place, the volunteer doctors managed to prevent about **320,000** people from getting infected.

*Reach out to Kaleyra to know how our Cloud-based communication platform can customize solutions to address your problems and improve your business communication. To know more about our products and services, contact us at [sales@kaleyra.com](mailto:sales@kaleyra.com). Our team will be glad to assist you.*

