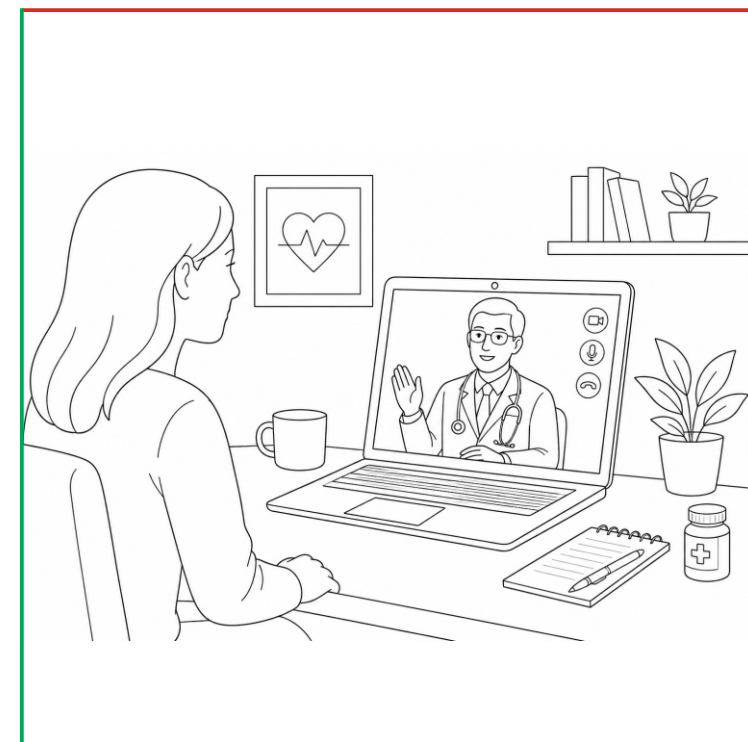


e - Sanjeevani



National Health Mission
Government of Kerala

June 2026

Health and Family Welfare Department
Government of Kerala

KERALA.HEALTH



COMPREHENSIVE DOCUMENT

STATE TELEMEDICINE PROGRAMME - KERALA



**GOVERNMENT OF KERALA
HEALTH & FAMILY WELFARE DEPARTMENT**

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Foreword

Digital health platforms are essential for improving access, efficiency, and resilience of health systems. This document has been developed to comprehensively inform eSanjeevani's institutional framework, governance mechanisms, technology architecture, service delivery processes, and performance outcomes in Kerala.

The document highlights eSanjeevani's system-level contributions, particularly during the COVID-19 pandemic, when it supported large-scale teleconsultations, continuity of care, and integration with surveillance and referral systems. By capturing workflows, utilisation analytics, and operational experiences, the document strengthens institutional memory and standardisation. Dr Rathan Kelkar SMD NHM has supervised online system by working out the teams, time structuring, consultancy mechanism not only for covid but also for other chronic diseases. We interacted with the GoI nodal team to facilitate Kerala specific requirements and they readily supported the requests. The Apex Cancer centres also provided services online. It is noteworthy that despite fuelling pandemic, the system did not get overwhelmed but systematically worked on many initiatives to provide care and support to people. Subsequently, Shri Jeevan Babu, Dr Vinay and Shri Rahul continued their efforts in strengthening the platform.

Dr Amba i/c officer of eSanjeevani has taken good efforts to operationalize all the policy decisions. I appreciate her's and all the doctors' commitment to provide care and support to the needy patients through eSanjeevani platform. It is noted that Dr Kiran and his team dealing with mental health has leveraged the platform very effectively. It is such commitment of the officers, counsellors and field functionaries is building the Kerala Health System.

I am confident that this document will serve as an important reference for planners, administrators, and health professionals. It will support evidence-based decision-making, guide future digital health investments, and contribute to the sustained integration of telemedicine within Kerala's public health system.

Dr Rajan Khobaragade IAS
Additional Chief Secretary (Health & Family Welfare),
Government of Kerala



RAHUL KRISHNA SHARMA IAS
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MESSAGE FROM THE STATE MISSION DIRECTOR

Kerala has always been at the forefront of leveraging technology to strengthen public healthcare and improve access to quality medical services. The implementation of **eSanjeevani – the National Telemedicine Service** represents a significant milestone in this journey, enabling healthcare delivery beyond the boundaries of physical facilities and bringing expert medical care closer to every citizen.

Since its launch in Kerala in June 2020, eSanjeevani has evolved into a vital component of the State's healthcare ecosystem. Through its robust hub-and-spoke model and 24x7 tele consultation services, the platform has ensured uninterrupted access to healthcare for people residing in remote, rural, tribal, and underserved areas. It has also reduced travel time, out-of-pocket expenditure, and waiting periods for patients while strengthening referral linkages across different levels of care.

The remarkable achievement of nearly **30 lakh tele consultations** reflects not only the scale of the programme but also the confidence reposed by citizens and healthcare providers in digital health solutions. The successful integration of eSanjeevani with Health and Wellness Centres, Family Health Centres, district hospitals, medical colleges, and other healthcare institutions has strengthened Comprehensive Primary Health Care and advanced the vision of equitable healthcare for all.

This document presents the evolution, governance framework, operational mechanisms, service analytics, achievements, challenges, and future roadmap of eSanjeevani in Kerala. It is a testament to the collective efforts of the Health & Family Welfare Department, National Health Mission, healthcare professionals, district administrations, technical partners, and frontline health workers whose dedication has contributed to the programme's success.

As we move forward, NHM Kerala remains committed to further strengthening telemedicine services, expanding specialist consultations, enhancing digital health integration, and ensuring that quality healthcare reaches every citizen, irrespective of geography.

I congratulate all stakeholders who have contributed to this transformative initiative and look forward to continued collaboration in building a more accessible, efficient, and patient-centred healthcare system for Kerala.


Rahul Krishna-sharma IAS
State Mission Director
National Health Mission, Kerala

Chapter 1:

Background and Policy Alignment

Chapter 1: Background and Policy Alignment

Kerala's demographic profile is frequently cited as a global anomaly, where social development indicators such as literacy, life expectancy, and population stability align more closely with developed Western nations than with the rest of the Indian subcontinent. The state has reached a stage of "demographic maturity," characterized by low birth rates and a rapidly aging population. As of the 2025–2026 period, Kerala's population is estimated at approximately 36.11 million. While the population continues to grow, the decadal growth rate has plummeted to roughly 4.9%, the lowest in the country. A defining feature of the state is its population density of 890 persons per square kilometre, which is nearly double the national average.

Unlike other Indian states with distinct mega-cities, Kerala exhibits a unique "Rural-Urban Continuum." The state lacks a single dominant metropolis; instead, it consists of a series of interconnected medium-sized towns and high-density villages. This has led to an "urbanized" lifestyle across nearly 80% of the state, with projections suggesting that the rural-urban divide will effectively disappear by 2036.

The most significant shift in Kerala's current demographic is the "Silvering" of its population. Due to decades of successful health interventions and high life expectancy (currently averaging 75.1 years), the elderly population (60+) now accounts for nearly 19% of the total residents. This transition is further accelerated by a Total Fertility Rate (TFR) of 1.7, which is well below the replacement level of 2.1.

This age structure presents a "demographic dividend" that is rapidly closing, shifting the state's focus from paediatric and maternal care toward geriatric support and chronic disease management. Kerala maintains the highest literacy rate in India at 96.2%, with near-total parity between genders. This educational foundation has directly influenced the state's Sex Ratio, which stands at 1,084 females per 1,000 males. This is the only state in India where females significantly outnumber males, a testament to high female survival rates and social status.

While Kerala is historically known for its diaspora in the Gulf countries, the current decade is defined by Internal Migration. To fill the labour gap created by a highly educated local workforce and an aging population, Kerala has become a primary destination for Interstate Migrants. Approximately 3 million workers from states like West Bengal, Bihar, and Assam are now integral to the state's economy, particularly in the construction and service sectors.

In summary, Kerala in 2026 represents a society that has traded rapid numerical growth for high-

quality social indicators. The challenges of the next decade will not be about managing "too many people," but rather about managing a shrinking workforce and providing for an increasingly elderly population within a highly urbanized environment. These facts pave light to importance of health at finger tips concept- The Telemedicine in Kerala model.

1.1 Origin and Evolution

eSanjeevani, the NATIONAL TELEMEDICINE SERVICE was launched by the Ministry of Health and Family Welfare (MoHFW), Government of India¹.

This transformative platform aims to tackle shortage of doctors, especially specialists, in overburdened district and tertiary hospitals, absence of proper health record creation at primary and secondary levels and to ensure continuum of care. It was developed by CDAC, Mohali Punjab as a flagship initiative under the Ayushman Bharat Digital Mission to bridge geographical barriers and enhance healthcare access. The initial version V1 of e-Sanjeevani was launched in November 2019 as a doctor-to-doctor (e-Sanjeevani HWC) telemedicine system, aligned with the Ayushman Bharat – Health and Wellness Centre (AB-HWC) programme. Its objective was to enable specialist consultations from secondary and tertiary care institutions to HWCs and peripheral health facilities through a Hub-and-Spoke model, thereby strengthening CPHC services. In response to the COVID-19 pandemic and the need to ensure continuity of outpatient care while minimising physical hospital visits, MoHFW launched e-Sanjeevani OPD (patient-to-doctor model) on 13 April 2020. This marked a significant expansion of the platform, enabling citizens to directly access medical consultations from their homes using web and mobile-based interfaces. Platform was integrated with the National Digital Health Mission (NDHM) and later the Ayushman Bharat Digital Mission (ABDM), with emphasis on interoperability, digital health records, and secure data exchange.

Government of India has augmented eSanjeevani further to add the logical next dimension of telediagnosis in eSanjeevani 2.0 that was rolled out in March 2023. This entails seamless integration of a vast spectrum Point of Care Diagnostic devices (PoCDs). PoCDs provide results of various clinical tests including physiological parameters within minutes thus facilitating rapid diagnosis and quick decision making. Nationally, it has evolved into the world's largest government-owned telemedicine platform, serving 441,037,554 patients till date through patient-to-doctor OPD and hub-and-spoke AB-HWC models.

¹ (<https://esanjeevani.mohfw.gov.in>).

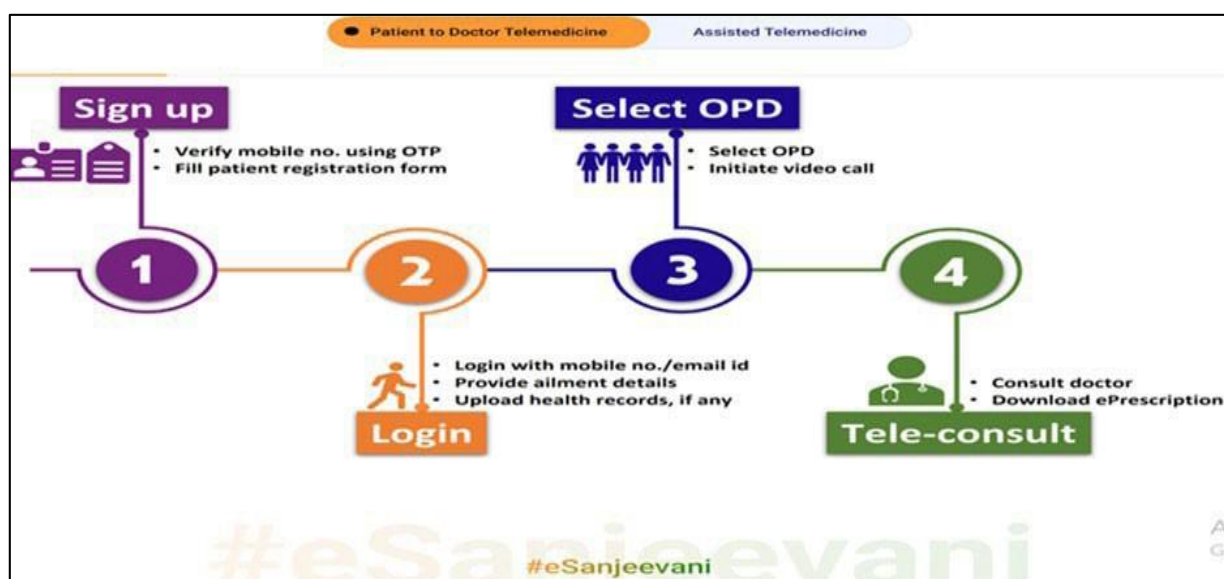


Fig 1.1: Pictorial representation of Consultation Process

In Kerala, telemedicine services commenced on June 10, 2020, with a strong focus on integration into the state's robust Kerala health system. State operates a 24x7 State Project Management Support Unit (SPMSU) Hub for uninterrupted services in OPD. The program aligns with national telemedicine guidelines (2020) and state digital health strategies, emphasizing equitable access, NCD management, and CPHC strengthening.

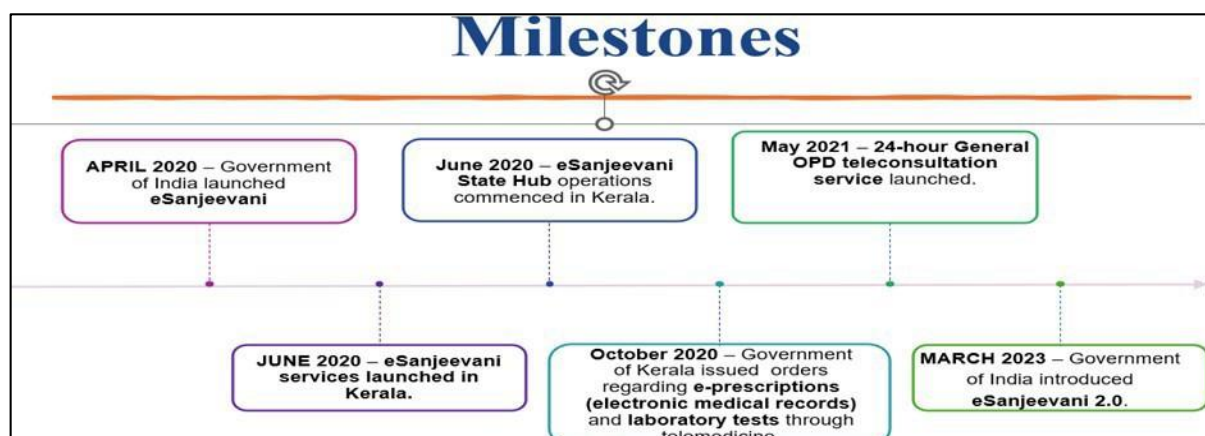


Fig 1.2: Key Milestones in the implementation and expansion of eSanjeevani Telemedicine Services

1.2 Policy Alignment

The policy rationale for strengthening Kerala Health capabilities by:

- Improving access to specialist and super-specialist care: Ensuring that patients can access higher levels of medical expertise and treatment, when necessary, from their comfort zone.
- Reducing out-of-pocket expenditure and travel burden: Alleviating the financial strain and logistical challenges for individuals seeking medical attention.
- Strengthening primary healthcare through technology-enabled referrals: Utilizing digital tools, a service provider assistance and structured referral systems to enhance the quality and coordination of health care.
- Building a flexible and robust health system that can proactively respond to emerging challenges, strengthen pandemic preparedness, and ensure seamless access to essential health services at the click of a button.

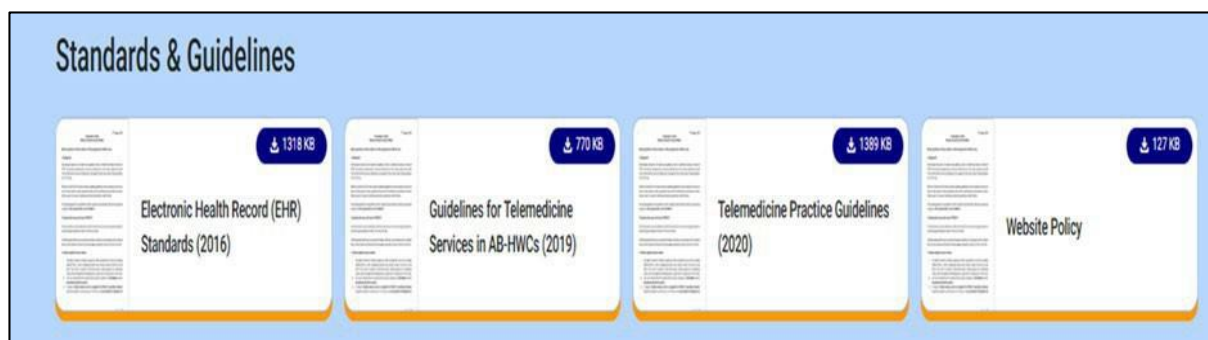


Fig 1.3: Standard Guidelines for Telemedicine services

PILLARS THAT SUPPORT eSanjeevani

❖ **National Telemedicine Practice Guidelines (2020)²**

❖ **ELECTRONIC HEALTH RECORDS³**

❖ **Ayushman Bharat – Health and Wellness Centre (AB-HWC) Telemedicine Practice Guidelines⁴**

❖ **WEBSITE POLICY⁵**

² https://esanjeevani.mohfw.gov.in/assets/guidelines/Guidelines_for_Telemedicine_Services.pdf

³ https://esanjeevani.mohfw.gov.in/assets/guidelines/ehr_guidlines.pdf

⁴ https://esanjeevani.mohfw.gov.in/assets/guidelines/Telemedicine_Practice_Guidelines.pdf

⁵ <https://esanjeevani.mohfw.gov.in/document/privacy-policy.html>



Fig 1.4: Key features and Operational scales of the eSanjeevani Telemedicine platform

❖ **Assisted Telemedicine**

Community Health Officers/ Mid-Level service providers at Ayushman Bharat Health & Wellness Centres (spokes) in rural areas across the country facilitate assisted consultations with doctors and specialists in hubs.

❖ **ABDM Compliant**

eSanjeevani allows users to create their Ayushman Bharat Health Account (ABHA) and use it to link and manage their existing health records.

❖ **SNOMED CT Compliant**

eSanjeevani complies with Systematized Nomenclature of Medicine - Clinical Terms - a global standard to promote semantic interoperability (certain content exchange and vocabulary).

In March 2020, Government of India released the 'Telemedicine Practice Guidelines' which have been incorporated as Appendix 5 of the Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulation, 2002. The implementation of e-Sanjeevani in Kerala is strategically aligned with the National Telemedicine Practice Guidelines (2020) and the Ayushman Bharat – Health and Wellness Centre (AB-HWC) framework to ensure standardized, accessible Comprehensive Primary Health Care.

Furthermore, it is integrated with the Ayushman Bharat Digital Mission (ABDM) and the Kerala

State Digital Health Vision, harmonizing with local eHealth initiatives to create a seamless, technology-driven healthcare ecosystem across the state. Regulatory Government orders GOs are issued by Health and family welfare department, Government of Kerala and State mission director NHM Kerala timely as required.

1.3 Physical Infrastructure (Hardware) and Operational Presence

The physical infrastructure of eSanjeevani in Kerala comprises hardware deployed across the three-tier Hub-and-Spoke model to enable reliable audio-video teleconsultations, vital sign monitoring, and telediagnosis.

Key Hardware Components:

At Spokes (FHCs, PHCs, Urban HWCs, AAMs, and district jails):

Desktop/laptop computers or tablets, HD webcams, headphones with microphones, high-speed internet connectivity and basic diagnostic Point of care tools such as digital blood pressure monitors, glucometers, pulse oximeters, weighing scales, and hemoglobinometers.

At Hubs (Medical Colleges, State Hub / 24×7 SPMSU in Thiruvananthapuram, District/General/Taluk Hospitals): Dedicated telemedicine consultation rooms equipped with high-end computers, large monitors, professional-grade webcams, noise-cancelling microphones/headsets, stable high-bandwidth internet, and software interfaces for managing multiple consultations, digital documentation, and e-prescription generation.

The hardware setup supports seamless real-time audio-video interaction between spokes and hubs. At spokes, frontline workers use the equipment to register patients, capture vitals, and assist during consultations. The State Hub in Thiruvananthapuram operates round-the-clock with robust server-side and endpoint hardware for uninterrupted OPD services.

At the Patient End (Direct Access):

Patients primarily use their personal smartphones, laptops, tablets, or desktop computers with a stable internet connection (minimum recommended 1–2 Mbps for smooth video). No special government-provided hardware is required for most users; patients simply access the service through the official website or mobile interface after registration.

Chapter 2:

Governance, Technology

Architecture, and System Integration

Chapter 2: Governance, Technology Architecture, and System Integration

2.1 Governance and Institutional Arrangements

The implementation and oversight of e-Sanjeevani telemedicine services in Kerala is guided by a structured, multi-tier governance framework, ensuring policy alignment, operational efficiency, and accountability across the health system.

At the STATE level, governance is provided through the **State Committee on e-Sanjeevani Telemedicine Services**, constituted under the Health & Family Welfare Department, Government of Kerala. The Committee is responsible for policy direction, inter-departmental coordination, and periodic review of programme performance.[G.O.(Rt)No.899/2022/H&FWD dated 23/04/2022]

A. State Committee and District Committees are constituted for proper coordination and regular monitoring.

1. State Committee

- a. Principal Secretary, Health & Family Welfare Department(Chairperson)
- b. State Mission Director, National Health Mission, Kerala(Convenor)
- c. Director, Health Services
- d. Director, Medical Education
- e. Additional Director, Health Services (Administration and Training)
- f. Special officer, DME
- g. State Nodal Officer, Training & Telemedicine, NHM (supported by technical team)
- h. Consultant, Health & Wellness Centre NHM
- i. Nodal Officer, DME
- j. DPM, NHM Thiruvananthapuram

- k. Domain Expert, eHealth (supported by eHealth team)
- l. DISHA Floor manager, NHM (supported by the team)

Functions of State Committee

The state committee shall convene in every financial quarter and shall Coordinate and monitor the district-level activities. One meeting shall be towards the end of the financial year before submitting the Consolidated district proposal for approval. The state committee shall review the district wise activities and Monitor the service delivery through the eSanjeevani OPD and Doctor to doctor teleconsultation platform ,Handle the official grievances in relation to the telemedicine duty ,Assignment and glitches in service delivery, Identify the specialist doctors from service who are not assigned to any, Institution after completion of their PG course and doctors who are requested leave / duty exemption on virtue of any clinical condition for teleconsultation services. The state committee shall advice regarding the activities from a futuristic perspective.

Operational coordination and day-to-day programme management are undertaken by technical team under the leadership of the State Nodal Officer (Training & Telemedicine), NHM, supported by domain experts and technical teams from CDAC and eHealth Kerala. This arrangement ensures effective implementation, monitoring, training, and technical support in the programme.

2. District Committee

- a. District collector - Chairman of the district committee
- b. District Medical Officer – Convenor of the district committee
- c. Principal of the Medical College
- d. District Program Manager
- e. AARDRAM Nodal Officer
- f. District Nodal officer Telemedicine
- g. Telemedicine nodal officer from medical college.

Functions of District Committee

The District Committee shall convene every month and shall assess the district-level telemedicine activities, Gap analysis of procurement, HR and prioritizing after identifying the

service delivery gaps. Give necessary instructions to the officials in the hub and spokes and OPD platform for implementing the telemedicine service delivery, Ensure judicious use of resources in the state hub, district hub and spokes in district. The district committee shall prepare and submit the yearly district proposal for expansion of service delivery through PIP and other grants/Funds. Addressing the grievances and complaints regarding service delivery. The district committee shall report to the state committee.

State pool of doctors include state hub MBBS General medical officers on contractual human resource pool from NHM and private empanelled specialists on honorarium per teleconsultation call. The fixed pool of doctors [MBBS General medical officers] takes three shift duties on rotation roster on the eSanjeevani OPD/HWC platform at State Hub teleconsultation centre physically. SPMSU and DPMSU have private empanelled specialists on honorarium per teleconsultation calls.

2.2 Technology Architecture

The e-Sanjeevani platform is built on a robust, scalable, and secure digital architecture designed by CDAC Mohali to support high-volume telemedicine service delivery across diverse healthcare settings.

Key Technology-architectural components include:

- A **centralised e-Sanjeevani application**, hosted and maintained under the aegis of the Ministry of Health & Family Welfare, Government of India. The platform has Secure, end-to-end video and audio-based services, ensuring confidentiality, data protection, and continuum of care.
- Electronic capture, storage, and retrieval of clinical records, including patient history, findings, diagnosis, and treatment details. Integrated with MoHFW's MyHealthRecord (Personal Health Record Management System - PHRMS) to enable lifetime archival of health records in patient's PHR profile.
- **ABHA ID** creation is enabled in platform.
- Generation of electronic prescriptions (**e-Prescriptions**) in compliance with the Telemedicine Practice Guidelines, 2020, and other applicable statutory and regulatory requirements, state anti-microbial resistance policy is done by doctors.
- Role-based access control mechanisms to ensure authorised system access for

healthcare providers, administrators, and support staff across different levels.

- **State-level operational dashboards with recently updated MIS** for real-time monitoring, reporting, and performance analysis from state.
- **Integration interfaces** enabling connectivity with Health and Wellness Centres (HWCs), Family health centres, district hospitals, medical colleges, and other participating healthcare institutions

2.3 System Integration

The e-Sanjeevani platform is designed to ensure interoperability with existing **healthcare delivery workflows and digital e-health systems**. It seamlessly integrates with:

- Health and Wellness Centre (HWC) service delivery processes
- Referral and counter-referral mechanisms across levels of care
- State digital health initiatives and hospital information systems, wherever applicable

Data security, patient privacy safeguards and system integrity form integral components of the e-Sanjeevani implementation framework in Kerala. The platform incorporates:

- **End-to-end encryption** for all teleconsultation interactions
- **Compliance with national telemedicine practice guidelines and data protection norms**
- **Controlled and role-based access** to patient health records
- **Periodic system audits, MIS validation, and quality assurance mechanisms** to ensure data accuracy and reliability is ensured in platform by MoHFW.

These safeguards collectively ensure that e-Sanjeevani services are delivered in a secure, ethical, and legally compliant manner, fostering trust among patients and healthcare providers.

Chapter 3:

Operational Structure, Human Resources, and Service Delivery Processes

Chapter 3: Operational Structure, Human Resources, and Service Delivery Processes

3.1 Operational Framework

The physical infrastructure of eSanjeevani in Kerala follows a **Hub-and-Spoke model for Health and Wellness Centres (HWC)**.

The physical infrastructure of eSanjeevani in Kerala follows the national hub-and-spoke model, particularly under the eSanjeevani AB-HWC (Ayushman Bharat Health and Wellness Centres) component. This assisted, provider-to-provider telemedicine service connects grassroots health facilities (spokes) with higher-level medical institutions (hubs) to enable remote consultations, specialist referrals, and continuity of care, especially in rural and underserved areas.

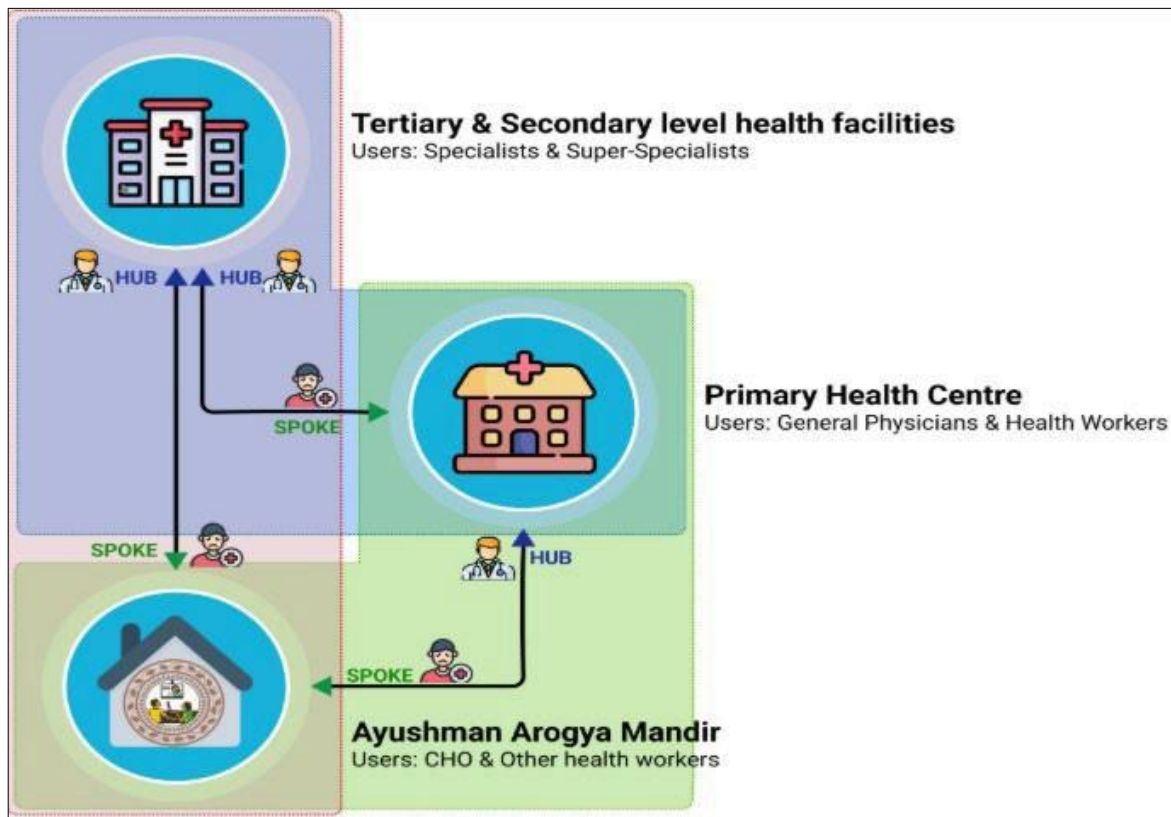


Fig 3.1: Hub & Spoke Model of eSanjeevani Telemedicine Services across Healthcare Level

Hub-and-Spoke Model Overview in Kerala

Kerala implements a structured, often described as a **three-tier hub-and-spoke system** through the eSanjeevani platform, aligning with national guidelines from the Ministry of Health and Family Welfare (MoHFW). This model leverages existing public health infrastructure upgraded with telemedicine capabilities:

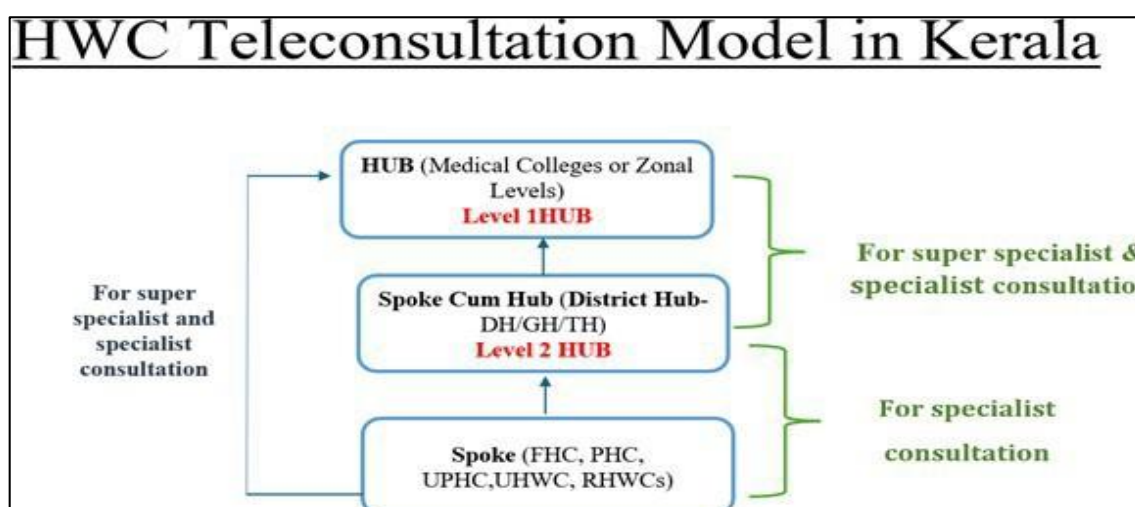


Fig 3.2: HWC Teleconsultation Model in Kerala

Under this framework, Medical Colleges and designated Zonal or State Hubs function as central nodes Level 1 HUB providing specialist and super-specialist consultations. District Hospitals, General Hospitals, and Taluk Hospitals operate as intermediate Level 2 Spoke-cum-Hubs, offering specialist services while also facilitating referrals from peripheral centres. HWCs, including Family Health Centres (FHCs), Primary Health Centres (PHCs), Urban HWCs, Urban Primary Health Services, Janakeeya Arogya Kendras (AAMs), function as spokes where patients are registered and assisted for teleconsultations.

This structured infrastructure ensures equitable access to quality healthcare services, optimizes referral mechanisms, and strengthens the continuum of care across primary, secondary, and tertiary levels of the public health system in Kerala.

Level 1 Hub:

- **Medical Colleges hubs:- For Super-specialist and specialist consultations**

Level 2 Hub (Spoke-cum-Hub):

- **District Hospitals / General Hospitals / Taluk Hospitals**

Spokes:

- FHCs, PHCs, Urban PHCs, Urban HWCs, Rural HWCs, JAILS

Table 1: JAILS as SPOKES

DISTRICT	JAILS
KANNUR	District Prison Kannur
KANNUR	Jail Hospital Central Prison and Correctional Home
THIRUVANANTHAPURAM	Central Prison Hospital Poojapura
THIRUVANANTHAPURAM	Nettukaltheri Open Jail
THRISSUR	Central Prison Viyyur
THRISSUR	High Security Prison Viyyur

eSanjeevani has been effectively implemented in Kerala's prisons as part of the national telemedicine initiative to address inmates' healthcare needs. Necessary steps have been initiated to strengthen teleconsultation services across the state, ensuring consistent and reliable access. All above mentioned prisons are registered as spokes in the hub-and-spoke model, facilitating assisted consultations with registered providers. Providers are enrolled based on the list handed over by the District Telemedicine Nodal Officer from respective districts for seamless coordination. Overall, eSanjeevani proves to be a great initiative for jail inmates, offering timely medical care, reducing the need for hospital transfers, and promoting health equity in institutional settings.

Kerala operates a 24×7 State Programme Management Support Unit (SPMSU) State Hub, ensuring uninterrupted e-Sanjeevani OPD services. The infrastructure includes

3.2 Key human resources include:

Key human resources driving the implementation of eSanjeevani in Kerala encompass a diverse group of professionals who ensure effective teleconsultation services across the state.

- Medical Officers from the Directorate of Health Services (DHS), Directorate of Medical Education (DME), and empanelled private specialists form the core clinical workforce, delivering general and specialty consultations.
- Nursing Officers, Mid-Level service Providers (MLSPs), Junior Public Health Nurses (JPHN), and Junior Health Inspectors (JHI) serve as the frontline at spoke-level facilities like Health and Wellness Centres and primary care units, where they handle patient registration, vital sign monitoring, facilitation of assisted teleconsultations, and coordination with hub doctors to support seamless service delivery.
- Palliative care nurses play a specialized role in managing chronic and end-of-life conditions through eSanjeevani, offering consultations for bedridden patients in homes, old age facilities or care centres to reduce the need for physical hospital visits.
- RBSK staff contribute to child health services by supporting early detection and intervention for childhood illnesses via the platform.
- District Nodal Officers (DNO) and District Programme Management Support Unit (DPMSU) teams manage local implementation, including roster scheduling, monitoring of consultation volumes, resolution of operational challenges, and district-specific coordination to strengthen hub-and-spoke linkages and sustain high-quality telemedicine services.
- At the programmatic level, the State Nodal Officer (SNO) along with the State Programme Management Support Unit (SPMSU) technical team provides overarching coordination, policy guidance, training oversight, and technical support for statewide operations, troubleshooting issues, including provider & practitioner registration, mapping and ensuring compliance with national guidelines.



Fig 3.3: eSanjeevani Kerala State Hub

3.2 eSanjeevani service delivery process

Call mapping / work-flow chart

- 1. Patient registration at Spoke or through OPD portal**
- 2. Initiation of teleconsultation**
- 3. Clinical assessment and documentation**
- 4. Digital prescription and advice**
- 5. Referral to higher centres (if required)**
- 6. Follow-up and record management**

The eSanjeevani telemedicine platform follows a **standardized operational workflow** to ensure efficient, secure, and patient-centric service delivery across all levels of healthcare in Kerala.

Patient registration is carried out at the spoke facilities such as Health and Wellness Centres, Primary Health Centres, Family Health Centres, Urban and Rural HWCs, and Jail Hospitals by authorized healthcare personnel, or directly by patients through the eSanjeevani OPD portal, with entry of essential demographic and clinical details. Following registration, the teleconsultation is initiated through the eSanjeevani application and routed to an available Medical Officer, Specialist, or Super-specialist at the appropriate hub.

The consulting doctor conducts a comprehensive clinical assessment through real-time audio-video interaction, supported by the spoke healthcare provider, and all clinical findings, diagnoses, and investigations are documented digitally in the system. Upon completion of the consultation, a digitally signed e-prescription containing medication details, dosage, duration, and clinical advice is generated and made available to the patient and the spoke facility.

Patients requiring further evaluation or in-person care are referred to higher-level facilities such as Taluk Hospitals, District Hospitals, or Medical Colleges, with referral details recorded electronically to ensure continuity of care.

Follow-up consultations are scheduled as advised, and all electronic health records, including consultation notes, prescriptions, and referrals, are securely stored within the platform to support continuity of care, audit, reporting, and programme monitoring by district and state authorities.

Programme Monitoring

Human Resources Team-building sessions have been conducted in Kerala involving private empanelled doctors associated with District Programme Management Support Units (DPMSUs), State hub doctors, District Nodal Officers (DNOs) and SNO team to foster collaboration, enhance coordination, and build a cohesive telemedicine ecosystem.

These sessions aim to align stakeholders on best practices, address operational challenges, and promote a shared understanding of roles in the hub-and-spoke model, ultimately strengthening service delivery across spokes (like HWCs and prisons) and hubs.

Additionally, monthly reviews of State Hub doctors and DNOs have been implemented as a key quality improvement mechanism, allowing regular assessment of performance metrics such as consultation volumes, response times, user feedback, and compliance with guidelines, leading to continuous improvements in service quality and efficiency. At the national level, the National Monitoring Team oversees the overall functions of the eSanjeevani programme through the Centre for Health Informatics (CHI) under the Ministry of Health and Family Welfare (MoHFW), headed by the Director (CHI). This monitoring is duly coordinated by a Senior Consultant or Consultant at the National Health Systems Resource Centre (NHSRC)/MoHFW, who reports directly to the Director-eHealth of the Ministry. The national team relies on real-time reports and dashboards generated from the platform (integrated with national health systems like ABDM) to track programme performance, identify gaps, ensure adherence to standards, and guide resource allocation. As the programme scales, required minimum personnel are arranged at NHSRC and CHI specifically for this tele-consultation project, enabling effective coordination with states, including Kerala, to support ongoing

enhancements, technical troubleshooting, and policy alignment for sustainable nationwide telemedicine delivery.

eSanjeevani offers comprehensive telemedicine services through its 24×7 OPD. The eSanjeevani OPD operates continuously (24×7) with a General OPD available at all hours for immediate consultations on common ailments, while scheduled specialty OPDs provide focused expert care in General Medicine, Gynaecology, Paediatrics, Psychiatry, Dermatology, ENT, Pulmonology, Surgery, Ophthalmology, and Palliative Care, allowing patients to book appointments with specialists as per predefined rosters.

Complementing this, eSanjeevani HWC Services, delivered primarily through assisted mode at Ayushman Bharat Health and Wellness Centres, cover a wide scope including routine consultations for everyday health concerns, NCD management (such as diabetes, hypertension, and cardiovascular conditions), mental health services with counselling advices and psychiatric support, maternal and child health interventions including antenatal and postnatal care, geriatric care addressing age-related issues, and specialized palliative care for chronic and terminal illnesses.

Additionally, the platform extends to super-specialty consultations in fields like Neurology, Cardiology, Nephrology, Gastroenterology, Endocrinology, and various Paediatric subspecialties, enabling referral-based escalation from primary spokes to higher hubs for complex cases.

This integrated approach ensures equitable, timely, and continuum-of-care services, particularly benefiting rural, underserved, and institutional populations such as those in prisons, through seamless digital access, e-prescriptions, and linkage with ABDM for record continuity



Fig 3.4: Tribal woman consulting through eSanjeevani OPD



Fig 3.5: eSanjeevani HWC consultation at spoke



Fig 3.6: eSanjeevani Hub at Alappuzha

Chapter 4:

Service and Utilisation Analytics

Chapter 4: Service and Utilisation Analytics

4.1 Features of eSanjeevani Services

e-Sanjeevani OPD (24×7):

- General OPD (24×7) Basic consultations for common ailments, primary care, follow-ups, and general health advice. General OPD available for public round-the-clock for routine consultations, minor ailments, follow-ups, and initial advice. It is managed centrally at State Hub working at DPMSU, Thiruvananthapuram.

Other OPD Timings are

- General Medicine OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Gynaecology OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Ophthalmology OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Palliative care OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Psychiatry OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Paediatrics OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Pulmonology OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- General Surgery OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- Dermatology OPD: Monday to Sunday: 9:00 AM to 1:00 PM
- ENT OPD: Monday to Sunday: 9:00 AM to 1:00 PM

Table 2: Weekday Duty Roster Across Districts

Weekdays	District		
Monday	Thiruvananthapuram	Alappuzha	Kasaragod
Tuesday	Kollam	Thrissur	Palakkad
Wednesday	Ernakulam	Kannur	
Thursday	Kozhikode	Wayanad	
Friday	Kottayam	Idukki	
Saturday	Pathanamthitta	Malappuram	
Sunday	Rotation Wise		

Table 3: DOCTORS EMPANELLED SANCTIONED /INPOSITION TABLE

District	Sanctioned Specialist	Sanctioned Medical Officer	Specialist In Position	In Position Medical Officer
Thiruvananthapuram (State Hub)	20	35	13	26
Kollam	4	0	2	3
Pathanamthitta	4	0	4	0
Alappuzha	4	0	4	0
Kottayam	4	0	6	0
Idukki	4	0	7	2
Ernakulam	2	0	0	2
Thrissur	3	0	2	4
Palakkad	4	0	1	2
Malappuram	2	0	6	2
Kozhikode	4	0	6	6
Wayanad	4	1	3	2
Kannur	2	0	0	2
Kasaragod	2	0	2	4
TOTAL	63	36	56	55

The human resource position for eSanjeevani Telemedicine services across the State indicates the status of sanctioned posts and personnel in position, disaggregated by district and category (Specialists and Medical Officers). A total of **63 Specialist posts** and **36 Medical Officer posts** have been sanctioned for eSanjeevani services. Against this, **56 Specialists** and **55 Medical Officers** are presently in position across various districts.

The State Hub at Thiruvananthapuram accounts for a significant share of the sanctioned strength, with **20 Specialists** and **35 Medical Officers** sanctioned, of which **13 Specialists** and **26 Medical Officers** are currently in position. District-wide variations are observed in the availability of Specialists and Medical Officers.

4.2 Overall Utilisation Trends KERALA

- **Cumulative Teleconsultations:** ~29.9 lakh
- **FY 2024–25:** 8.6 lakh
- **FY 2025–26 (till 04.01.2026):** 10.36 lakh

The e-Sanjeevani telemedicine platform in Kerala has demonstrated robust growth and increasing adoption since its inception, reflecting the state's strong digital health infrastructure and high public acceptance of remote consultations. Cumulative teleconsultations across both modes have reached approximately 29.9 lakh (as of early January 2026), underscoring the programme's significant contribution to accessible healthcare delivery.

In Financial Year 2024–25, the platform facilitated 8.6 lakh total consultations, marking a steady upward trend in utilisation. This momentum has continued into Financial Year 2025–26, with 10.36 lakh consultations recorded till 04 January 2026, indicating accelerated usage and enhanced service reach during the current fiscal year.

HWC and OPD Utilisation

- HWC cumulative (Dec 2021–Dec 2025): 24.1 lakh
- OPD cumulative (June 2020–Dec 2025): 5.8 lakh
- Average consultations per day (2025–26): 4,323

e-Sanjeevani AB-HWC (Assisted/Doctor-to-Doctor mode): Cumulative utilisation from December 2021 to December 2025 stands at 24.1 lakh, highlighting its pivotal role in supporting primary and preventive care at the community level

e-Sanjeevani OPD (Direct Patient-to-Doctor mode). Cumulative consultations from June 2020 to December 2025 total **5.8 lakh**, with growing preference for specialty and super-specialty access.

The average daily consultations during **FY 2025–26** have reached **4,323**, reflecting consistent high-volume utilisation and effective operational scaling across districts. This trend aligns with Kerala's emphasis on integrating e-Sanjeevani into routine healthcare

workflows, driven by factors such as high literacy, widespread smartphone penetration, active promotion through NHM initiatives, and the platform's role as a key conditionality for national performance evaluation.

Overall, the utilisation patterns demonstrate sustained growth, with the HWC mode dominating due to its assisted nature and alignment with primary healthcare delivery, while OPD usage continues to expand for direct and specialised care needs. These figures position Kerala as a high-performing state in national e-Sanjeevani implementation.

SERVICE INTEGRATION IN TELEMEDICINE

eSanjeevani platform has AYUSH services mainly Homeopathy and Ayurveda services under corresponding department's monitoring.

Telemanas is well maintained parallel teleconsultation system under National Mental Health Programme addressing mental health and well-being related issues. A toll-free helpline (14416 / 1-800-91-4416) connects callers to trained counsellors and, where needed, to mental health specialists. Services operate 24×7 to accommodate diverse populations.

MOBILE TELE-OPHTHALMOLOGY [NAYANAPADHAM] PROJECT of NPCB at DISTRICT HOSPITAL ,PALAKKAD. (Secondary level approach)

The Mobile Tele Ophthalmology unit of District Hospital Palakkad funding availed from NPCB (60Lakhs), District Panchayath Palakkad (25 Lakhs) and the running cost including diesel by Hospital Development Committee. The unit is functioning for last 13 years, Inaugurated on 10/11/2012. Camps started from 20/11/2012. Total Camps from 20/11/2012 to 31/12/2025 is 1057 Total patients screened from 2012 to 2025 is 51847. Total fundus photo taken from 20/11/2012 to 30/12/2025 is 21953. The service is been provided to the rural areas of Palakkad district. The facilities inside the vehicle include Digital Imaging Fundus Camera, Digital Imaging Slit Lamp, Video Imaging Indirect Ophthalmoscope, Remote Control Vision Drum and Video Conferencing Facilities for connecting to the surgeon at D.H. Palakkad. conducting camps at regular basis at all CHCs PHCs and Grama Panchayath with KSWAN facility / WIMAX facility .There are trained Site Administrators / optometrists (nearly 28) who are working in the periphery for taking fundus picture and slit lamp photography. These pictures which has been taken by the optometrist is sent to the District Hospital from the bus by the Site Administrator who is available in the mobile

teleophthalmology unit. Ophthalmologist in Telemedicine Room evaluate the picture, selected patients been called for teleconferencing. Then patient who needs treatments is been called to District Hospital for treatment. This is used by Ophthalmologists who are working in periphery where facility for eye examination is not available to do detailed evaluation and minor procedures.

Year-wise Growth Trajectory

The service has transitioned through three distinct phases:

- Phase I (2020–2021): Rapid adoption driven by COVID-19 lockdowns.
- Phase II (2022–2023): Integration of the Hub and Spoke model (HWC-based Doctor-to-Doctor).
- Phase III (2024–till date): Focus on specialty care and chronic disease management (NCDs).

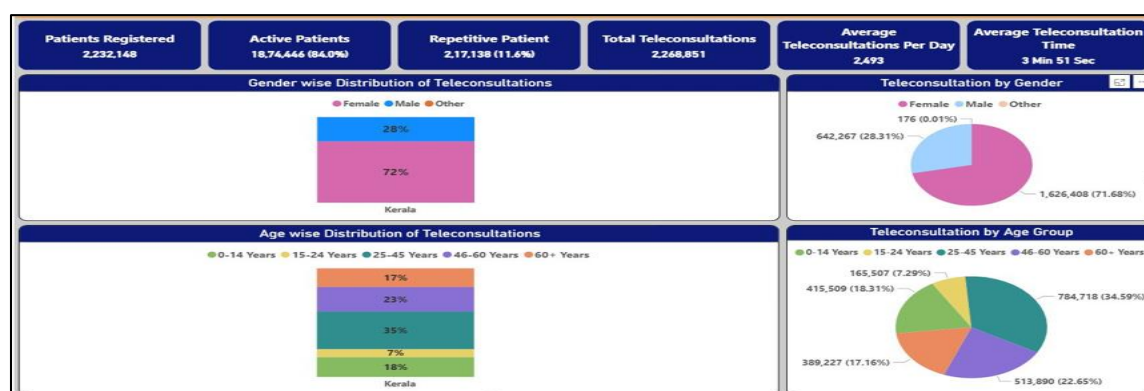


Fig 4.1: Demographic Distribution by Age and Gender

Beneficiary Profiles

Analysis of patient demographics reveals a diverse user base, with a significant shift towards the female population. The predominant beneficiary age group is **25–45 years**.

Demographic Breakdown

Gender: Females account for approximately **71.68%** of total consultations, often seeking services for **maternal health, paediatrics, and endocrine disorders**.

Age Groups:

- **0–14 years:** 18% (Primarily Paediatric and Adolescent OPDs)
- **15–24 years:** 7% (Major users of General OPD and Dermatology)
- **25–45 years:** 35%
- **46–60 years:** 23% (Primarily NCD and lifestyle disease management)
- **60+ years:** 17% (Palliative and geriatric care)

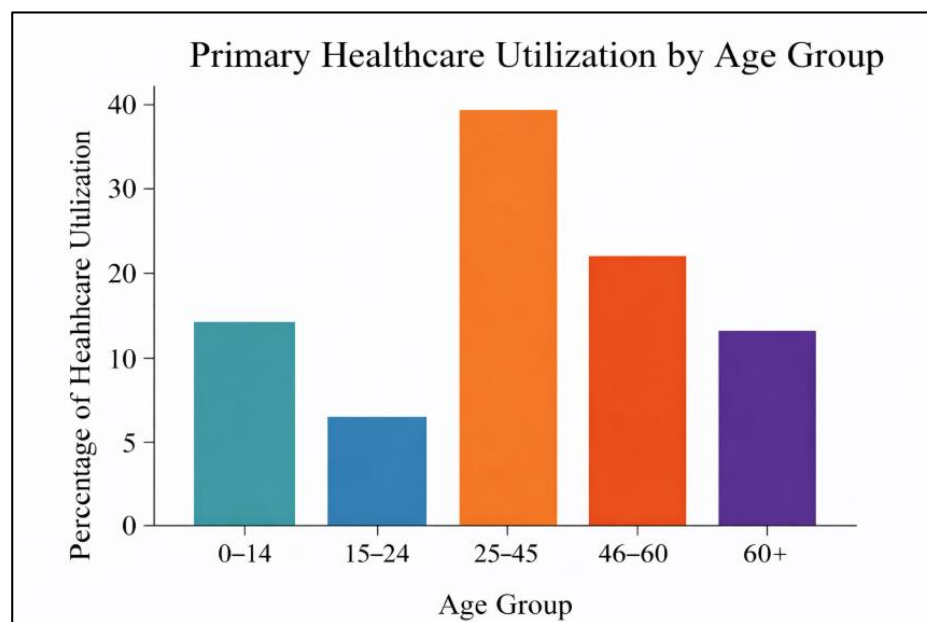


Fig 4.2: Primary Healthcare utilization by age group

Service Analytics & Call Types

The administrative portal categorizes calls into two primary delivery modes:

- **eSanjeevani OPD (Patient-to-Doctor):** Accounts for 19% of total volume. This mode is preferred for follow-ups and minor ailments.
- **eSanjeevani HWC (Doctor-to-Doctor):** Accounts for 81% of total volume. This model connects Mid-Level Health Providers (MLHPs) at Sub-Centres to Specialists at Hubs, significantly reducing physical referrals.

Top Performing Specialty OPDs

A key performance highlight is the high number of **General Medical Officer consultations**. The specialty with the highest consultations is **Dermatology**, followed by

General Medicine.

Key Performance Indicators (KPIs)

To ensure quality of care, the State Hub monitors real-time KPIs through the admin dashboard. **100% operationalisation** is maintained as the key deliverable. The State has achieved **96.68%**, and is progressing towards active operationalisation of spokes and hubs.

Spoke Analysis (District-wise and Facility-wise Analysis)

- **96.68%** total institutions operationalised
- **100%** UPHC and UHWC operationalisation
- **68%** FHC/PHC operationalised
- **96%** AAM/HWC operationalised

Table 4: State level diagnosis details

Top Diagnosis – State Level		
Diagnosis	Total Teleconsultations	Percent %
Acute URI	1,23,898	6.63%
Viral fever	1,16,565	6.24%
Fever	1,02,441	5.48%
Upper respiratory infection	88,892	4.72%
Cough	53,875	2.88%
Headache	47,689	2.55%
Common cold	45,014	2.41%
Gastritis	34,471	1.84%
Rhinitis	31,387	1.68%
Total	18,68,823	100.00%

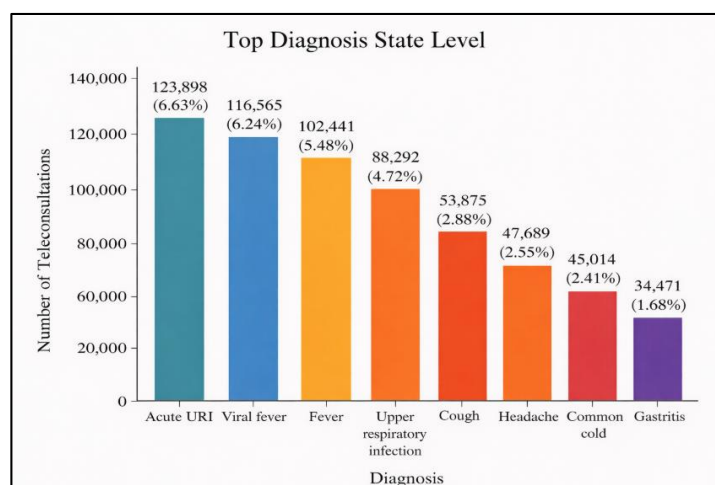


Fig 4.3: Graphical demonstration of State level diagnostic details

Most common diagnosis in teleconsultation sessions from KERALA is Acute Upper Respiratory Infection as compared to Fever at national level. At the national level, fever constitutes the highest proportion of teleconsultations with 1,33,17,763 cases (13.14%), followed closely by headache with 1,30,29,673 cases (12.81%). Cough (93,73,827; 9.26%) and joint pain (89,55,965; 8.54%) also account for a substantial share of consultations. Common cold (66,29,564; 6.54%) and gastritis (60,09,627; 6.02%) contribute moderately, while acidity accounts for 50,01,155 cases (4.93%). Comparatively lower proportions are observed in stomach pain (31,85,417; 3.14%), weakness (19,96,829; 1.97%), and loose motion (10,02,081; 0.99%). Overall, the pattern indicates that common febrile, respiratory, and general symptomatic conditions predominate teleconsultation utilization at the national level.

Table 5: National level most diagnosis

Most Diagnosis – National Level		
Diagnosis	Number of Teleconsultations	Percentage
Fever	1,33,17,763	13.14%
Headache	1,30,29,673	12.81%
Cough	93,73,827	9.26%
Joint pain	89,55,965	8.54%
Common cold	66,29,564	6.54%
Gastritis	60,09,627	6.02%
Acidity	50,01,155	4.93%

Stomach pain	31,85,417	3.14%
Weakness	19,96,829	1.97%
Loose motion	10,02,081	0.99%

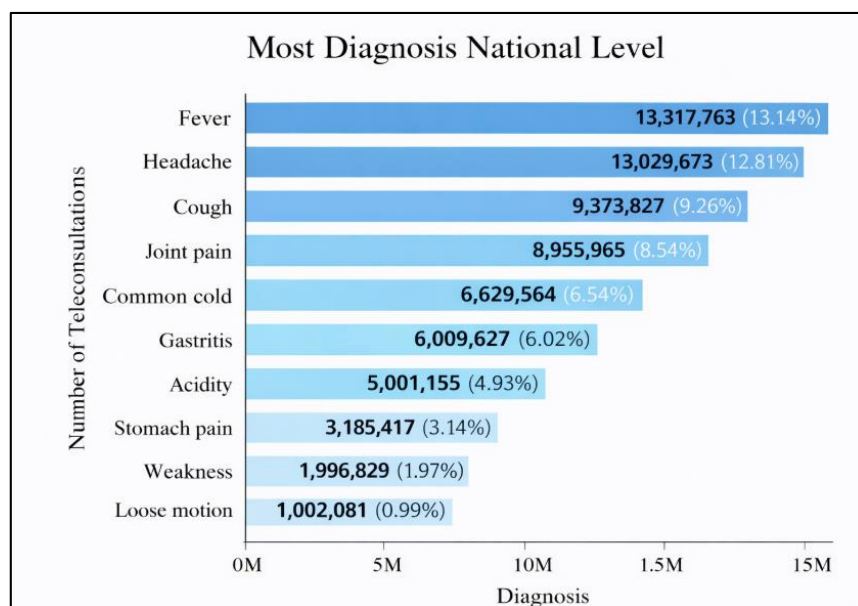


Fig 4.4: Graphical demonstration showing diagnosis details

At the state level, Kerala has registered a total of 6,781 spokes, including 121 Spoke-cum-Hubs, of which 6,618 are operational, achieving an overall operational efficiency of 96.68%. Most districts demonstrate high functionality, with Kottayam (99.27%), Idukki (98.09%), Kollam (98.04%), and Thrissur (97.99%) leading in operational performance. Districts such as Wayanad, Alappuzha, and Ernakulam also maintain consistently high operational rates above 97%. However, comparatively lower operational percentages are observed in Malappuram (91.66%) and Kannur (93.85%), indicating scope for targeted improvements. Overall, the state reflects strong operationalization of telemedicine spokes with near-universal coverage across districts.

Table 6: State level spoke details

SPOKE DETAILS – STATE LEVEL					
State/District	Spokes Registered	Spoke Cum Hubs Registered	Total Spokes Registered	Total Spokes Operational	Operational %

Kerala (Total)	6,660	121	6,781	6,618	96.68%
Alappuzha	457	8	465	456	97.85%
Ernakulam	544	12	556	548	97.66%
Idukki	359	7	366	362	98.09%
Kannur	527	10	537	510	93.85%
Kasaragod	300	7	307	307	97.72%
Kollam	503	8	511	504	98.04%
Kottayam	407	2	409	407	99.27%
Kozhikode	516	12	528	521	97.35%
Malappuram	709	10	719	666	91.66%
Palakkad	587	5	592	572	96.28%
Pathanamthitta	310	7	317	312	97.16%
Thiruvananthapuram	619	17	636	626	96.86%
Thrissur	587	11	598	588	97.99%
Wayanad	235	5	240	239	97.92%

Chapter 5:

Budgeting and Financial Allocation

Chapter 5: Budgeting and Financial Allocation

5.1 Budgeting Framework

Funding for e-Sanjeevani in Kerala is primarily routed through:

- National Health Mission (NHM)
- State health budgets

National Health Mission (NHM) ROP

As per Record of Proceedings, Kerala, The Record of Proceedings (ROP) document provides the budgetary approvals under the National Health Mission (NHM), guiding the states in implementing Program Implementation Plans (PIP) for each fiscal year. National Health Mission approved Rs 866.75 Lakhs for Sanjeevani (OPD + AAM) in 2025-2026.

Financial Allocation is mainly for the purposes as:

- Operational costs of State Hub and district hubs
- Human resource support and training
- Infrastructure and IT support

Remuneration Payment criteria for private empanelled doctors as per ORDER NO: NHM/6355/JC-TELEMEDICINE/2023/SPMSU, Dated, 08.10.2023

1. The payment of specialist doctors (State Hub & District Hub) will be disbursed after analysing the data from CDAC Mohali every month.
2. The payment criteria of specialist doctor are revised and finalised as Rs. 1000/- for minimum 10 calls and Rs. 100/- for additional complete calls (except in case of Psychiatry OPD, for psychiatry payment of Rs. 2000/- for minimum 20 calls and Rs. 100/- for additional complete calls, because their average call duration is above 20 mins per call).
3. Payment will be provided only for completed consultation – the criteria for a complete consultation are defined below. The additional payment provided for multiple consultations/ incomplete consultations will be recuperated every month.

4. If an empanelled doctor claims any disparity in payment, then he/she can submit an appeal to the grievance email (esanjeevanigrievance@gmail.com) with relevant data and evidence.

Criteria for a complete consultation;

1. A complete consultation should include Provisional diagnosis (include medical terms), and the advice part should contain treatment-related advice.
2. Multiple consultations from a spoke for the same patient in a day should be considered as one consultation.
3. Less than two minutes consultation cannot be considered as a complete consultation.
4. Those calls which are completed by a specialist after duty day cannot be considered for payment.

Prescriptions with clinically unacceptable management for the given diagnosis (diagnosis: earache management: vitamins supplements, diagnosis: cat scratch injury: management: calcium carbonate) is avoided.

1. Avoid typographical errors and improper advice while typing prescriptions.
2. If a specialist doctor receives a call not related to his/her specialty, the call should be referred to concerned specialty. Such a cross call will not be considered as a complete consultation.
3. Those calls which require only physical OPD management, and patient cannot be benefited by a Tele consultation cannot be included for payment consideration. Eg : inguinal swelling , laser or cauterisation procedure requiring skin lesions

Roles and responsibilities of empanelled doctors.

1. Daily duty hours of specialist doctor are minimum 4 Hours.
2. All specialist doctors are instructed to provide their duty schedule for next month (including time and date) to the state coordinators before last day of every month. Any changes further cannot be entertained.
3. All specialist doctors are instructed to report any leave at least one day prior. They must strictly adhere to the duty schedule, and if any emergency leave has to be taken during the duty session, the duty can be compensated for that day or on the very next duty day. Advance compensation will not be allowed.
4. All doctors should speak politely to those who call via telemedicine platform.
5. All doctors should prescribe generic medicine.
6. All doctors should report to the hub nodal officer the details of notifiable disease under IDSP and

diseases of public health importance.

*In India, there is a standing regulation that mandates doctors to prescribe medicines using their generic names. This is stipulated under Clause 1.5 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002. Clause – 1.5 is substituted in terms of Notification published in the Gazette of India on 08.10.2016 as under. “Every physician should prescribe drugs with generic names and he/she shall ensure that there are a rational prescription and use of drugs” MCI-211(2)/2016(Ethics)/131118. Doctors are expected to prescribe generic medications and adhere to standard treatment guidelines as well as the State Government's antimicrobial AMR policies

Table 7: Year-wise Budget and Expenditure

Head	Year	Approve Amount (Rs in Lakhs)	Expenditure (Rs.in lakhs)
RoP	2020-2021	242.84	0.00
ECRP II	2021-2023	815.78	276.72
RoP	2022-2023	616.60	201.92
RoP	2023-2024	4810.59	200.72
RoP	2024-2025	877.65	342.74
RoP	2025-2026	866.78	437.38 (till date)

Expenditure for the FY 2025-2026 (till dec 2025)

During the period from 2020–2021 to 2025–2026, funds were approved and expended under the Record of Proceedings (RoP) and the Emergency COVID Response Project Phase II (ECRP-II) with varying levels of utilization. In 2020–2021, an amount of ₹242.84 lakhs was approved under RoP; however, no expenditure was incurred during the year, indicating non-initiation and delays in implementation. Under ECRP-II during 2021–2023, ₹815.78 lakhs were approved, against which an expenditure of ₹276.72 lakhs was incurred. In 2022–2023, RoP approval amounted to ₹616.60 lakhs with an expenditure of ₹201.92 lakhs, followed by 2023–2024 where ₹481.59 lakhs were approved and ₹200.72 lakhs was utilized. A higher allocation was observed during 2024–2025 with an approved amount of ₹877.65 lakhs, of

which ₹342.74 lakhs was expended. For the current financial year 2025–2026, ₹866.78 lakhs have been approved, and ₹437.38 lakhs has been utilized till date. This pattern indicates initial implementation challenges during the early pandemic period and post-peak recovery phase, contrasted with steadily improving fund utilization in the most recent years.

Overall, expenditure trends indicate a gradual improvement in fund utilization in recent years, reflecting better implementation progress and financial execution over time.

Key Trends and Analytical Observations

Overall Financial Performance

Effective budgeting is indispensable for the successful implementation, scaling, and long-term sustainability of the eSanjeevani National Telemedicine Service Programme in Kerala. Adequate and timely fund allocation under the National Health Mission (NHM), including through mechanisms like the Emergency COVID Response Package Phase-II (ECRP-II), has enabled critical foundational steps such as the establishment of hub-and-spoke functionalities, equipment procurement, and the rollout of doctor-to-doctor consultations starting from selected districts. This financial support ensures uninterrupted specialist consultations, timely disbursement of honorarium to empanelled doctors and medical officers, ongoing maintenance of telemedicine infrastructure (hardware, network connectivity). It also supports the organisation of review meetings at district and state levels, strengthens monitoring, audit, and quality assurance processes, and powers robust IEC/BCC activities to raise public awareness and drive utilisation, especially in rural and underserved areas. By preventing funding gaps, ensuring compliance with NHM guidelines and Government of India conditionalities, and building a strong performance record, disciplined budgeting has been key to Kerala's effective expansion of eSanjeevani under ECRP-II and subsequent RoP allocations, ultimately advancing equitable, accessible, and quality healthcare delivery through the platform.

Chapter 6:
System Impact, Achievements,
Challenges, and Strategic Way
Forward

Chapter 6: System Impact, Achievements, Challenges, and Strategic Way Forward

6.1 System Impact and Achievements

The National Telemedicine Service of India has already served more than 441,037,554 patients at over 137,242 Ayushman Arogya Mandirs as spokes through 18,314 hubs and an extensive team doctors, medical specialists, super-specialists and health workers as telemedicine practitioners [January 2026].

The implementation of the e-Sanjeevani telemedicine platform in KERALA has resulted in high levels of adoption and utilisation during the COVID-19 pandemic, with sustained usage in the post-pandemic period system-level improvements in healthcare service delivery across the State. Enhanced access to specialist and super-specialist for populations in remote and underserved areas. Substantial reduction in patient travel time, out-of-pocket expenditure, and waiting periods for consultations are expected. The e-Sanjeevani telemedicine platform has emerged as a key digital health intervention for improving access to healthcare services across the State. Since its inception, the programme has demonstrated significant scale, sustainability, and integration within the public health system, as evidenced by the following achievements:

State-wide Teleconsultation Coverage

As of date, the State has recorded a **cumulative total of 29.9 lakh teleconsultations** through the e-Sanjeevani platform, reflecting widespread adoption and utilisation

Cumulative Teleconsultations till December 2025 : 29.9 lakh

- **Teleconsultations during FY 2024–25:** 8.6 lakh
- **Teleconsultations during FY 2025–26 (till date):** 10.36 lakh

The steady increase in utilisation during the current financial year highlights the continued **relevance of telemedicine** its institutionalisation within routine healthcare. 91.49% increase in teleconsultations are noted from calendar year 2024 to 2025 shows KERALAs greatest achievement in this field.

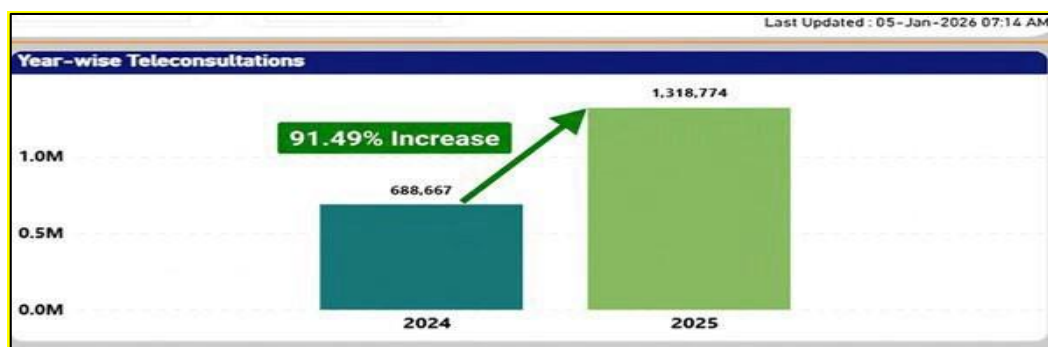


Fig 6.1: Year-wise Growth in Teleconsultations

Performance

Health and Wellness Centres have emerged as the backbone of teleconsultation service delivery at the primary care level.

- **Cumulative Teleconsultations at HWCs (Dec 2021 – Dec 2025):** 24.1 lakh
- **Teleconsultations during FY 2025–26 (April 2025 – 04 January 2026):** 10.1 lakh
- **Average Daily Teleconsultations (FY 2025–26):** 4,323

This demonstrates effective integration of e-Sanjeevani with Comprehensive Primary Health Care (CPHC) services, enabling timely specialist support for Medical Officers and improved continuity of care for beneficiaries.

The e-Sanjeevani OPD (patient-to-doctor) module has provided direct access to medical consultations for citizens, particularly benefiting individuals with mobility constraints, chronic illnesses, and those residing in remote areas.

- **Cumulative Teleconsultations through OPD (June 2020 – Dec 2025):** 5.8 lakh

The OPD module has played a critical role in reducing unnecessary hospital visits, patient load at secondary and tertiary facilities.

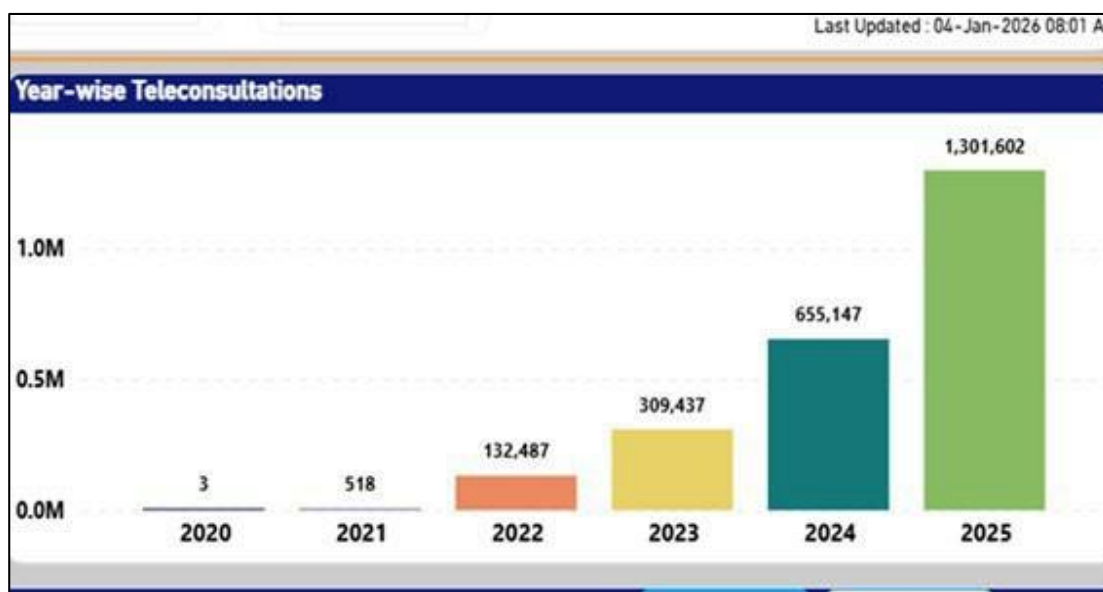


Fig 6.2: Year wise Teleconsultation Trends

6.2 Key Challenges

Despite notable progress, certain challenges have been identified that require targeted interventions for optimal programme performance:

- i. Variable levels of participation and engagement from medical colleges, affecting availability of specialist/ super- specialist teleconsultation services to public.
- ii. Inconsistent utilisation patterns across districts, indicating the need for uniform implementation and need for centralising service of private empanelled doctors, available for all districts.
- iii. Delays in Management Information System (MIS) updates and technical glitches, impacting real-time reporting / analysis. Connectivity issues persisting in spokes and different terrains of Kerala.
- iv. Geotemporal analysis of telemedicine calls can serve as a critical, early-warning syndromic surveillance tool for pandemic preparedness, to map disease hotspots and allocate resources. Lack of a data analysis unit; to analyse real-time teleconsultation data under proper data governance umbrella and thus to support as an early warning for new challenges like disease outbreaks or pandemics; may often limit effectiveness to reactive rather than proactive management.
- v. Inadequate awareness and orientation among the public and healthcare providers

regarding the full scope and benefits of e-Sanjeevani services.

6.3 Strategic Way Forward

To address the existing gaps and further strengthen the implementation and sustainability of the e-Sanjeevani programme, the following strategic measures are proposed:

- **Strengthening infrastructure and technical capacity** at the State Telemedicine Hub to effectively manage increasing service demand and ensure uninterrupted service delivery.
- **Establishment of fully functional, well-equipped e-Sanjeevani hubs** in all Government Medical Colleges and General Hospitals across all districts.
- **Engaging voluntary ,retired professionals in the platform.**
- **Achieving 100 per cent operationalisation of all designated spoke facilities** across the State to ensure uniform and equitable access to teleconsultation services.
- **Designation of Old Age Homes, Orphanages, and Special Homes as e-Sanjeevani spoke centres** to enhance access to healthcare services for vulnerable and institutionalised populations.
- **Intensification of Information, Education and Communication (IEC) and Behaviour Change Communication (BCC) activities** to improve awareness, acceptance, and utilisation of e-Sanjeevani services among the general public as well as healthcare providers.

Abbreviation	Full Form
AAM	Ayushman Arogya Mandir
ABDM	Ayushman Bharat Digital Mission
ABHA	Ayushman Bharat Health Account
AB-HWC	Ayushman Bharat – Health and Wellness Centre
AMR	Anti-Microbial Resistance
BCC	Behaviour Change Communication
CDAC	Centre for Development of Advanced Computing
CHI	Centre for Health Informatics
CPHC	Comprehensive Primary Health Care
DHS	Directorate of Health Services
DME	Directorate of Medical Education
DMO	District Medical Officer
DNO	District Nodal Officer
DPMSU	District Programme Management Support Unit
EHR	Electronic Health Record
FHC	Family Health Centre
GO	Government Order
H&FWD	Health and Family Welfare Department
HWC	Health and Wellness Centre
IDSP	Integrated Disease Surveillance Programme
IEC	Information, Education, and Communication
JHI	Junior Health Inspector
JPHN	Junior Public Health Nurse
KPI	Key Performance Indicator
MCI	Medical Council of India
MIS	Management Information System
MLSP / MLHP	Mid-Level Service Provider / Mid-Level Health Provider
MoHFW	Ministry of Health and Family Welfare
NCD	Non-Communicable Disease

NDHM	National Digital Health Mission
NHM	National Health Mission
NHSRC	National Health Systems Resource Centre
OPD	Outpatient Department
PHC	Primary Health Centre
PHRMS	Personal Health Record Management System
PIP	Program Implementation Plan
PoCD	Point of Care Diagnostic devices
RBSK	Rashtriya Bal Swasthya Karyakram
ROP	Record of Proceedings
SNO	State Nodal Officer
SNOMED CT	Systematized Nomenclature of Medicine – Clinical Terms
SPMSU	State Project Management Support Unit
UPHC	Urban Primary Health Centre
UHCW	Urban Health and Wellness Centre