

Improving the eSanjeevani program & tech platform to Unlock its Full Potential for Universal Health Access in India

A Policy Brief

1. Executive Summary

The eSanjeevani telemedicine program, particularly its Provider-to-Provider (P2P) service under the Ayushman Bharat – Health and Wellness Centres (AB-HWC) initiative, has significantly improved access to specialist care in rural and underserved areas. With over 330 million teleconsultations completed, the platform has played a pivotal role in advancing India’s Universal Health Coverage (UHC) agenda. However, despite its remarkable scale, the program faces critical challenges in both its technology platform and implementation approach that undermine its potential to deliver seamless, high-quality care.

1.1 Key technological challenges include a non-intuitive user interface lacking multilingual support, poor interoperability with national health programs such as ABDM, and limited broadband connectivity in many HWCs. Additionally, the absence of real-time data dashboards for decentralized decision-making restricts effective program monitoring and management.

1.2 Implementation challenges persist in the form of target-driven consultations compromising quality, inadequate triaging of cases, brief and incomplete consultations, and service delivery that remains transactional rather than holistic. These issues have led to missed opportunities in strengthening primary care and ensuring continuity of care through telemedicine.

1.3 To address these gaps, this policy brief proposes key actionable recommendations:

- **Redesign the eSanjeevani interface** using human-centred design principles (High Impact, Medium Feasibility).
- **Develop a decentralised integrated monitoring dashboard** with real-time analytics for state, district and block level managers (High Impact, High Feasibility).
- **Introduce quality assurance and supervision frameworks to improve utilization and quality (Medium Impact, Medium Feasibility).**
- **Ensure platform interoperability** with ABDM and national portals (High Impact, Medium Feasibility).
- **Invest in digital infrastructure** in HWCs through convergence with other national schemes (High Impact, Medium Feasibility).
- **Mandate structured training and refresher programs** for CHOs and medical officers (Medium Impact, High Feasibility).

Each recommendation is accompanied by an impact-feasibility analysis to guide evidence-based decision-making. Implementing these reforms will be crucial in unlocking the full potential of eSanjeevani, enabling it to deliver integrated, patient-centred, and high-quality telehealth services across India.

2. Successes of eSanjeevani:

Under Ayushman Bharat, eSanjeevani has been deployed across over 165,000 Ayushman Arogya Mandirs (AAMs) as spokes and nearly 15,800 hubs, with more than 214,000 providers trained. It plays a critical role in delivering comprehensive primary health care, especially by linking remote communities with doctors at higher-level facilities. When a patient at an AAM requires care beyond the CHO’s scope, they initiate a teleconsultation with a hub doctor—typically at a community health centre (CHC) or district hospital—via eSanjeevani. The doctor

consults with the patient remotely, while the CHO facilitates communication, provides follow-up care, and ensures treatment continuity. This hub-and-spoke model enables timely specialist input without requiring patients to travel.

eSanjeevani's Provider-to-Provider (P2P) service has expanded specialist healthcare access in rural and underserved regions, advancing India's Universal Health Coverage goals. Each teleconsultation saves patients an estimated INR 941 (USD \$11.75) and 21.59 kilometres of travel, with greater benefits for women. With over 330 million teleconsultations completed, patient savings exceed USD 3.88 billion. However, large unmet healthcare needs remain, highlighting the opportunity to further strengthen eSanjeevani.

A mixed-methods patient satisfaction survey involving 178 randomly selected patients from 64 facilities in Odisha, showed patients appreciated the quality, efficiency, reduced travel time compared to in-person visits, convenience, and ease of access to healthcare through the platform, as expressed in both quantitative and qualitative findings. Their overall satisfaction was high, with patients rating the services between 5.8 and 6.1 out of 7. Many patients reported that they would recommend the platform to others due to its effectiveness, convenience, and the free services provided, including medication.

Despite these achievements, the platform faces persistent technology and implementation challenges that limit its scalability, quality of care, and long-term sustainability. The current system is often transactional rather than comprehensive, focused more on meeting numeric targets than delivering integrated, patient-centred healthcare.

The program is also not yet fully integrated with broader national digital health infrastructure such as the Ayushman Bharat Digital Mission (ABDM) or disease-specific portals (e.g., for NCDs, TB), creating fragmented data ecosystems. Furthermore, issues such as poor internet connectivity, inadequate training, lack of real-time performance dashboards, and limited focus on quality assurance hinder its optimal functioning.

Given the Government of India's commitment to digital health and the growing role of telemedicine in the health system, there is a critical need to strengthen eSanjeevani's core technology platform and implementation strategy. This policy brief outlines targeted recommendations to help unlock its full potential.

Drawing on existing literature and recent evaluations, this policy briefs identified key challenges in the eSanjeevani program implementation and technology platform and proposes actionable recommendations to address these challenges along with the impact-feasibility analysis to guide evidence-based decision-making.

2.1 Policy recommendations to optimize the technology platform and its impact.

The Challenges	Policy Recommendations	Impact	Feasibility
Lack of multilingual support: The platform lacks comprehensive multilingual support, creating barriers for CHOs with limited digital and English literacy.	Upgrade the eSanjeevani platform with low-bandwidth optimization, offline access, local language support, audio-visual aids, and accessibility features using a user-centred design. Thus enabling CHOs with limited digital and English literacy to use the platform effectively.	High	High

● User experience challenges Recent reports highlight technical and user experience challenges for the healthcare providers. Logging in, patient registration, and navigating multiple screens are often slow and confusing, with frequent session timeouts. If a call drops, the CHO must recreate the case instead of the doctor being able to re-initiate the call, causing delays and frustration.	● Improve Login, Registration, and Session Stability: Simplify the login process with features like single sign-on and streamline patient registration by enabling auto-fill for repeat visits using a patient ID or ABHA IDs. Introduce a “Quick Consult” one-click option to place patients directly in the queue for the next available doctor—eliminating the need to navigate multiple screens. Improve session stability by extending session timeouts and adding auto-reconnect functionality	High	High
● Lack of information on internet availability at the facilities Thus, making it difficult for the states to plan to initiate internet access in the facilities.	● Enable the platform with feature to capture visualization on Status of internet connectivity. Thus, helping the states to plan to initiate internet access in the facilities with low internet. In Odisha having this information helped State to plan measures to improve internet connectivity from 9% of facilities in baseline to 70%.	High	High
● Lack of interoperability: eSanjeevani does not integrate with ABDM, NCD portals, or AAM HMIS, disrupting care continuity. Leading to CHOs and doctors re- enter data across multiple systems, increasing workload, and reducing provider satisfaction.	● Upgrade eSanjeevani platform with interoperability standards like ABDM, FHIR, to enable seamless integration with other EMR and MIS systems such as NCD portal, NIKSHAY portal, AB-HWC HMIS, to facilitate seamless data exchange and continuity of care.	High	Medium
● Lack of effective triaging of cases: The current ways of CHO lead triaging and referral pathway for teleconsultations bypasses general practitioners, leading to inefficient use of specialist resources, with frequent referrals to the wrong specialties reducing specialists’ availability for complex cases. ● Lack of decision support for the CHOs leads to inadequate referrals and irrational use of telemedicine for the cases that can be managed by the CHOs themselves.	● Leverage AI to enhance the functionalities of eSanjeevani platform: - AI-Powered Triage: Use AI tools for more accurate specialist selection and efficient triage/referral processes for teleconsultations to ensure rationale use of telemedicine. - Multilingual AI Solution: Implement AI-driven tools to record medical histories and translate vernacular languages into English for specialists. Thus reducing burden on the specialists and increasing their adaption. - AI-Powered Clinical Decision Support: Develop AI-driven Clinical Decision Support Systems (CDSS) to help doctors ensure standardized diagnosis and treatment.	High	Medium

● Lack of quality indicators tracking: There is no mechanism or reports to track quality indicators like - Average time duration of the teleconsultation, - Type of medicines provided in order to track antibiotic overprescribing, - Diagnosis provided in order to track rational use of telemedicine - No of incomplete teleconsultations due to unavailability of doctors, and dropped calls.	● Upgrade the visualizations of the dashboard for the states with key performance indicators and granular data at district, block and AAM level for effective monitoring, resource planning. The dashboard or reports should have mechanism to track quality indicators like - average time duration of the teleconsultation, type of medicines provided in order to track antibiotic overprescribing, diagnosis provided in order to track rational use or telemedicine.	High	High
● Lack of data on repeat patients: Furthermore, while the platform facilitates initial consultations, it lacks a mechanism for tracking repeat patients. A sample survey of 500 eSanjeevani patients from Jharkhand, showed that 75% of clients reported that they will like to re-use the service in future ● Lack of information on patient referrals: There is no mechanism to track patients referred post teleconsultation, thus inability to assess whether there are over referrals or under referrals.	● Follow up modules: Upgrade eSanjeevani platform with functionalities of recording follow up of cases post teleconsultation, this should be done either through telephonic follow up or in person follow up through ASHAs for tracking the outcomes of the teleconsultations. ● Add the features of tracking repeat patients, linking the electronic health record system of patients previous visits records. This tracking data should be displayed on the dashboard as an important metric to demonstrate the platform's "patient retention" and the degree to which patients prefer the service.	High	High
● No mechanism for raising technology issues: There is no formal mechanism for the users and states to raise technology related issues with CDAC, there is no tracking and monitoring of issues raised and resolved.	● Reporting mechanism of technology issues from the States to CDAC: State admins and users should be able to raise these issues from the portal itself. Thus, automating the mechanism would add in efficiency in raising the issues, monitoring the issues and ensuring rapid responses to the issues.	Medium	Medium
● Broadband Limitations in Rural Areas: Disparities in broadband access reduce effectiveness.	● Using the Bharatnet-project at Panchayat level¹ expand broadband network coverage in rural AAMs, and consider satellite-based internet for remote locations.	High	Low

2.2 Policy recommendations to optimize the monitoring dashboard and its impact.

The Challenges	Policy Recommendations	Impact	Feasibility
Limited Granularity and Reporting: The dashboard lacks granular data at the district, block, and AAM levels, hindering effective monitoring and resource planning. For example, difficulty in identifying specific AAMs with low service utilization or high dropout rates, preventing targeted interventions. States are unable to pinpoint regional disparities in telemedicine service utilization or patient outcomes.	Decentralized Data and Localized Dashboards: Develop decentralised dashboard , having data available for state, district, block and AAM level, with role-based access for state, district, taluka, and Hub and Spoke levels. This decentralised drill down dashboard should display relevant KPIs and metrics such as teleconsultation numbers, patient demographics, quality indicators, and outcomes, specific to each level at a click. Develop data aggregation and reporting tools. Train users on how to access and utilize the granular data.	High	High
Limited Patient Demographics and Utilization Data: Absence of detailed patient demographics (age, gender, socioeconomic status) and service utilization patterns (e.g., disease types) hinders needs assessment and targeted service delivery. For example, inability to analyze if eSanjeevani is effectively reaching vulnerable populations or if specific health needs (e.g., NCDs, maternal care) are being adequately addressed in different regions.	Enhanced Patient Demographics and Utilization Data: Include detailed demographic data (e.g., age, gender, income level) in the dashboard. Track service utilization by disease category (e.g., NCDs, maternal care). Health providers to be trained on collecting standardized demographic data (age, gender, income, education) during patient registration. Develop a system for categorizing and tracking teleconsultations by service type (e.g., NCDs, maternal health, mental health). Integrate this data into the dashboard for visualisation of patient demographics and service utilisation. States will better understand service reach and utilization, helping to ensure that telemedicine is effectively serving all population groups, especially vulnerable communities.	High	High
Inadequate visibility on Post-Consultations patient pathways: Lack of post-consultation data - number of repeat consultations, and number of referrals limits understanding of eSanjeevani's impact. Lack of access to this data on the dashboard makes it difficult in assessing if patients are receiving appropriate follow-up care or patient continuity of care.	Outcome and Follow-up Tracking: Develop a system for recording post-consultation outcomes, including follow-up visits, referrals, and health status updates. Explore integration with EHRs or develop a dedicated module within eSanjeevani. Implement mechanisms for capturing patient-reported outcomes. Integrate follow-up tracking for teleconsultations, Tracking continuity of care will help assess the impact of teleconsultations on patient health outcomes.	High	Medium

Insufficient Provider Performance Metrics: Absence of metrics evaluating provider performance such as granularity on provider wise teleconsultation numbers, average consultation time hinders quality assurance and improvement. For example, due to non-availability of this data it is difficult to identify providers needing support or recognize and incentivize high-performing providers.	Provider Performance Metrics: Define key provider performance indicators (e.g., number of consultations, patient satisfaction scores, consultation duration, adherence to clinical guidelines). Develop a system for collecting and tracking this data. Integrate performance dashboards with anonymized peer comparison features to highlight best practices.	High	Medium
Absence of Real-Time Monitoring or Alerts: The dashboard lacks real-time alerts for service disruptions, high-demand areas, or overburdened providers, preventing timely interventions. For example, absence of this data leads to inability to detect a sudden surge in teleconsultation requests in a specific region due to a local outbreak, leading to long wait times and potential system overload.	Real-time Monitoring and Alerts: Implement real-time monitoring tools to track system performance (uptime, latency), provider availability, and consultation demand. Develop an alert system for critical events (e.g., system downtime, high wait times, sudden demand surges). Integrate SMS/email alerts for relevant stakeholders. Real-time monitoring will allow for immediate corrective actions, reducing service disruptions and improving response times.	High	High
Limited Customization and Reporting: State Health officials cannot generate customized reports or visualizations that meet their specific needs, limiting localized data analysis. These inflexible reporting and data visualization limit the ability of state and district officials to generate customized reports for local needs.	Customizable Reports and Visualizations: Introduce customizable reporting features, allowing states to generate specific reports tailored to their local needs. Include data visualization tools to make trends and progress easier to interpret. This should be done by implementing a flexible reporting module allowing users to generate customized reports based on selected indicators, time periods, and geographic areas. Integrate interactive data visualization tools (charts, graphs, maps) to facilitate data interpretation.	High	Medium
Lack of capacity among the stakeholders at state/district level in data analysis, dashboard understanding for evidence based decision making.	Capacity Building: Conduct comprehensive training programs for all users (healthcare professionals, program managers, data entry personnel) on how to use the enhanced dashboard and interpret the data. This can be done by developing specific training materials focusing on data analysis and conducting training either in person or in virtual mode.	High	High

	Establish a feedback mechanism (e.g., online surveys, user forums). Conduct periodic reviews of the dashboard's functionality.		
--	--	--	--

2.3 Policy recommendations for strengthening implementation

The Challenges	Policy Recommendations	Impact	Feasibility
Lack of comprehensive training: Healthcare providers (CHOs and Medical Doctors) often lack sufficient training to provide effective and quality teleconsultation. There is absence of standardized training programs and support systems for healthcare providers leading to inadequate skills for providing quality telemedicine services. Studies in Odisha have shown that 96% of CHOs and 85% MOs felt that they need additional training on technical, clinical and telemedicine guidelines to facilitate eSanjeevani teleconsultations effectively.	Comprehensive training modules: Revamp the training curriculum to cover telemedicine guidelines, communication skills, service quality, rational use of telemedicine, and best practices for teleconsultations, going beyond the current training limited to eSanjeevani technology, thus improving service quality and healthcare outcomes. States like Odisha, Jharkhand and Karnataka have adapted the expanded package of eSanjeevani training for healthcare providers for the comprehensive capacity and skill building. The expanded training package can be accessed here Telemedicine Training Manual-eSanjeevani HWC. Ensure periodic refresher training for healthcare providers, studies in Odisha, has shown that regular training helped to improve the facilities regularly using telemedicine increased from 69% to 93%. FHW (nurse) perceptions about telemedicine being a viable alternative improved from 79% to 93%.	High	High
Lack of enough availability of Medical Doctors to manage the demand teleconsultations in quality manner : Limited availability of medical specialists hampers timely and quality service delivery. Provisions like additional incentives, hardship allowance etc can be made available for improving the availability and retention of specialists.	Dedicated telemedicine doctors : The absence of Doctors exclusively assigned to telemedicine results in missed calls and service disruptions. Additionally, existing doctors are often overburdened during peak OPD hours, compromising both in-person and virtual care. Establishing a dedicated cadre of doctors for teleconsultations can help ensure uninterrupted services while maintaining the efficiency of regular service delivery in secondary and tertiary care hospitals. Dedicated teleconsultation hours: The arrangements can be made to have dedicated telemedicine hours for post OPD of the existing doctors, for	High	High

	avoiding the calls to be taken during the OPD hours Private sector involvement in PPP models: Engaging private sector doctors in PPP mode, with case based payment structures. This necessitates stronger policy safeguards and robust monitoring mechanisms to ensure accountability and public interest.		
• Target driven approach leading to poor quality: Reports indicate that administrative bodies set teleconsultation targets for healthcare providers which, based on past experiences with target-driven healthcare, results in suboptimal service quality. There is a high prevalence of teleconsultations done for meeting the targets. 80% of current consultations are for self-limiting conditions like viral fever, seasonal coughs and colds, likely driven by target-based approaches forcing CHOs into unnecessary teleconsultations. The target driven approach motivates the healthcare providers to adapt fraudulent mechanisms to show the numbers such as it was noticed that high prevalence of teleconsultations were outside duty hours of HWCs, prescriptions without consultations.	• Promote rational use of telemedicine rather than target driven approach: Emphasise the rational use of telemedicine for cases which require telemedicine. Intelhealth intervention in Odisha to improve rational use showed that the average teleconsultations per month per facility decreased from 81 to 25 per month, but the total number of teleconsultations in the state stayed the same at 120k/month as more facilities were activated. By implementing rational use guidelines and removing targets, more CHOs and doctors begin to actively and consistently use the platform as they see the benefits in patient care.	High	High
• There are no triaging protocols/tools leading to lack of effective triaging: There is no mechanism for the frontline healthcare providers to take decisions on which self-management, telemedicine, or in-person referrals. The current ways of triaging and referral pathway for teleconsultations bypasses general practitioners, leading to inefficient use of specialist resources, with frequent referrals to the wrong specialties reducing specialists' availability for complex cases.	• Develop triaging tools for effective triaging of cases for telemedicine to ensure that telemedicine is effectively used for where it is genuinely needed for example long term chronic conditions like Diabetes, Hypertension management, high-risk pregnancy management etc for which telemedicine is required. Rather than the consultations for the health issues that a CHO could have handled on their own.	High	High
• Strengthening rationale use of eSanjeevani services for the chronic conditions such as NCD	• Training of CHOs and MOs on managing NCD cases through eSanjeevani • Policy changes on allowing initiation of treatment of NCDs such as	High	High

It is observed that currently 80% of teleconsultations on eSanjeevani are for acute conditions such as cough, cold, viral fever which can be managed by the CHOs themselves. There is high potential of eSanjeevani for chronic conditions like NCDs. However, there are following gaps in eSanjeevani for providing NCD services. - Lack of Integration with the NCD Portal - Absence of a structured follow-up mechanism - Lacks of training of CHOs and MOs on behavioral counselling support, despite NCDs causing 66% of deaths - Lack of treatment protocol based NCD management in eSanjeevani	Diabetes and Hypertension through telemedicine instead of compulsion of patient to be in person for initiation of the treatment • Integrate eSanjeevani with the NCD Portal using unique ABHA IDs to enable continuity of care through tracking of patient history, treatment plans. Ensuring interoperability between the two platforms for effective care • Introduce follow-up consultation alerts in eSanjeevani; share alerts with ASHAs for in-person follow-ups and CHOs for longitudinal tracking. • Include structured tele-counselling/teleconsultation followed by in person counselling by CHO, sessions focusing on lifestyle, diet, and physical activity. Enable CHOs to connect with NCD counsellors and specialists. • Embed standardized Hypertension and Diabetes management protocols in the CHO and medical officer interface to ensure clinical guideline adherence.		
• Lack of awareness in citizens: Studies have shown that awareness campaigns are crucial for increasing telemedicine utilization. Public awareness of the benefits of eSanjeevani remains low, particularly in rural communities. There is hardly any investment in creating awareness of eSanjeevani services among the communities, leading to lack of consumer-initiated demand for the eSanjeevani services.	• Increase Public Awareness of eSanjeevani: Invest in developing Behaviour Change Communication (BCC) material targeting barriers in accessing telemedicine amongst communities and providers. Implementing awareness activities on eSanjeevani in Odisha has shown that patients asking for telemedicine services increased from 63% to 76%. • Engage panchayat raj system, women's health groups, ASHAs, and Anganwadi workers to actively promote eSanjeevani services within their communities. • Utilize print and mass media to raise awareness about eSanjeevani national telemedicine services.	High	High
• Lack of quality of Service: Studies indicate compromised doctor-patient interactions on eSanjeevani, with high prevalence of teleconsultations averaging less than one-two minutes. A dipstick assessment done in 8 states by development partners showed that 69.54% of teleconsultations were of less than 2mins and ~24% of teleconsultations scored less	• Continuous Quality Assurance: Develop a robust quality assurance framework for teleconsultations. States like Odisha, Jharkhand and Karnataka have adapted the Quality of care & patient safety in telemedicine programs: A toolkit Intelehealth (developed based on the NHSRC guidelines for audit of in-person care services adapted for telemedicine		

than 50% on the quality index. indicating concerns on the quality of teleconsultations.	care) for implementing quality of telemedicine services. • Supportive supervision and clinical audits: Implement supportive supervision and periodic assessments of teleconsultation quality, patient satisfaction, and outcomes to identify and address gaps in service delivery. The findings from the audits must be used for refresher training of health providers for continuous quality improvement.		
• Lack of standardized care protocols: Research stresses the need for standardized protocols to ensure quality and safety in telemedicine. The absence of standardized teleconsultation protocols and follow-up care affects continuity and treatment effectiveness, particularly for chronic conditions such as Diabetes, Hypertension etc.	• Standardized clinical protocols: Power eSanjeevani platform with evidence-based standardized clinical protocols for teleconsultations, including guidelines for patient assessment, diagnosis, treatment plans, and follow-up procedures. • Establish National Guidelines: Uniform national guidelines and standard operating procedures (SOPs) for telemedicine consultations should be implemented to ensure a standard of care across states.	High	High
• Lack of follow up and referral linkages for comprehensive care: The services are transactional in nature not linked into the care continuum, thus leading to inability of tracking the outcomes of the patients. The design of eSanjeevani telemedicine platform along with implementation need to be designed keeping in mind the tracking of comprehensive health services for the patient to demonstrate true potential of eSanjeevani services. • Lack of referral tracking: Additionally, currently there is no referral pathway and tracking of referrals for post teleconsultation referrals to the health systems to ensure comprehensive care.	• Enhance Comprehensive Continuum of care - Patient Tracking System: eSanjeevani should include a mechanism for tracking patient outcomes and follow-ups, especially for chronic and non-communicable diseases. This will ensure that patients receive comprehensive care beyond the transactional consultation. • Referral Pathways: Strengthen referral pathways by connecting eSanjeevani program with district and tertiary hospitals for complex cases, ensuring that telemedicine is part of a continuum of care rather than a transactional service. This can be implemented by developing referral framework and guidelines for patient and clear referral pathways to PHC, CHC, district and tertiary hospitals for comprehensive care and effective health outcome.	High	Moderate
Lack of focus on health outcomes: • Absence of mechanism for capturing health outcome data: eSanjeevani has facilitated millions of consultations, but rigorous, value-based evaluations are missing beyond consultation counts. The data on health outcomes is not	Assessing the impact of eSanjeevani: • Implement robust evaluation frameworks to assess the impact of eSanjeevani telemedicine services by developing clear matrix such as time distance, money saved, health outcomes improvements. Assessment of eSanjeevani services in	High	Moderate

being captured, thus limiting the assessment of impact of eSanjeevani. The absence of data on health outcomes and patient experiences limits a full assessment of the eSanjeevani's impact. This gap raises concerns about usage variations and inequalities across states and population groups, highlighting the need for deeper analysis.	Jharkhand demonstrated that through each teleconsultation patients are saving INR 941 and 21kms of distance travelled. The savings are 1.5 times more among women. • Similar impact assessment studies should be done to assess the matrix of improvement of health outcomes, cost effectiveness, cost savings for health systems and benefits of eSanjeevani on climate and health. by partnering with academic institutions, research institutes, local NGOs.		
--	--	--	--

Conclusion:

A phased implementation of these recommendations will transform eSanjeevani P2P into a more efficient, user-friendly, and impactful digital health platform. In the short term, UI improvements, training, and connectivity upgrades can significantly boost provider confidence and usage. Over the medium term, integrating with health records and refining workflows will institutionalize telemedicine as a routine service. In the long term, embedding innovation and robust policy support will ensure the platform remains scalable, secure, and aligned with the vision of universal health coverage.

Ultimately, these reforms will enhance the experience for providers and patients alike—ensuring faster access to quality care, especially for underserved populations—and bring India closer to its goal of "Healthcare for All."

References:

- Ministry of Health and Family Welfare (MoHFW), Government of India. (2024). eSanjeevani—National Telemedicine Service of India. Retrieved from <https://esanjeevani.mohfw.gov.in/eSanjeevani>
- Press Information Bureau. (2023, March 21). Press Release: Press Information Bureau,
- Nagaraja, V. H., Ghosh Dastidar, B., Suri, S., et al. (2023). Physicians' experiences with telemedicine during the COVID-19 pandemic in India. Nagaraja, V.H. · Ghosh Dastidar, B. · Suri, S. · et al. Physicians' experiences with telemedicine during the COVID-19 pandemic in India.
- Dastidar, B. G., et al. (2024). Reimagining India's National Telemedicine Service to improve uptake and efficiency. The Lancet Regional Health – Southeast Asia.
- Intelhealth. (2022). eSanjeevani Jharkhand Impact Report. Retrieved from <https://intelehealth.org/eSanjeevani-Jharkhand-Impact-Report-2022.pdf> (intelehealth.org)
- Dastidar, B. G., et al. (2024). Reimagining India's National Telemedicine Service to improve access to care. PubMed Central (PMC).
- Scroll.in. (2023). India's landmark telemedicine initiative needs a revamp if it is to fulfil its potential. [India's landmark telemedicine initiative needs a revamp if it is to fulfil its potential](#)
- World Health Organization. (2023–2024). [Recommendations on digital interventions for health system strengthening](#).
- World Health Organization. (2021). Operational Guidance on Telemedicine [Consolidated telemedicine implementation guide](#)
- Dastidar, B.G. et al. – Lancet Southeast Asia (2024). *“Reimagining India's National Telemedicine Service to improve uptake and efficiency.”*
- National Health Systems Resource Centre. (2022). Evaluation of Teleconsultations at HWCs (2022).
- India's landmark telemedicine initiative needs a revamp if it is to fulfil its potential. (2023). Scroll.in. Retrieved from <https://scroll.in>
- Dastidar, B. G., et al. (2022, December). A virtual bridge to universal health care in India. Nature Medicine. <https://doi.org/10.1038/s41591-022-02100-2>
- Government of Odisha. (2024). FRA Odisha Report. Retrieved from Google Drive: [FRA Odisha Report_Final_03092024.pdf - Google Drive](#)
- Sahu, P. · Vashisht, K.R. · Agarwal, A. · et al. Navigating dermatological care: experience with assisted tele dermatology practice on e-Sanjeevani platform J Eur Acad Dermatol Venereol. 2024; 00:1-3
- Naskar A, Bhatte S, Verma N, et al. Improving the effectiveness of telemedicine in rural communities: reflecting on client and provider experience of eSanjeevani, Jharkhand. Popul Med. 2023.
- Edwards N, Black S. Targets: unintended and unanticipated effects. BMJ Qual Saf. 2023;32:697–699.
- Singh B, Basu R. Clinical decision support system (CDSS) for eSanjeevani. Healthcare in Fragile Contexts Challenge, MIT Solve. 2024. Available from: <https://solve.mit.edu/challenges/health-in-fragile-contexts-challenge/solutions/75300>
- Implementation of a standardized protocol for telehealth provider in triage to improve efficiency and ED throughput: a quality improvement project. Adv Emerg Nurs J. 2022;44:312–321.
- Barbosa W, Zhou K, Waddell E, et al. Improving access to care: telemedicine across medical domains. Annu Rev Public Health. 2021;42:463–481.
- World Health Organization. Going digital for noncommunicable diseases: the case for action. [New Task Force report “Going digital for noncommunicable diseases: the case for action”](#)