Telemedicine In Action: Transforming healthcare in LMICs









Webinar Agenda

S.No	Time	Details	Speaker/Moderator	
1	02.00 PM- 02.05 PM	Introductory Remarks	Dr. Karthik Adapa	
2	02.05 PM- 02.15 PM	Introduction to the webinar series What is telemedicine?	Dr. Neha Verma	
3	02.15 PM- 02.25 PM	Case Study 1: Telemedicine in Timor Leste - Building country readiness to deploy telemedicine	Dr. Vinay Bothra	
4	02.25 PM- 02.35 PM	Case Study 2: Telemedicine in Sri Lanka – Experiences of developing country guidelines and regulation for telemedicine	Dr. Gumindu Kalatunga	
5	02.35 PM- 02.45 PM	Case Study 3: Telemedicine in India - Experiences from implementing eSanjeevani, India's national telemedicine program	Shri Madhukar Kumar Bhagat	
6	02.45 PM- 02.55 PM	Q & A	Dr. Neha Verma	
7	02.55 PM- 03.00 PM	Closing Remarks	Dr. Neha Verma	

Webinar Faculty



Sri Madhukar Kumar Bhagat Sri Madhukar Kumar Bhagat is the Joint Secretary of e-Health in the Ministry of Health and Family Welfare. He is an IRS officer from the 1995 batch with extensive experience in digital technology. He played a key role in launching initiatives like the National Judicial Reference System, ePAN, and instant PAN. Nominated by CBDT as a country expert on information security to the OECD Global Forum, he is currently managing crucial e-health projects like e-Sanjeevani, e-Sushruta, e-Hospital, and AI research in health. Bhagat has authored 15 books and over 25 articles, including a series on COVID-19 projections.





Dr. Vinay Bothra

Dr. Vinay Bothra is a distinguished medical professional with extensive experience in healthcare management, clinical practice and public health. A former orthopedic surgeon, he moved into public health and has over two decades of experience in this field. Dr. Bothra has held significant roles, including working with the NHS (UK), and NHSRC (India), and currently serving as a Health Policy Advisor at WHO Timor-Leste



Dr. Neha Verma

Dr. Gumindu Kulatunga [MBBS, MSc, MD, MCGP)

Board-certified specialist medical doctor in health informatics and primary care physician with work experience in digital health as well as curative care. He functions as a consultant at the Health Information Unit, Ministry of Health Sri Lanka. His special interest areas are telemedicine, primary care and professional development. ORCID ID : https://orcid.org/0000-0003-2164-5361

Dr. Gumindu Kulatunga

Neha is the Co-founder and CEO of Intelehealth, a telemedicine technology non-profit that delivers health services where there is no doctor. She is an entrepreneur and medical information engineer. She earned an MS in Applied Health Sciences and a PhD in Health Informatics from the Johns Hopkins University School of Medicine. Neha is also an active contributor for Women@Forbes. writing about women in tech, product development, organizational strategy, social impact and nonprofits

Telemedicine In Action

Target Audience and Objectives

BRIDGING THE GAP: Telemedicine's Impact on Healthcare in Low- and Middle-Income Countries



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What is Telemedicine and How Are Health Systems Using it Globally? Primer for Health Systems Leaders.

March 6th, 2025 | 14.00 IST

Please join WHO and Intelehealth for the first webinar series of 2025 on Telemedicine and its benefits for LMICs. This session will explore ow telemedicine is transforming healthcare equity particularly in resource-limited settings. In this webinar, we will explore



Context : The rise of telemedicine has transformed healthcare delivery, especially in the wake of the COVID-19 pandemic and post COVID for improving access to healthcare. This webinar aims to provide healthcare policymakers and professionals with an understanding of telemedicine, its global applications, and how different health systems are using it to improve access, efficiency, and outcomes

Objectives: The goal is to familiarize healthcare leaders with the potential of telemedicine to address current challenges and opportunities within their own health systems.

Expected Outcomes: By the end of the webinar, participants will:

- Gain a foundational understanding of telemedicine and its key components.
- Learn about successful case studies of national and sub-national public sector telemedicine implementations from various regions.
- Understand the key policy and regulatory considerations for integrating telemedicine into national health system
- · Be equipped with practical insights to explore telemedicine solutions in their respective contexts.

This webinar will provide an opportunity for healthcare leaders to gain actionable insights into how telemedicine can be successfully integrated into their health systems, fostering improved access and quality of care for diverse populations.



Audience:

- •
- •
- Academia •
- •

Goals: At the end of this webinar series, health system leaders will understand how to incorporate telemedicine into national and sub-national public health systems.

Ministries of Health NGOs & Hospitals Medical professionals

Webinar Topics and Dates

S.No	Date	
1	6 March, 2025	What is Telemedicine and How Are Health Syst Leaders
2	10 April, 2025	Brick-and-mortar to Brick-and-click – Designin Telemedicine Programs
3	8 May, 2025	Evaluating telemedicine interventions: Evidence
4	5 June, 2025	Creating a Telemedicine-Ready Healthcare Wo
5	10 July, 2025	Telemedicine Policy: How Telemedicine is Regu
6	7 August, 2025	Choosing a Telemedicine Software: The case fo open-source Digital Public Goods (DPGs)
7	11 September, 2025	Ensuring Quality of Care & Patient safety in Tele
8	9 October, 2025	Telemedicine Adoption by Communities – How Citizens?
9	6 November, 2025	Artificial Intelligence and Machine Learning in T
10	4 December, 2025	Financing Telemedicine and ROI – The Business
11	8 January, 2026	Telemedicine use cases for health programs – P
12	5 February, 2026	Telemedicine use cases for health programs – P
13	12 March, 2026	Telemedicine use cases for health programs – P

Горіс

ems Using It Globally? A Primer for Health System

ig & Implementing Quality, Effective, and Impactful

e so far, and Methodologies

rkforce: Training for Healthcare Providers

lated in Asia

or standards-compliant, interoperable &

emedicine

[•] Might We Drive Uptake of Telemedicine (TM) by

elemedicine

Case for Telemedicine

Part 1 Applications for NCDs

Part 2 Applications for CDs

Part 3 Applications for RMNCAH

Objectives and Outcomes for Audience

BRIDGING THE GAP: Telemedicine's Impact on Healthcare in Low- and Middle-Income Countries



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- Learn from successful case studies of national and sub-national public • sector telemedicine implementations.
- Understand key policy and regulatory considerations for integrating • telemedicine into national health systems.
- Be equipped with practical insights to explore and implement ullettelemedicine solutions in your contexts.

Learn how telemedicine can address challenges and enhance health systems

Webinar 1: What is Telemedicine and How Are Health Systems Using It Globally? A Primer for Health System Leaders

Accessibility of health facilities and human resources for health: **CLIENT-TO-PROVIDER TELEMEDICINE**

Use of information and communication technologies to provide healthcare at a distance



3.5

3.4

Accessibility of health facilities and human resources for health: **PROVIDER-TO-PROVIDER TELEMEDICINE**

Insufficient supply of

qualified health workers

Delayed provision of care



Source: https://www.who.int/reproductivehealth/publications/digital-interventions-health-system-strengthening/en/

What is telemedicine?



Case Study 1 – Telemedicine in Timor Leste – Building country readiness to deploy Telemedicine– Dr. Vinay Bothra

"Wanting what others have"

Dr Vinay Bothra WHO Timor-Leste

The (non)case of Tele-medicine in Timor-Leste:

- Why we've missed out?
- What we want?
- How we plan to get there?

Country Profile





Source: Martins, N., Trevena, L.J. Implementing what works: a case study of integrated primary health care revitalisation in Timor-Leste. *Asia Pac Fam Med* **13**, 5 (2014). <u>https://doi.org/10.1186/1447-056X-13-5</u>

Why we've missed out?







What we want?

Neighbor's envy. Owner's pride.



How we plan to get there?



Case Study 2 - Telemedicine in Sri Lanka

intelehealth



Telemedicine in Action: Transforming healthcare for LMICs 6th March 2025.

Overview of Telemedicine in Sri Lanka

Experiences of developing country guidelines and regulation for Telemedicine

Dr. Gumindu Kulatunga MBBS, MSc, MD, MCGP **Board certified medical specialist in Health Informatics** HIU, Ministry of Health, Sri Lanka (gumindu@gmail.com), (ORCID)

Work Group member on Telemedicine, International Medical Informatics Association

Member - ISO TC 215 Taskforce on Telehealth and Virtual Care

Secretary of the Specialty Board in Bio-Medical Informatics, Postgraduate Institute of Medicine, University of Colombo

Sri Lanka's Context



- Population: 22 Million
- Size: 65610 km² , Urbanization: 18–20 %
- Life expectancy at birth <u>77 Years</u>
- Infant mortality <u>10 / per 1000 live births</u>
- Still Birth rates <u>6.5/per 1000</u> births
- Maternal Mortality <u>25 /per 100,000 live births</u>
- **Eradication of Malaria, Polio etc**
- Avg 5 km to free government healthcare institute
- Doctor to population ratio <u>12 for 10,000</u>
- Median age <u>33.1 years</u>
- **Rising** Elderly population and NCD

Current challenges in healthcare delivery



Lack of continuation of care and lack of information

Time and Travel costs seeking healthcare

Limited Access to Specialist Care in Rural Areas

Overburdened Healthcare Facilities in Urban Areas

Lack of Awareness on disease preventon



Factors affecting Telemedicine in Sri Lanka

Fixed Broadband and Mobile

Broadband Subscriptions

-Fixed BB ---- Mobile BB

- Smart Phone/Tab use <u>66%</u>

- Access to Electricity <u>99%</u>

- diseases with stigma
- Health Informatics as a medical specialty





20,000,000

15,000,000

10,000,000

5,000,000



Cellular Mobile Density (per 100 inhabitants) = <u>132</u>

- General Literacy Rate- <u>92%</u>
- Internet penetration rate <u>67%</u>

- High Mobile phone signal coverage
- Digital literacy (<u>57%</u>) (Urban –72%/ Rural –55%)
- More than state 100 hospitals with EMR systems
- Attraction to Telemedicine is related to specific

State Sector Digital Health Applications and Services

Categories	Examples
Clinical Informatics	HIMS, HHIMS, Cloud HIMS , Open MRS
Public Health Informatics	COVID 19 vaccination tracker and SVC, tracker, ePIMS (TB), Anti Malarial Camp MHMIS, eNIP, National Injury Surveillan Haemoglobinopathies Registry
Educational Informatics	Moodle based CPD
Administrative supportive informatics	HRMIS, Swastha logistics
Consumer Informatics	Telehealth applications

S Cluster HIS, PACS

elMMR, eRHMIS, Anti Leprosy patient baign Information System, E Surveillance, ice, Thalassemia Information Systems,

EMRs in the State sector

System	Hospital Health Information System (HHIMS)	Hospital Information Management System (HIMS)	Hospital Information Management System Cloud Module (HIMS Cloud)	OpenMRS Cluster HIS
Scope	Mainly District General Hospital and Base Hospitals	Mainly Teaching Hospitals	Mainly Primary Medical Care Units / HLCs	Cluster HIS (Pilot in Dambulla/ Thabuthegama)
Managed By	ICTA and Ministry of Health	Ministry of Health	Ministry of Health	Ministry of Health
No. of Institutions	100	9	500	31
No of registrations	11 million patients, 31 M encounters	8 million patients , 15 million encounters	2.3 million patients	Currently being Piloted





Cloud HIMS (500)

HHIMS (100), HIMS (9)



Cluster HIS (31)

Sri Lankan Telehealth Echo system



practices in Sri Lanka in the context of the COVID-19 pandemic. Sri Lanka Journal of Bio-Medical Informatics. 2020 Oct

Telehealth related Applications in Sri Lanka (State and Private sector)

















කොන්දේසි සහිතයි.



Telehealth solutions supporting COVID19 response

	Solution Name
COVID 19 hotlines (247, 1390 patients and hon	1390 – COVID19 helpline by the ministry of Health
	Sri Lanka Medical Association (SLMA) - 247 help line for COVOD 19 assistance
This Application by Mini Teleconsultati	"MyHealth Sri Lanka" Application by Ministry of Health
Telephone based hotline is	"Suwasariya" 1999 hot line by Health Promotion Bureau (HPB)
Hot line to m	1926 – National Institute of Mental Health- call centre
Ones like Odoc and Doc9 consultations and assisted	Private sector applications
Transportatio	"Suwa-seriya" Ambulance service 1990
Smart phone application to k sy	Self Shield App

Function

will assist for the triage of COVID 19 diagnosed ne management of minor conditions

stry of Health will coordinate free of charge on using private sector platforms

used for the Health Promotion of Sri Lankans.

anage psychological conditions.

90, eChanelling provided online audio/video in reducing unnecessary hospital admissions.

on assistance to nearest hospital

eep track of health and detect some of the early mptoms of COVID-19

Legislations affecting Telemedicine in SL

General Legislations affecting Telemedicine in SL

- Electronic Transactions Act No. 19 of 2006
- Information and Communication Technology Act No. 27 Of 2003 11.
- Computer Crime Act – No. 24 of 2007
- IV. Intellectual Property Act – No. 36 of 2003
- Right to Information Act, No. 12 of 2016 V.
- Personal Data Protection Act, No. 9 of 2022 VI.

Medical Legislations affecting Telemedicine in SL

- **Medical Ordinance** |.
- <u>National Medicines Regulatory Authority Act, No. 5 Of 2015</u>

Digital Health policies and guidelines affecting Telemedicine

- National Digital Health Guidelines and Standards v2 2021
- Information Security Guideline for Healthcare Institutions –2021
- 111. National Policy on health information – 2017
- Sri Lanka Digital Health Blueprint Architecture –2023 **İV.**
- **Telemedicine Guidelines 2024** V.

Digital Health Standards in Sri Lanka



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சுகாதார தகவல் மீதான தேசிய கொள்கை சுகாதார போசணை மற்றும் சுதேச வைத்திய அமைச்சு

The National Policy on Health Information Ministry of Health, Nutrition and Indigenous Medicine





NATIONAL DIGITAL HEALTH GUIDELINES AND STANDARDS [NDHGS] 2.0





Information Security Guideline for Healthcare Institutions (Draft) Version 1.0

January 2021

SRI LANKA DIGITAL HEALTH BLUEPRINT

MINISTRY OF HEALTH

Overview of the national mechanisms to link Digital health/Telemedicine for Healthcare

National Health Policy 2016-2025

> **Health Information Policy** 2016

> > **Digital Health Strategic** Plan

> > > **National Digital Health Guidelines and Standards**

> > > > National Digital Health **Blueprint Architecture**

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Doctor-offself

Telephone.

Circular Number : 01-17/2024

All Additional Secretaries, Director General of Health Service, All Deputy Director Generals of Health Service, All Provincial Directors of Health Service, All Regional Directors of Health Service, All Directors,

All Heads of Health Institutes/Heads of Specialized Campaigns,

National Telemedicine Guidelines

services. However, the absence of stand Sri Lanka poses significant challenges, patients through Telemedicine platforms Guidelines through collaborative e administrative, clinical and regulatory a safety, standardize practices and enhance country.

Therefore, it is advised to follow the Te (Annexure 01) for the planning, implem related digital health projects. For furt Information Unit of the MDPU.



Dr. P.G. Mahipala Secretary Health, Ministry of Health

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80691434

SUWASIRIPAYA සෞඛ්ෂ අමාත්සාංශය சுகாதார அமைச்சு Ministry of Health

Telemedicine/Telehealth modality have been used frequently in Sri Lanka for the healthcare delivery process since the COVID 19 pandemic. Also, Sri Lankan healthcare landscape continues to evolve, driven by advancements in technology and changing patient needs, Telemedicine/Telehealth has emerged as a vital tool in enhancing availability of healthcare

Telemedicine Guidelines for Sri Lanka Version 1.0 2024 Health Information Unit, Ministry of Health. Introduction to the necessity for Telemedicine Guidelines in Sri Lanka

Telehealth is the provision of healthcare remotely by means of telecommunications technology. Telehealth includes both curative and preventive aspects of healthcare delivery. Telemedicine, on the other hand, is the curative or the clinical part of Telehealth.

Annexure 01

Telemedicine applications rapidly grew globally as well as in Sri Lanka following the COVID-19 Pandemic situation. It became a solution to the delivery failures of traditional healthcare delivery models to comply with social distancing and travel restrictions. Even after the pandemic ended, the trend continued due to its convenience for patients as well as healthcare providers.

Guidelines development

A series of physical and online meetings were held by the Health Information Unit, Ministry of Health

with relevant stakeholders (Professional colleges, Medical Administrators, private sector Telemedicine

service providers, users and regulators) to develop the Telemedicine guidelines for Sri Lanka.









- Medical/Dental practitioners and others registered under SLMC and SLNC providing Telehealth services to Sri Lankans
- Telehealth platform administrating institutes within Sri Lanka
- Patients and the community in Sri Lanka



Guild to the Healthcare providers

- Will address only who are registered under the SLMC or SLNC
- Take informed patient consent and select suitable patients for services
- Only authorized Medical professional categories at SLMC shall prescribe medicines online
- Data elements in an online prescription.
- Certain limitations on prescribing controlled medications

Guide for the Platform administrators

- Use of UID the Personal Health Numbers (PHN) to register consumers/patients
- Ensure healthcare providers are duly registered with national medical councils
- Provide professional details of each healthcare provider
- Provide proper training to the staff
- Private provider companies needs to take registration at the PHSRC

Overall Key Objectives of Telemedicine Guidelines/Standards

Ensure	Ensure Quality of Care: Maintain high clinical
Protect	Protect Patient Privacy and Security: Complia
Facilitate	Facilitate Interoperability: Ensure compatibili systems.
Promote	Promote Accessibility and Usability: Ensure saccessible to all patients.

standards.

ance with international regulations

ty between different telehealth

services are user-friendly and

Challenges for expansion of Telehealth in Sri Lanka

- Unavailability of specific acts and regulations specific to Telemedicine
- Data security of personal data
- Lack of Interoperability of Telehealth applications
- Lack of guidelines on regulation of remote monitoring devices
- Poor knowledge on digital health modalities & Technophobia of Doctors
- Financial barriers for development
- Poor infrastructure /proper devices for rural community.
- Average ICT literacy (55%) in rural areas.
- Low ICT literacy in elderly people leading to digital divide









Case Study 3 - Telemedicine in India- Experiences from implementing eSanjeevani, India's national telemedicine program- Shri Madhukar Kumar Bhagat





DIGITAL HEALTH INNOVATION

IMPROVING ACCESSIBILITY & EQUITY IN HEALTHCARE





Presented by Madhukar Kumar Bhagat Joint Secretary (eHealth)





INITIATIVE	YEAR
National Health Policy	2017
Conceptualization of National Platform	2018
Design and Development	2019
Rollout	2019–20
Telemedicine Practice Guidelines	March 2020







Universal Health Coverage – A Global Goal

- Universal Health Coverage (UHC) A global goal to ensure accessible quality health services for everyone.
- Digital Health, by enabling UHC, accelerates progress towards 'good health' and 'well being' and ensures availability, accessibility, affordability and quality in healthcare service delivery.

India's Digital Health Vision

- Establishment of National Digital Health Ecosystem
- Citizen centric health service delivery ensuring Continuum of Care
- Ensuring creation of **longitudinal electronic health record** of patients • across health facilities for seamless data exchange (ABDM).
- Set-up pan-nation Telemedicine Network
- Optimal use of IT for surveillance & monitoring of programs
- Efficient use of IT tools for capacity building & training ullet
- Integration of national and state programs in a **common framework** ullet
- Promotion of standardization, interoperability and research in area like AI • & Medtech
- Ensure cyber security of **digital assets**. •





Focus Areas on Digital Health



Creating an Enabling Environment



Need for Governance Framework



Digital Health Policies & Strategies



Implementation & Capacity Building

India leveraging Digital Health for UHC







Telemedicine Genesis

Development of Telemedicine Technology (1999-2002)

State Level Telemedicine Network - Himachal Pradesh and Punjab (2005-2009)

International (bilateral) Implementations – Myanmar, Tanzania, Armenia and Kyrgyzstan (2008–2015)

Conceptualization & Rollout of eSanjeevani- National Telemedicine Service (2018-2020)



2

3

4







National Telemedicine Service (eSanjeevani)

- e-Sanjeevani: National Telemedicine Service of India is a step towards digital health equity to achieve Universal Health Coverage (UHC). eSanjeevani is implemented in two variants:
 - eSanjeevani AB- Ayushman Arogya Mandir (a provider-to-provider telemedicine platform): It enables the access of quality and specialized health services to rural and isolated populace in assisted mode.
 - eSanjeevani OPD (a patient to provider telemedicine platform): it empowers citizens to access health services in the confines of their homes through smartphones or laptops etc.









eSanjeevani – National Telemedicine Service





eSanjeevani AB-HWC: Provider-to-Provider Connects nurses at AAMs to doctors at PHC/CHC/Hospitals. Connects doctors







eSanjeevani OPD : Client-to-provider

Patients can directly connect with a doctor

via a mobile app









eSanjeevani (During COVID)

eSanjeevaniOPD Key Applications



- eSanjeevani issued comorbidity certificates to prioritize vaccinations and treatment for high-risk individuals.
- Facilitated consultations with specialists for critical patients, ensuring timely care despite lockdowns.
- Provided healthcare services to inmates through virtual consultations, avoiding physical visits.
- HIV/AIDS patients to access Enabled consultations, counseling, and prescriptions while ensuring confidentiality.
- Supported District Early Intervention Centres (DEICs) with virtual consultations for children with special needs.









Adoption

			No. of	consultations in
		J&K Ladakh		
		0.73	0.00	0.38
		Himachal Pradesh 0.50 Punjab 0.38 Uttarakhand 0.40 Haryana 0.38 Delhi 0.00		Sikkim 0.03
States	36	Rajasthan 1.53	ar Pradesh 32.89	Bihar 16.83 Jharkhand
		Gujarat Madhya Pradesh 8.60 5.29	Chhattisgarh	1.91 West Bengal 51.33
Districts	754		2.10	Odisha
	I	Goa 0.00 Karnataka 12.00		
		Lakshadweep 0.00	nil Nadu 45.49	A&N 0.00
		Kerala 1.04	Puducherry 0.00	







Impact





e-Sanjeevani is a living example of how the people of India have made technology a part of their lives.

Shri Narendra Modi Hon'ble Prime Minister of India

IMPACT

EASY ACCESS.

CONTACTLESS.

Each teleconsultation at Ayushman Arogya Mandir saves*:



A journey of 21.58 kms



Rs. 941.51 (US\$ 10.88) direct & indirect costs





FREE OF COST.



Cumulative cost savings of over US\$ 3.54 billion

*As an independent study

eSanjeevani is considered a climate intervention by the WHO

- Dr. Alain B. Labrique, from the WHO, highlighted at the ICT&health World Conference 2024 that India's eSanjeevani platform is considered a climate intervention by the WHO.
- Since 2019, the eSanjeevani platform has helped avert 4.4 billion kilometers of travel.
- On average, the platform has saved 21.6 kilometers of travel per consultation.





Impact of eSanjeevani

- · 21.59 km (13.36 miles) saved in distance travelled per consultation
 - INR 941.51 (US \$ 11.5) money saved per consult. Savings for women clients were 1.5 times more than for male clients
 - Cumulative cost saving of over US \$3.8 billion
 - 87% of clients received a prescription from the teledoctor. 88%
 - of these clients received medicine at the AAM post consultation
 - 60% patients reported having entirely recovered from their health problems, 25% reported partial recovery
- 75% are likely to use eSanjeevani services in the future

eSanjeevani-Jharkhand-Impact-Report-2022. pdf (intelehealth.org)







Source: A study conducted by an NGO in Jharkhand (2022) Stratified random sampling survey in 5 districts of Jharkhand -Sample size: 500 clients, 200 health providers (116 CHOs, and 13 doctors)



AI Based Differential Diagnosis & eOPD Recommendation



Patients visiting Community Health Officer at Ayushman Arogya Mandir



Symptoms collected using the Patient Assistance Form







Differential diagnosis Recommendation

eOPD Recommendation



AI Based Differential Diagnosis & eOPD Recommendation

SeSanjeevani National Telemedicine Service	Ministry of Health and Family Welfare Government of India	Azadi Ka Amrit Mahotsav	22 Ref Jours NEM		eOPD Rec outputs wi
CHO XXXXX XXXX HWC SC SVP COVID Hosp	pital Delhi (Delhi)	National Telemedic	ine Service		appropriate
Test 13/Female Patie	ent ID XXXXXXXXX Consultation II	D XXXXXXXXX AddressXXXX XXXXX XX	xxxx		
 Chief Complaints Fever Duration: Every seaso Cough 	2 onal change Onset of Fever: Slowly Inte	ensity of fever: High fever with shivering Temperature:	101	1	Chief Complaints *
Duration: Every seaso	nal change When in the day: Early Mornin	g Non stop Coughing: No, don't have continuous coug	h Aggravating Factors: Cold weather/ cold things		Q Type here for search
 ✓ History ✓ Active Medication 					Joint pain Fever
✓ Health Records					Common Colu
y Query					Diabetes Follow-Up
Select					Add to the list
 System Suggested 1. Respiratory Inf The purpose of the onumbering, 1 being 	d Differential Diagnosis Tection 2. Viral Fever 3. Puo diagnosis recommendations is to inform doctors an the highest.	- Pyrexia Of Unknown Origin d the final decision of the diagnosis should be made by the consu	ulting doctor alone.The recommendation is in the order of		Save & Next >
				R	ecommended Specialty:
Assists	doctors with d	ifferential diagnosis	recommendations	(The 'Recommended Specialty'

based on patient details like age, gender, and CHO-entered chief complaints.

commendations: Maps differential diagnosis with eOPD to guide CHOs in selecting the e specialty.



y' helps in choosing the appropriate specialty in uncertain situations, but it doesn't replace individual judgment.



eSanjeevani – National Telemedicine Service



SUPPORTING INDIA'S MARCH TOWARDS UNIVERSAL HEALTH COVERAGE

eSanjeevani - National Telemedicine Service of India is a cloud-based telemedicine platform for providing health services remotely across the length and breadth of the country. eSanjeevani is offering improved access to healthcare even in resource limited settings. This crown jewel of Digital India is bridging the digital health divide in the country.

Innovations

- Point of Care devices
- Follow-up consultations
- **AI-based CDSS**
- Real-time sharing of health records
- Case completion score
- Assistive aspects (upcoming)
- Speech to speech translation (upcoming)



eSanjeevani Features

Technology

- Point of Care devices •
- Cloud-based platform ٠
- Hub and Spoke model •
- Secure & Scalable technology •
- Multilingual interface •
- Unified interface for • telemedicine practitioners





Challenges Faced

- · Quality of services & rational use of telemedicine
- · Availability of doctors
- Patient trust in telemedicine services
- Provider knowledge and adoption to deliver telemedicine-based services
- Digital divide: Areas with limited internet connectivity cannot reliably benefit





New Developments & Way Forward







Risk module





Leveraging AI/ML for Data Analytics & Visualization



eSanjeevani, recognized as a Digital Global Good, is a core element of India Stack Global, revolutionizing digital healthcare delivery

Special Training as part of the project "Putting India's Telemedicine Health Care Model to Work during Disasters and Pandemics in the Indo-Pacific Project"

India–U.S. Triangular Development Partnership (TriDeP) Special Telemedicine Training, focused on everaging India's Telemedicine Health Care Model during disasters and pandemics in the Philippines

Specialized Training Programme in Digital Health, designed for participants from Nigeria

Diplomats from over 30 countries were sensitised on eSanjeevani - National Telemedicine Service and its impact





Scope of International collaboration





Scope of International collaboration



eSanjeevani - India's National Telemedicine Service is directly driving four Sustainable Development Goals





NATIONAL AWARD WINNER "Best Innovation in Pandemic" **Digital India Awards 2020** Conferred by Hon'ble President of India







DIGITAL GLOBAL GOOD indiastack.global www.indiastack.global

Integrations







Integrations under process















THANK YOU





Centre for Development of Advanced Computing

(A premier R&D agency of the Ministry of Electronics & IT, Govt. of India)



इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय MINISTRY OF ELECTR(N'CS F F F INFORMATION TECHNOLOGY

Additional resources

- WHO Guideline: Recommendations on digital interventions for health system strengthening • https://www.who.int/publications/i/item/9789241550505
- WHO Consolidated Telemedicine Implementation Guide: • https://www.who.int/publications/i/item/9789240059184
- Digital Health Foundation Course, Koita Foundation. Module 9: Telemedicine • https://www.koitafoundation.org/DHFC
- Understanding Telemedicine: A comprehensive glossary ullethttps://intelehealth.org/understanding-telemedicine-a-comprehensive-glossary/

Q@A Session



Thank You for Attending!

We greatly appreciate your participation in today's webinar. To help us improve future sessions and ensure we're meeting your needs, we would love to hear your thoughts.

Please take a few minutes to fill out our feedback form – your input is invaluable!

https://forms.gle/jNce5z7NKwunMadT9





Thank You for Joining Us!



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We Appreciate Your Time and Participation!