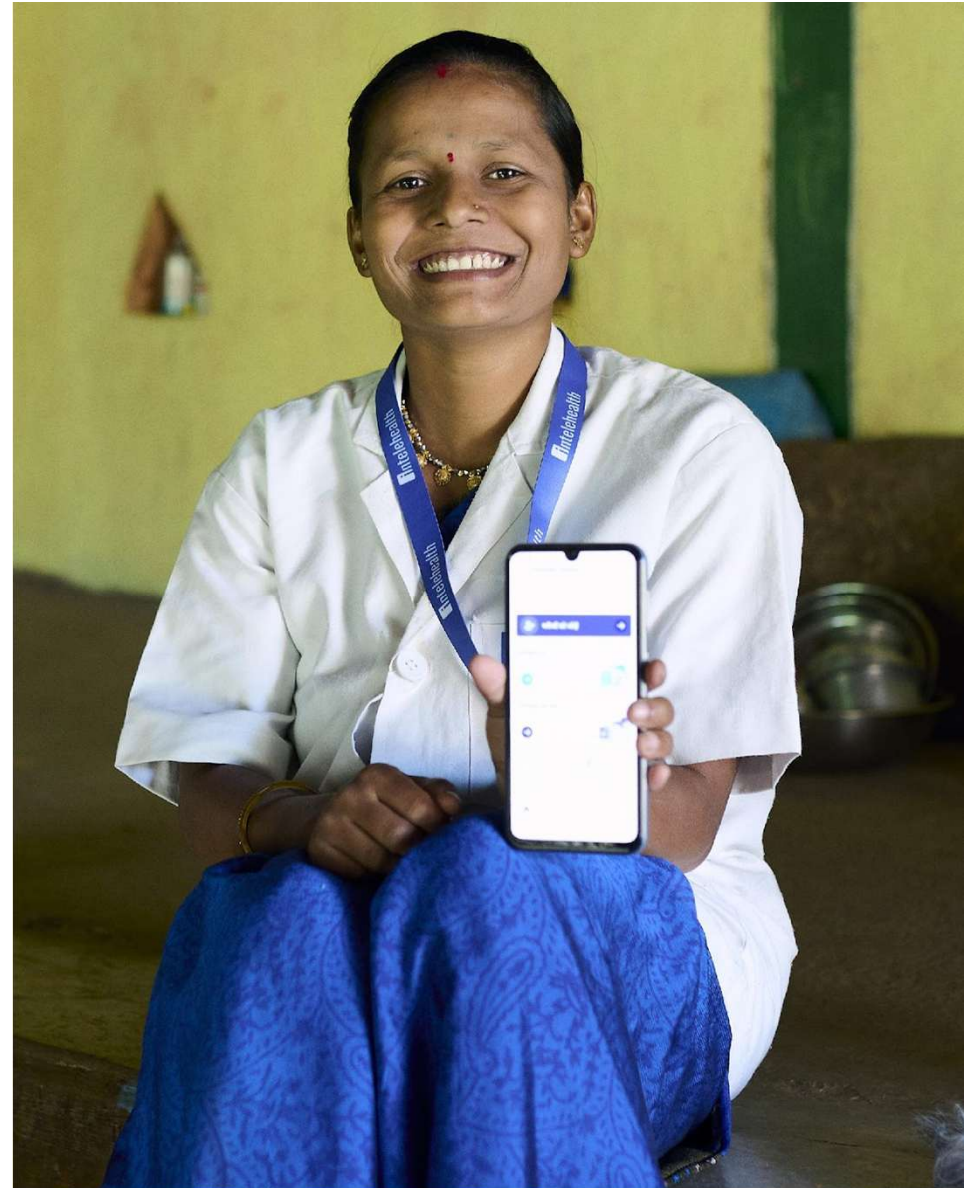


Telemedicine In Action: Transforming healthcare in LMICs



About the Webinar Series

Intelhealth is proud to collaborate with the WHO SEARO office to drive the future of telemedicine and transform healthcare equity in low- and middle-income countries. Together, we are launching a groundbreaking webinar series that will empower governments with the knowledge and tools needed to build sustainable, standards-compliant telemedicine programs.

Total Webinars: 13, will take place online on Zoom

Goal: By the end of the series, health system leaders will learn to integrate telemedicine into public health systems. We will also develop videos and literature to be published after each webinar or at the series' conclusion.

Target Audience:

Healthcare policymakers, healthcare professionals, public health leaders, digital health enthusiasts, and decision-makers in the South East Asia region and Globally.

- Ministry personnel
- Private sector organizations - NGOs & Hospitals
- Healthcare professionals - nurses, midwives, community health workers, doctors, pharmacists
- Donors & aid agencies

Webinar Agenda

S.No	Time	Details	Speaker/Moderator
1	02.00 PM- 02.10 PM	Introductory Remarks	Mr. Wayan Vota
2	02.10 PM- 02.20 PM	Telemedicine Policy: How Telemedicine is Regulated in Asia	Mr. Max Kintisch
3	02.20 PM- 02.30 PM	Telemedicine Policy: How Telemedicine is Regulated in Asia	Mr. Carl Fourie
4	02.30 PM- 02.40 PM	Telemedicine Policy: How Telemedicine is Regulated in Asia	Ms. Neeraja Reddy Karna
5	02.40 PM- 02.55 PM	Wrap Up	Mr. Wayan Vota
6	02.55 PM - 03.20 PM	Q&A	Mr. Wayan Vota
7	03.20 PM - 03.30PM	Closing Remarks	Mr. Wayan Vota

Webinar Faculty



Mr. Carl Fourie

Carl Fourie designs systems that empower people through resilient, scalable digital infrastructure. He has over 20 years of experience in global health, open source, localisation, and capacity development. He contributed to the development of interoperability standards, compliance frameworks, and drives strategy behind Global Goods as critical enablers of national-scale systems. This includes authoring the Global Goods Ecosystem Report and shaping sustainable investment models that bridge open source and digital public infrastructure (DPI).



Mr. Max Kintisch

Max Kintisch is the Director of Research at the Digital Public Goods Alliance (DPGA), where he leads research and evidence generation to support the adoption of open-source digital solutions that advance the Sustainable Development Goals. With a background in science journalism and digital strategy, Max brings a unique lens to the intersection of technology, equity, and global development. At the DPGA, he focuses on identifying impactful digital public goods, evaluating their real-world applications, and supporting countries and partners in scaling these tools to improve health, education, and other critical sectors.



**Ms. Neeraja Reddy
Karna**

Neeraja Reddy Karna is the Vice President of Engineering at Intelhealth, where she leads the platform's technical vision and development efforts. With over 16 years of experience in the software industry, she has progressed through roles such as Senior Engineering Manager, Senior Technology Architect, and Mobility Specialist—working across companies like Infosys, Cognizant, Optum, and Electronic Arts before joining Intelhealth.

Known as a strategic technology executive, she drives innovation and product delivery for scalable, last-mile health solutions via Intelhealth's open-source telemedicine platform.

Choosing a Telemedicine Software: The case for standards-compliant,
interoperable & open-source Digital Public Goods (DPGs)

Objectives and Outcomes

Objectives:

The session will focus on existing DPG telemedicine platforms, their use cases, and the benefits of adopting non-proprietary, community-driven solutions to enhance healthcare delivery, particularly in resource-constrained settings.

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

- Gain a clear understanding of Digital Public Goods and their role in enhancing global health systems
- Learn about leading DPG telemedicine platforms and their real-world applications in improving healthcare access and quality.
- Understand the steps needed to implement, scale, and sustain telemedicine DPGs in diverse settings.
- Take away actionable insights on how healthcare systems can benefit from adopting open-source telemedicine platforms for greater accessibility and efficiency.



Speaker I

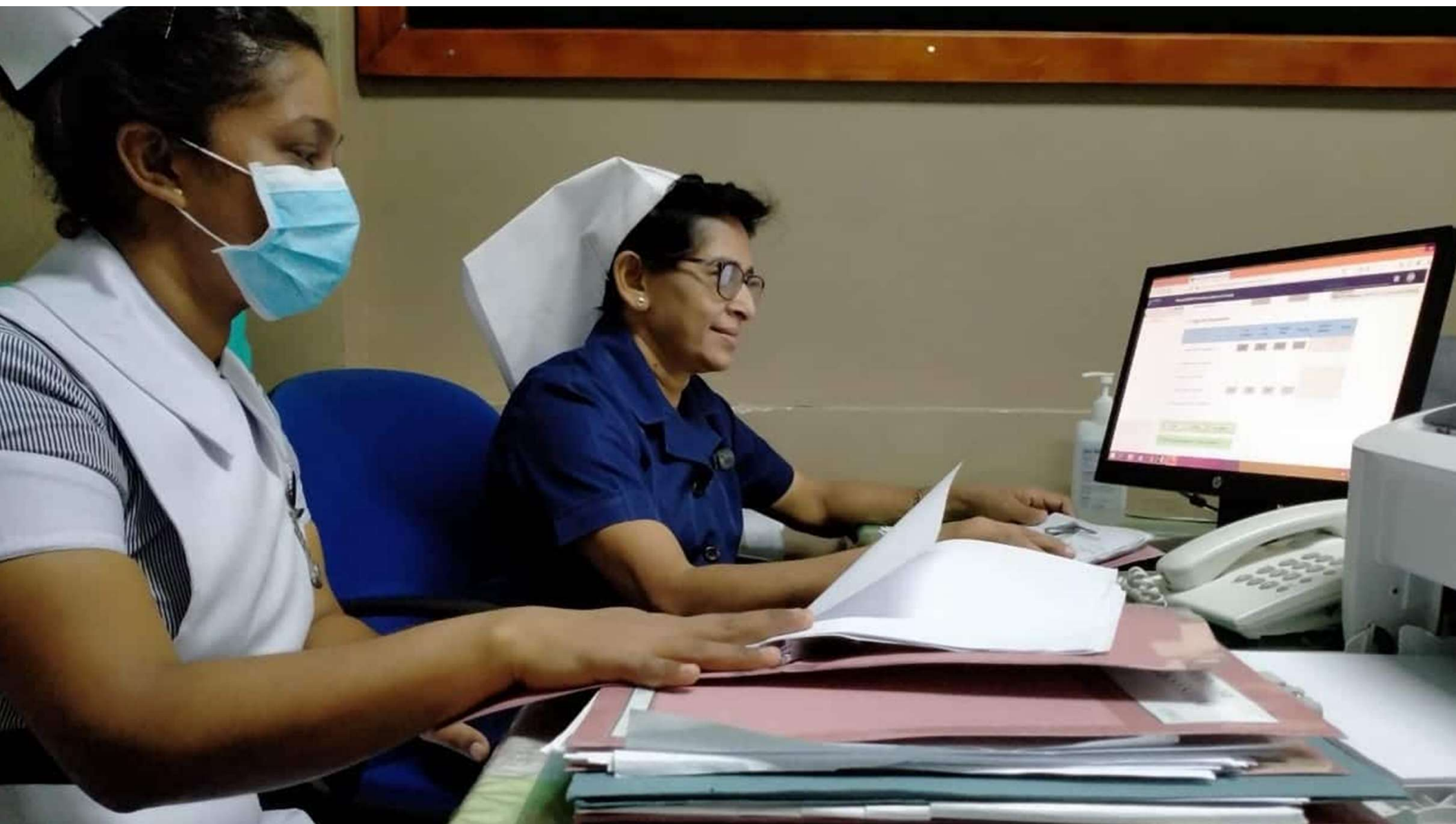


Digital
Public
Goods
Alliance

Leveraging Digital Public Goods to address global health needs

Max Kintisch

Director of Research | Digital Public Goods Alliance





Maintainer
University of
Oslo



Contributor/
User
Sri Lanka

51

COVID-19
Surveillance
Package

73

countries



30%

of the worlds
population

“

We must undertake a concerted global effort to encourage and invest in the creation of digital public goods: **open source software, open data, open AI models, open standards and open content.**

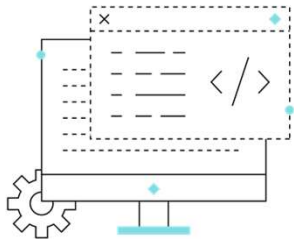
These **digital public goods** should adhere to privacy and other applicable laws and best practices, do no harm, and help attain the **SDGs**.

United Nations Secretary-General António Guterres
Roadmap for Digital Cooperation

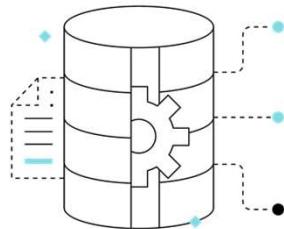
About Digital Public Goods

DPGs include open-source software, open data sets, open content collections and open AI systems that adhere to privacy and other applicable laws and best practices, do no harm, and help attain the Sustainable Development Goals (SDGs) and otherwise comply with the DPG Standard.

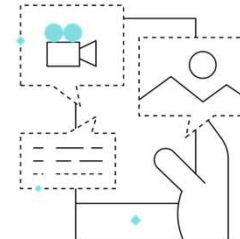
01 Open-source Software



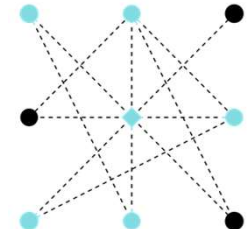
02 Open Data Sets

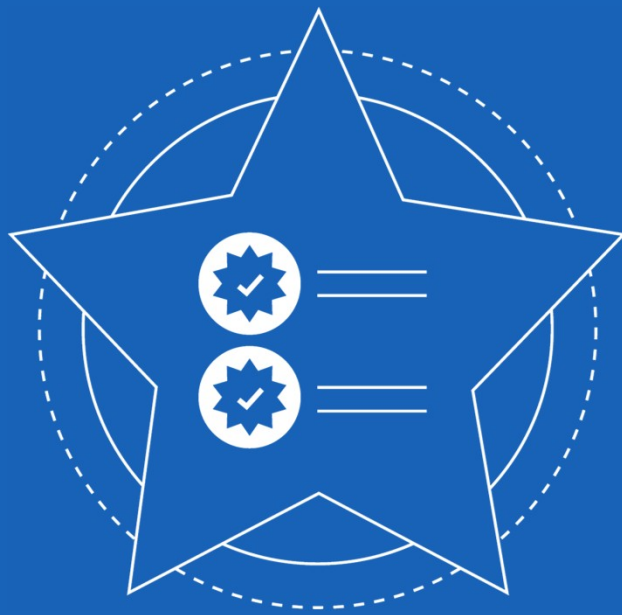


03 Open Content Collections



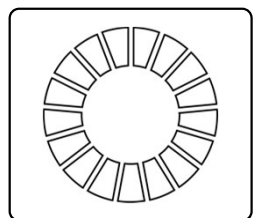
04 Open AI Systems



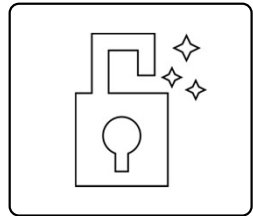


The **DPG Standard** is a set of specifications and guidelines designed to maximise consensus about whether a digital solution conforms to the definition of a digital public good.

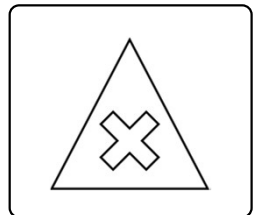
DPG Standard



Advance the SDGs



Open Source



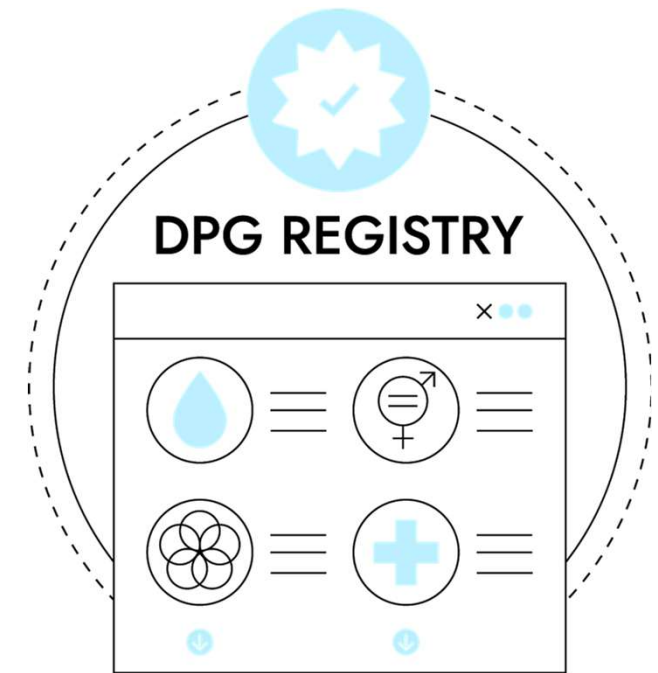
Do No Harm

- 01 Relevance to Sustainable Development Goals
- 02 Use of Approved Open Licenses
- 03 Clear Ownership
- 04 Platform Independence
- 05 Documentation
- 06 Mechanism for Extracting Data
- 07 Adherence to Privacy and Applicable Laws
- 08 Adherence to Standards & Best Practices
- 09 Do No Harm

DPG Registry

The DPG Registry lists all of the digital solutions that have applied for DPG recognition and have been proven to meet the DPG Standard.

It's a global resource to support governments, international organisations and other stakeholders to discover open-source solutions that are designed to support the attainment of the Sustainable Development Goals.



Exemplary telemedical solutions



OpenTeleRehab

OpenTeleRehab connects rehabilitation professionals with service users to improve access to rehabilitation services and contribute to universal health coverage by facilitating discharge, transition of care and follow-up



HCW@Home

HCW@Home is a scalable, institution-level secure teleconsultation system for typical telemedicine scenarios, achieved through close collaboration with healthcare professionals. It is fully open-source and offers integrated features for chat, audio, and video calls using WebRTC.



Bisa Health

Bisa is a health application that allows the public to receive health information and communicate with doctors.

Why DPGs?

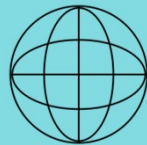
01

Open-source and accessible, meaning that any country can freely adopt and adapt them for their specific needs.



02

Give countries greater control over how they build and enhance their digital public infrastructure.



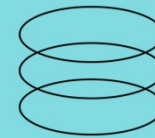
03

Customizable, enabling countries to create more inclusive digital solutions tailored to their local context.



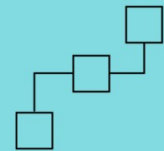
04

Often cheaper and faster to implement than proprietary solutions, allowing countries to avoid vendor lock-in and high costs associated with proprietary software licenses and updates.



05

Catalyze local tech ecosystems, leading to economic growth, job creation, and multi-stakeholder collaboration on tech development.



Thank you



Digital
Public
Goods
Alliance

Max Kintisch

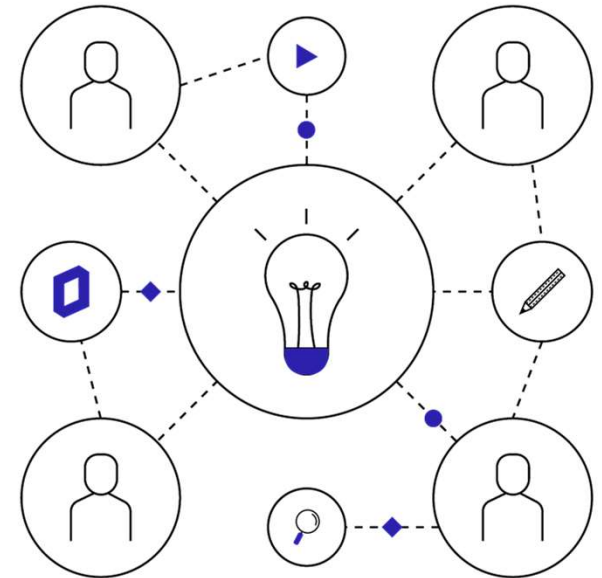
max@digitalpublicgoods.net

01

About the DPGA

About the DPGA

The Digital Public Goods Alliance (DPGA) is a UN-endorsed, multi-stakeholder initiative that brings together countries and organisations from all over the world, with the mission to **facilitate the discovery, development, use of, and investment in digital public goods in order to accelerate attainment of the Sustainable Development Goals.**



About DPGA Members

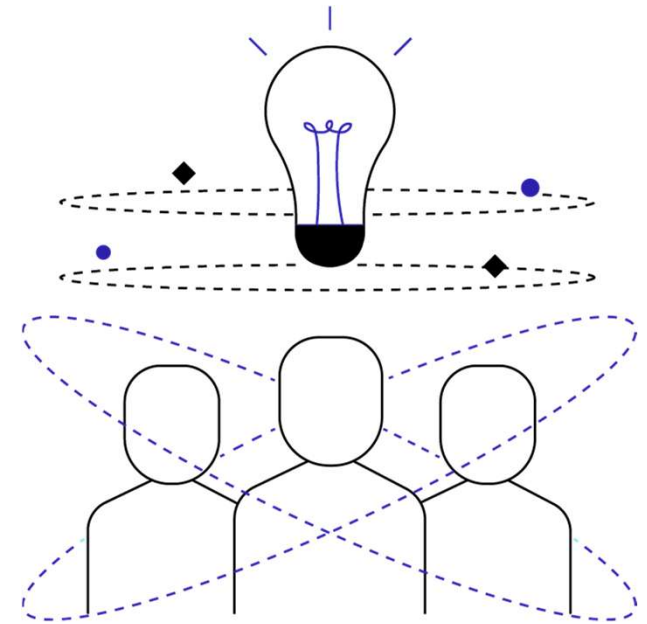
The Digital Public Goods Alliance is a vibrant **global community of national governments, multilaterals and international non- and for-profit organisations** aligned around a shared vision for digital cooperation and accelerating attainment of the **SDGs** through **digital public goods**.

Identified for their leadership in the **DPG-ecosystem**, member organisations contribute significantly to advancing the discovery, development, use of, and investment in DPGs.

- **Meaningful Relationships**

- **Multilateral Knowledge Exchanges**

- **New Collaborations**

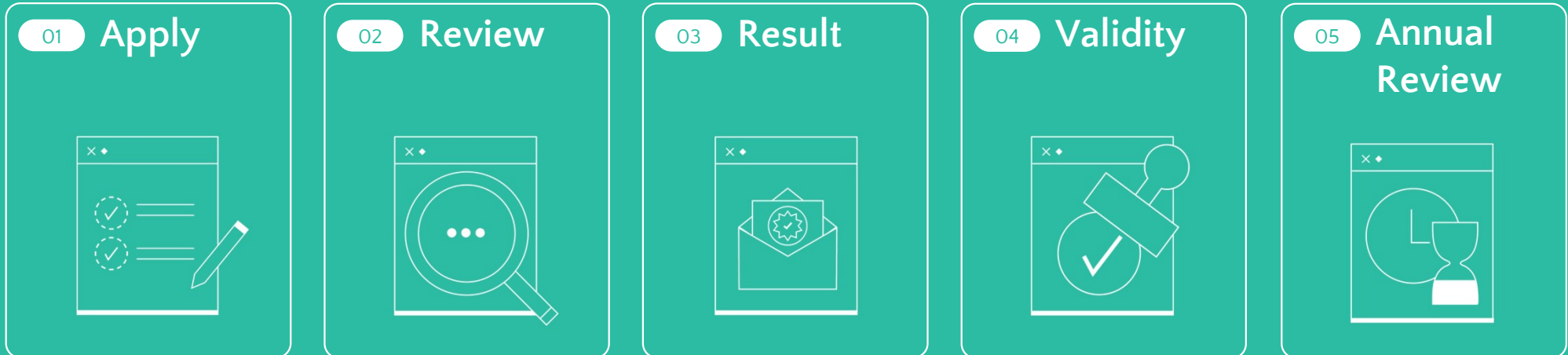


07

How to Become a DPG?

How to become a DPG?

Understanding how digital solutions receive **DPG recognition**.



How to become a DPG?

01

Apply

Use a custom application to guide you through the requirements.

02

Review

DPGA Secretariat's technical team will review the application in detail against all the indicators of the DPG Standard to ensure adherence.

03

Result

If the application meets all the requirements of the DPG Standard, it is recognised as a digital public good and featured on the DPG Registry. The DPG owner then joins the DPG Product Owners community.



04

Validity

DPG status is valid for one year from its approval and applications undergo an annual review process to ensure that all solutions continue to comply with the DPG Standard.

05

Annual Review

In case the solution fails to continue to meet the DPG Standard, the solution is removed from the DPG Registry.

Speaker II

Three red geometric shapes are arranged vertically on a light gray background. The top shape is a rectangle. The middle shape is a regular hexagon. The bottom shape is a semi-circle.

PATH
▶◊::▲○◆//人□○

What We've Learned from 6+ Years of Investing in DPGs

Spent many years supporting / identifying Global Goods

Invested over \$71 Million

Worked with over 120 different partners

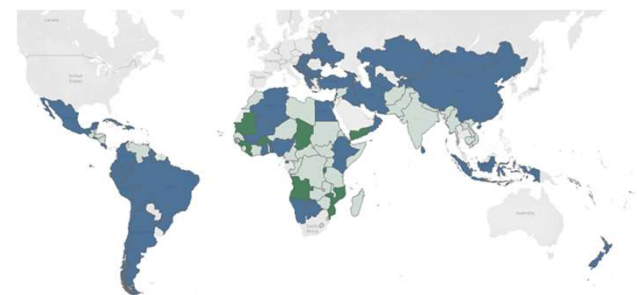
Global Goods reviewed and invested in

Built Digital Capacity

Coordinated and supported 4 regional networks

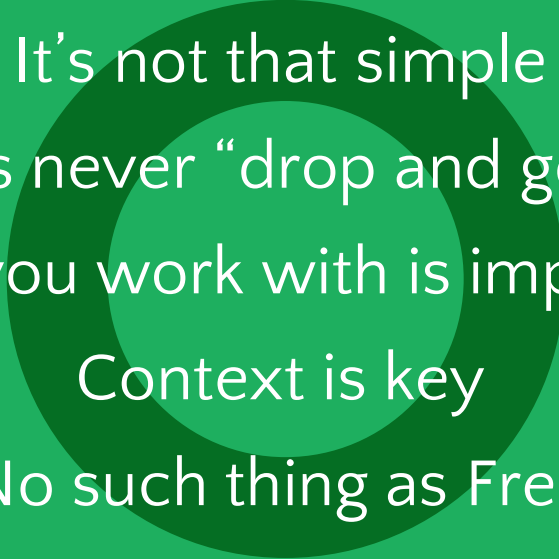
Real-world implementation experience across Africa & Asia

Emphasis on standards, interoperability, and sustainability



Featured Digital Square Resources





It's not that simple
Its never "drop and go"
Who you work with is important
Context is key
No such thing as Free

Open-Source != Free Software



Open source is like a free puppy. The real costs come after adoption.”

You get the Bricks, Not the House

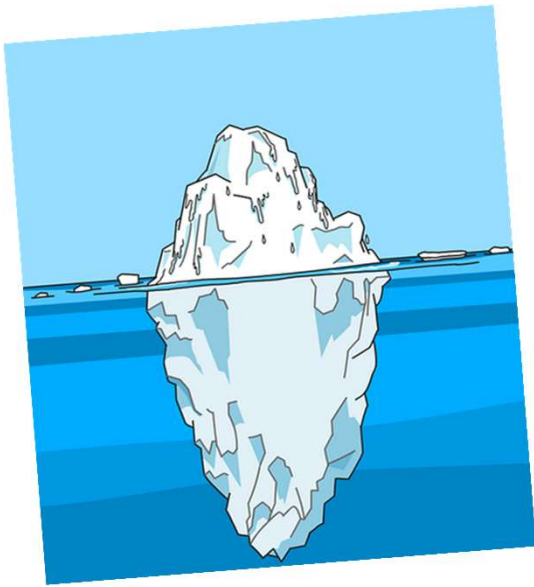


Open source gives you the bricks, not the house.

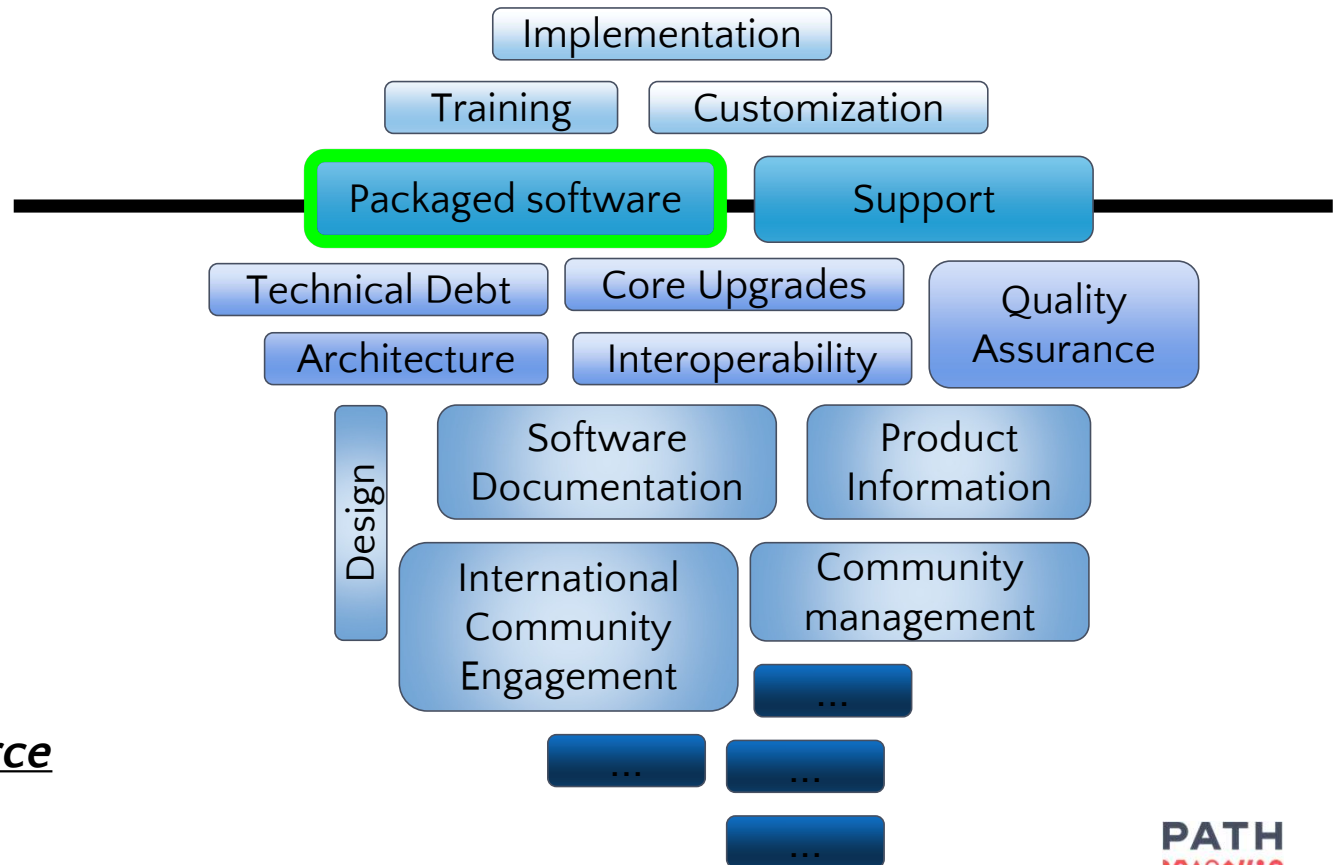
You need architects, engineers, and investment to build

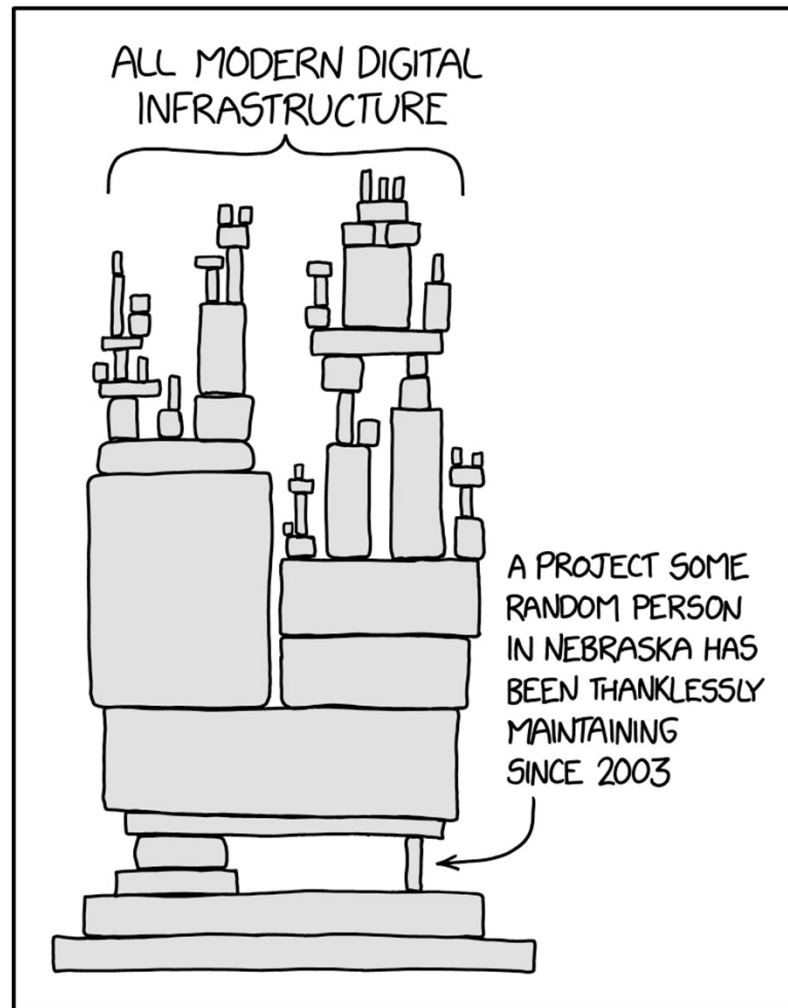
Open code still requires capacity and planning to implement

The Iceberg of Software Deployment



Hidden Costs of Open Source
tools





<https://xkcd.com/2347>

Standards ≠ Solutions

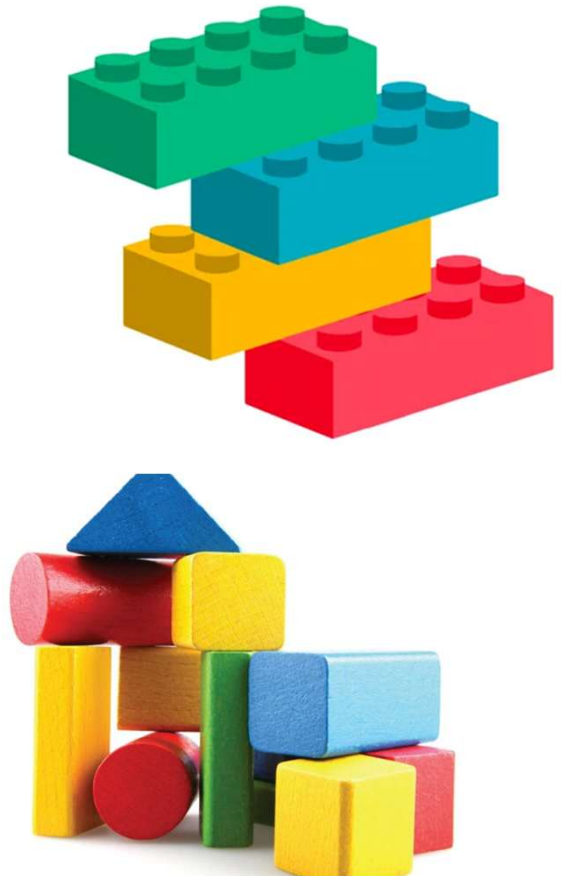
Standards are like LEGO bricks

They enable integration, not solve problems alone

They need to fit your context

They are not automatic and need skills!

Beware the hidden costs.



Context is King – No One Size Fits All

Some sizes fit most

Life is different, goals and context are different

There is always a cost to adopt.

OSS Gives you more of a choice





Thank you

Speaker III



Antelehealth

We Deliver Quality Healthcare Where There Is No Doctor!



Half the world lacks access to essential health services.

But especially women, 6 out of 10 women forgo or delay seeking healthcare

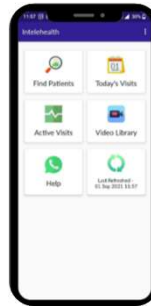
Our Solution

We work with governments and NGOs to set up **high-impact last mile telemedicine projects**, to dramatically improve **health access for women**.



We Offer An Open-source & Cloud-based **Technology** Platform

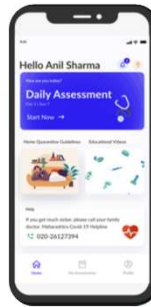
Intelehealth's **high-quality telemedicine software** supports patients and frontline health workers with **direct connections** to skilled medical experts.



INTELEHEALTH

Provider-to-Provider App

Connects patients with remote doctors via frontline health workers.



INTELECARE

Direct-to-Patient App

Home-based care video consultations with a remote doctor.



INTELEHELP

Direct-to-Patient Helpline

Creates virtual call centers to receive queries.

The Intelhealth Product



PROBLEM

No doctors in rural areas

HWs struggle with triage

Language barriers

Implementation challenges







INTELEHEALTH BENEFIT

Connects via HW to remote MD

AI + Protocols guide HWs

15-language Support

Proven 6-step Model

-  **Low bandwidth?** No problem – Offline-first design ensures teleconsults even without internet.
-  **Digital Assistant** – Assists the doctor in diagnosis and recommending a treatment plan
-  **Video Calling** – Enables real-time consults with patients, optimized for low bandwidth
-  **Built-in diagnostics** – Integrates with 60+ PoC devices for actionable results, not just records.

The Intelhealth Product

Open Source License	✓ Yes, Intelhealth's codebase is open source (usually on GitHub)
Open Access	✓ Freely available to governments, NGOs, and implementers
Relevance to SDGs	✓ Strong alignment with SDG 3 (Good Health & Well-Being), SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities)
Documentation	✓ Technical documentation available on wiki
Evidence of Use	✓ Deployed in 30+ projects across India and globally; supports 86M+ population coverage
No Harm	✓ Designed with ethical safeguards, task-shifting support, and low-literacy users in mind
Privacy & Data Protection	✓ SSL encryption, role-based access, HIPAA/GDPR-aligned practices
Interoperability	✓ Supports HL7, FHIR APIs
Replicability & Scalability	✓ Proven 6-step implementation model; scalable from districts to states to countries

Data Security, Hosting, and Privacy Compliance

DATA SECURITY

End-to-End Encryption

Role-Based Access Control (RBAC)

Audit Logging & Monitoring

JWT Token-Based Authentication

Data Integrity Measures

HOSTING & INFRASTRUCTURE

Cloud-Agnostic Deployment

Geographically Compliant Data Centers

High Availability & Disaster Recovery

Containerized Architecture

PRIVACY & COMPLIANCE

FHIR & OpenHIE Standards Compliant

Adheres to global and national healthcare data protection regulations.

User Consent Management

Data Anonymization & De-identification

Powered By A **Digital Assistant** To Support Task-Shifting

11:58 69%

Jayashree Dhir
F/47 Y

2/4 Visit reason

What is the reason for this visit?
Select one or multiple reasons

Type or select reason eg. Fever

Selected reasons

Abdominal Pain

All reasons

A

Abdominal Pain Abnormal Bleeding

B

Animal bites & Insect stings

Back & Neck pain Blood in stool or Black stool

Breast complaints Burns

Back Next →

11:59 69%

Jayashree Dhir
F/47 Y

2/4 Visit reason : Abdominal Pain

How severe is the pain?
Select any one

Mild, 1-3 Moderate, 4-6 Severe, 7-9

Very Severe, 10

8 of 12 questions

What worsens the pain?
Select one or more

Hunger Food Urination Pressure

Movement Coughing Straining

Other [describe] None Don't know/Unsure

Submit

12:03 68%

Visit Summary

Reason for visit

Chief complaint(s) [Change]

Abdominal Pain

Details [Change]

Abdominal Pain:

- Site - Upper (R) - Right Hypochondrium.
- Pain radiates to - Right shoulder, Right scapula.
- 10 Days.
- Onset - Gradual.
- Timing - Increases after a meal.
- Character of the pain - Colicky / Intermittent (comes & goes).
- Severity - Moderate, 4-6.
- Exacerbating Factors - Food.
- Relieving Factors - Vomiting, medications like Tramadol.
- Prior treatment sought - None.
- Associated symptoms:
- Patient denies - Fever

Associated symptoms [Change]

Patient reports
No data added.

Patient denies
No data added.

Appointment Send visit

100+ Clinical Protocols
for history taking, physical examination and clinical decision support for common conditions.

15 Languages
Support health workers and patients with evidence-based workflows in their own language

AI-enabled Decision Support
Use the structured data from the assistant to train AI models for AI-enabled decision support

Configurable & Pluggable System Design

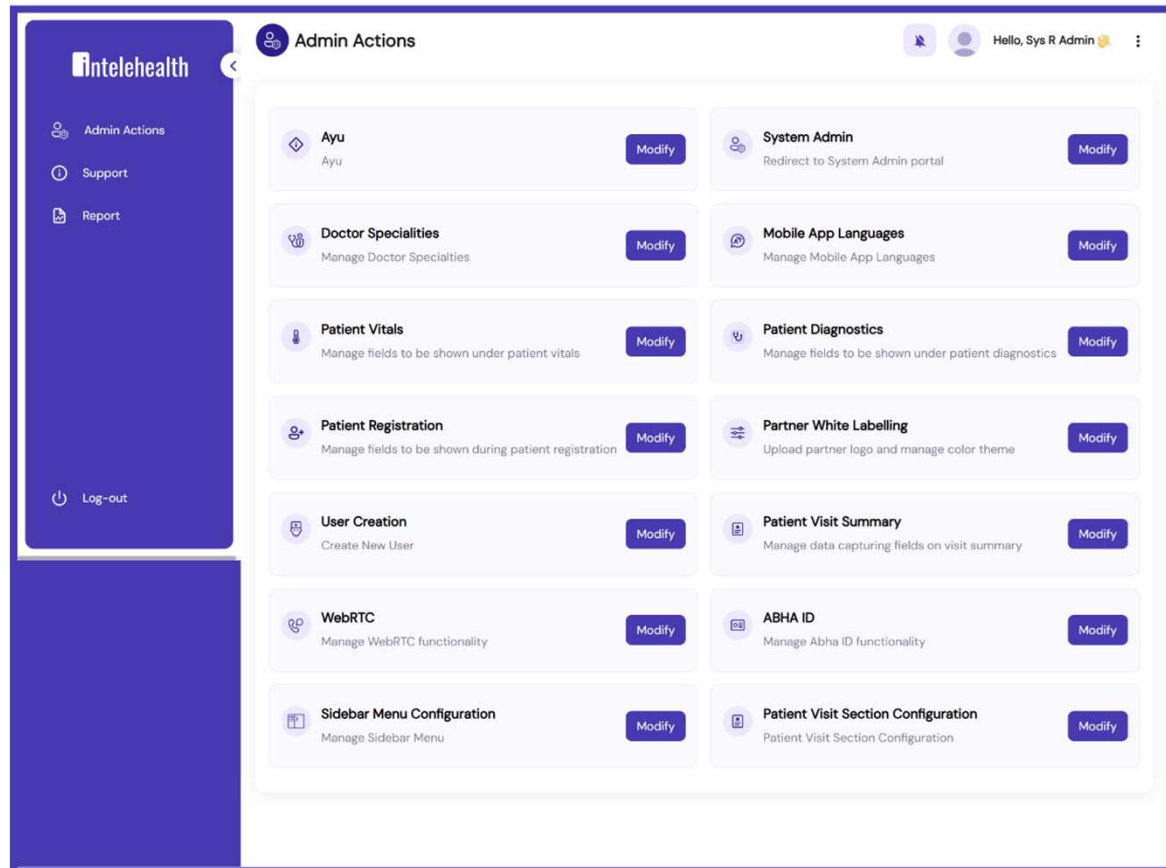
Configurability: Admin panel allows stakeholders to control feature visibility and inclusion in builds.

Pluggability: Modular integration via AAR (mobile) & JAR (web) enables dynamic, scalable feature management.

Configurable Features

Some of the key features that can be managed through the admin panel include:

- Doctor Specialties
- Patient Vitals
- Patient Registration
- Patient Visit Summary
- WebRTC
- Mobile App Languages
- Appointments
- Partner White Labeling
- Patient Visit Section Configuration, and more.



Interoperability – FHIR-Compatible & OpenHIE Standards Compliant

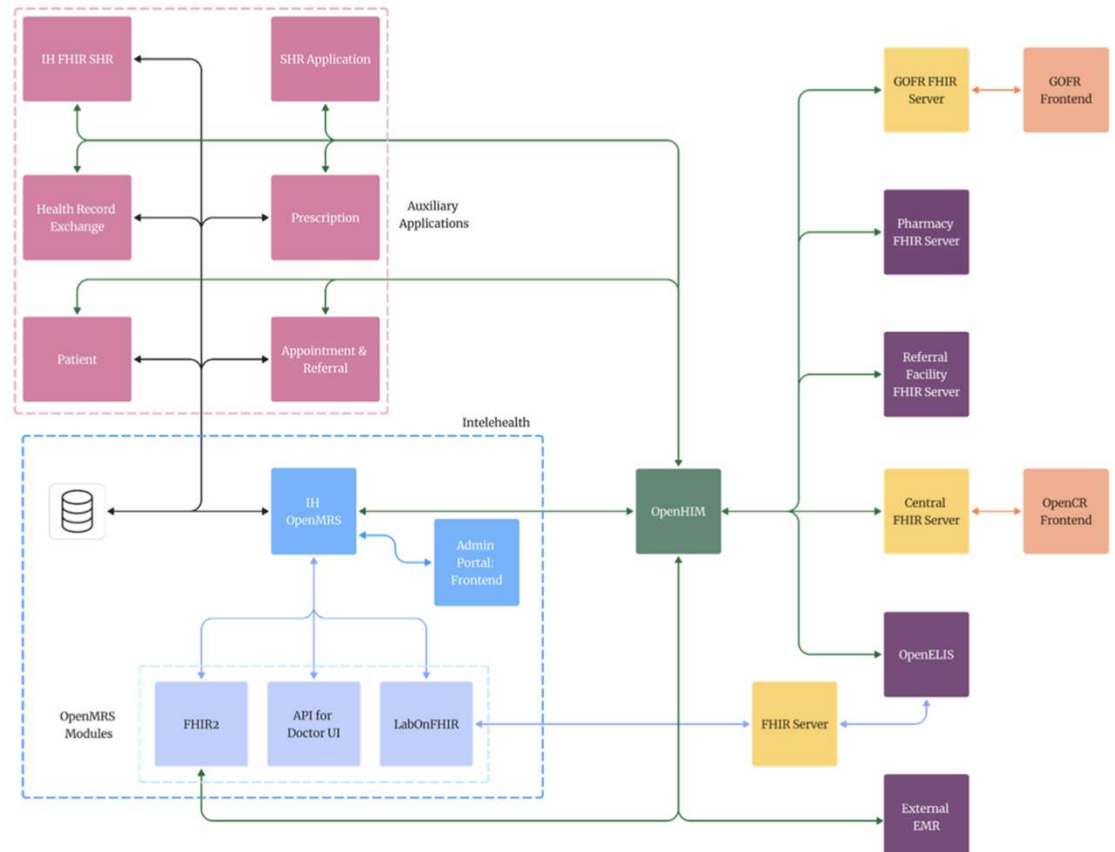
Interoperability: Uses FHIR & OpenHIE for seamless data exchange across healthcare systems.

Scalability: Supports 6 use cases, maximizing system connectivity.

Modular Design: Java microservices run independently, configurable via the Admin portal.

OpenHIM Middleware: Routes health data between source and target systems.

Lab Integration: LabOnFHIR in OpenMRS connects to FHIR servers linked to OpenELIS.

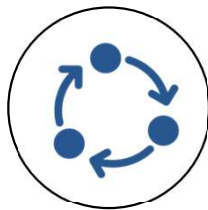


Tech Solutions Need **Implementation** Models

75% of telemedicine initiatives fail due to poor execution.

“The Intelhealth team increased the volume of teleconsultations by 5x.”

Outreach & messaging to drive behavior change



Day-to-day operations support for tech adoption

Reporting to evaluate success



Monitoring progress via dashboards



Intelehealth Provides End-To-End Solutions From Implementation, Product, And Policy To Improve Healthcare

6 STEP-IMPLEMENTATION MODEL



Step 1: Program Design & Readiness

Step 2: Supply Side Strengthening

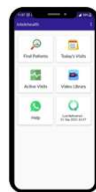
Step 3: Demand Side Strengthening

Step 4: Quality Assurance

Step 5: Monitoring Learning Evaluation

Step 6: Capacity Building

PRODUCT



Intelhealth Provider-to-Provider App

Connects lower level providers with higher level providers, eg: health workers to GPs



Intelcare Direct-to-Patient App

Home-based care video consultations with a remote doctor



Intelhelp Direct-to-Patient Helpline

Creates virtual call centers to receive queries.

When partners utilize the eSanjeevani app, we help implement a similar process

POLICY ADVOCACY



- ✓ Effective Program Design
- ✓ Regulation of Telemedicine
- ✓ Financing Telemedicine
- ✓ Return on Investment Analysis
- ✓ Evaluation Frameworks for Telemedicine
- ✓ Policy Briefs for Effective Implementation

Achievements Till 2025

Completed more than 13M
teleconsultations

>86 Mn population
covered in India

Each teleconsultations
saves \$11 for patients

Supported 18,000
HWs and 10,000 doctors



Replicable & scalable model for
training & implementation

500,000 lines of codes &
>150 features for
mobile/web applications

Innovation lab to explore new
processes, trainings & use of AI

Completed 30 projects
majorly in 3 India States:
Jharkhand, Odisha and Karnataka

Recognition And Value For Patients

Last year our work and data analyzed was highlighted in the Lok Sabha session by Dr. Mansukh L Mandaviya, Health & Family Welfare Minister stating

“One teleconsultation saves Rs 914 (\$11) as it reduces travel for the patients and their family/friends”

- ✓ **80% of clients** have improved health outcome
- ✓ Each visit saves them **21.59 km** in travel
- ✓ **9 in 10 women** now get to care **within 8 hours**
- ✓ **\$1 invested** in telemedicine gives a **\$19 ROI** for health systems!

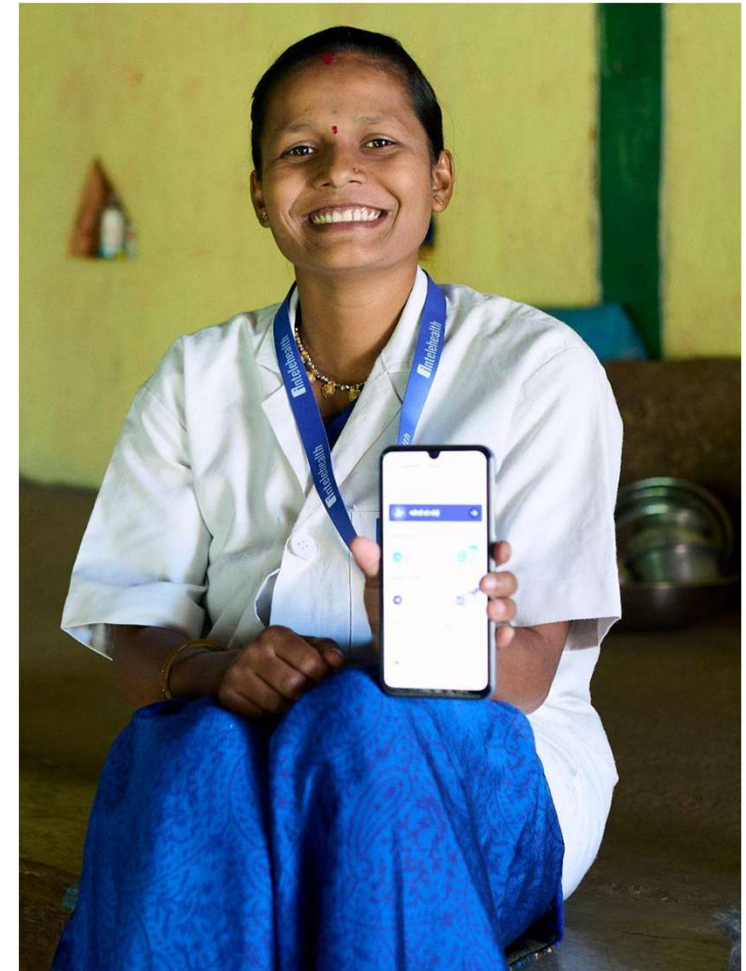
Notes

(1) Study conducted with 300 patients in 2024

(2) Studies conducted with 2000 patients from 2018 to 2022

(3) Study conducted in Nashik with 200 women

(4) UN-WHO Report “Going Digital for Noncommunicable diseases: The Case for action”



Community Resources

Community Resources:

Click to check more details.

[Github](#)

[Community Slack Channel](#)

[Intelehealth Wiki](#)

TECH STACK



MANAGEMENT STACK



DEVELOPMENT STACK



DEPLOYMENT ENVIRONMENT



Conclusion: Telemedicine Can Be A Crucial Role In LMIC's Through Transforming Health Equity



WHO SEARO + Intellehealth webinar series

www.intellehealth.org/webinars

Objectives:

Learn how telemedicine can address challenges and enhance health systems

Expected Outcomes:

By the end of the session, participants will:

- Gain a foundational understanding of telemedicine and its key components.
- 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 telemedicine solutions in your contexts.



Telemedicine in Action: Transforming healthcare for LMICs

Choosing a Telemedicine Software: The case for standards-compliant, interoperable & open-source Digital Public Goods (DPGs)

August 7th, 2025, 14.00 IST

Context: One of the most important aspects of a telemedicine program is selecting the right software. Health system leaders have a choice between "build or buy", as well as a choice of multiple software products. This webinar will introduce healthcare policymakers and professionals to the concept of Digital Public Goods (DPGs) in the context of telemedicine software. DPGs are open-source tools designed to improve global health equity by offering accessible, customizable, and interoperable digital health solutions.

Objectives: The session will focus on existing DPG telemedicine platforms, their use cases, and the benefits of adopting non-proprietary, community-driven solutions to enhance healthcare delivery, particularly in resource-constrained settings.

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

- Gain a clear understanding of Digital Public Goods and their role in enhancing global health systems.
- Learn about leading DPG telemedicine platforms and their real-world applications in improving healthcare access and quality.
- Understand the steps needed to implement, scale, and sustain telemedicine DPGs in diverse settings.
- Understand the cost of implementing DPGs and how open-source does not mean "free"
- Take away actionable insights on how healthcare systems can benefit from adopting open-source telemedicine platforms for greater accessibility and efficiency.

LIST OF SPEAKERS



Mr. Carl Fourie
Digital Health & Care Strategist
Expert in designing scalable digital infrastructure for global health.
Drives strategies linking Global Goods with digital public infrastructure (DPI).



Mr. Max Kintisch
Director of Research, Digital Public Goods Alliance
Leads research on open-source digital solutions advancing global health equity.
Focuses on scaling Digital Public Goods to strengthen sustainable health systems.



Ms. Neeraja Reddy Karna
Vice President - Engineering, Intellehealth
Strategic Technology Executive
Driving innovation & product delivery
Building innovative last-mile healthcare solutions

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Webinar Topics and Dates

Sno	Date	Topic
1	06 March 2025	What is Telemedicine and How Are Health Systems Using It Globally? A Primer for Health System Leaders
2	10 April, 2025	Brick-and-mortar to Brick-and-click - Designing & Implementing Quality, Effective, and Impactful Telemedicine Programs
3	08 May, 2025	Evaluating telemedicine interventions: Evidence so far, and Methodologies
4	5 June, 2025	Creating a Telemedicine-Ready Healthcare Workforce: Training for Healthcare Providers
5	10 July, 2025	Telemedicine Policy: How Telemedicine is Regulated in Asia
6	7 August, 2025	Choosing a Telemedicine Software: The case for standards-compliant, interoperable & open-source Digital Public Goods (DPGs)
7	11 September, 2025	Ensuring Quality of Care & Patient safety in Telemedicine
8	9 October, 2025	Telemedicine Adoption by Communities - How Might We Drive Uptake of Telemedicine (TM) by Citizens?
9	6 November, 2025	Artificial Intelligence and Machine Learning in Telemedicine
10	4 December, 2025	Financing Telemedicine and ROI - The Business Case for Telemedicine
11	8 January, 2026	Telemedicine use cases to advance the SDGs - Part 1 Applications for Non-Communicable Diseases (Diabetes, Hypertension, Cardiovascular disease, Cancer and Mental Health)
12	5 February, 2026	Telemedicine uses to advance the SDGs - Part 2 Applications for Communicable Diseases (Tuberculosis, HIV)
13	12 March, 2026	Telemedicine use cases to advance the SDGs - Part 3 Applications for Primary Healthcare

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Q&A Session



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