World Health Organization
South-East Asia Region

intelehealth

Telemedicine In Action: Transforming healthcare in LMICs

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	11 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

Financing Telemedicine and ROI – The Business for Telemedicine

Objectives and Outcomes

Objectives:

- Equip participants with knowledge about cost components and financing models for telemedicine.
- Explain how to build a business case for telemedicine investment.
- Share global examples of successful financing strategies.

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

- Understand the full cost structure of implementing and operating telemedicine services.
- Explore different financing mechanisms: patient paying for services, public/government funding including public-private partnerships, insurance reimbursement, and donor funding.
- Learn how to estimate and communicate the ROI of telemedicine interventions.

Natalie Maricich

Natalie Maricich is a development professional with a strong focus on strengthening health and digital-health systems in South Africa. Her work spans research, evaluations, and project management aimed at improving access to equitable, quality healthcare. She also brings multisector experience across gender equality, youth empowerment, enterprise development, and impact measurement. Natalie is passionate about leveraging technology and inclusive design to drive sustainable health outcomes for underserved communities

Nitin Kumar Solanki

Nitin Kumar Solanki is an experienced leader in public and digital health with over 20 years of expertise in designing and scaling programs to expand access to quality healthcare. He combines strong skills in program design, evaluation, and partnership-building with governments, NGOs, and private-sector stakeholders. Nitin is deeply committed to equity, data-driven decision making, and sustainable impact — particularly in underserved and vulnerable communities.

Speaker I

Who we are – Audere

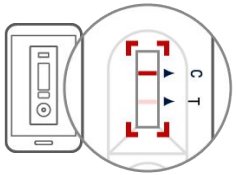
Natalie Maricich
Product Manager

- **Nonprofit**: founded by Gates foundation support in 2018. Catalytic development support from the Gates Foundation, CIFF, Patrick J. McGovern Foundation, and other global donors.
- **Global team**: co-headquartered in South Africa + US
- **Field-tested:** our AI integration toolkit has verified over 1.5 Million rapid tests in 12 countries and answered over 100,000 user queries in 4 self-care programs in 2 countries.
- **Extending equitable access**: Self-care from Anywhere multimodal AI (LMs, CV, ML) toolkit for differentiated HIV prevention and treatment, SRH, mental health, TB, STIs, and a growing range of use cases.

audere Africa

AI Integration Toolkit

Modular, Multimodal AI Services for efficient Health Care delivery



Computer Vision & Digital Guide Service

- Computer vision for RDT result interpretation
- Web service or SDK (20MB package, offline access)
- Benchmarking & monitoring
- Accessible digital use instructions

AI Companion & Conversational Coach Service

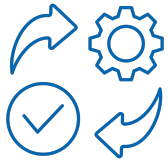
For patients: Empathetic coaching to support health insights

For health workers:

- Risk stratification to drive care
- Patient outreach prioritisation
- Next step guidance
- Guidance on conditions, testing, and tough conversations with patients

Predictive Analytics Service

- Data collection
- Structured data extraction
- Insights for care workflows
- Patient prioritization

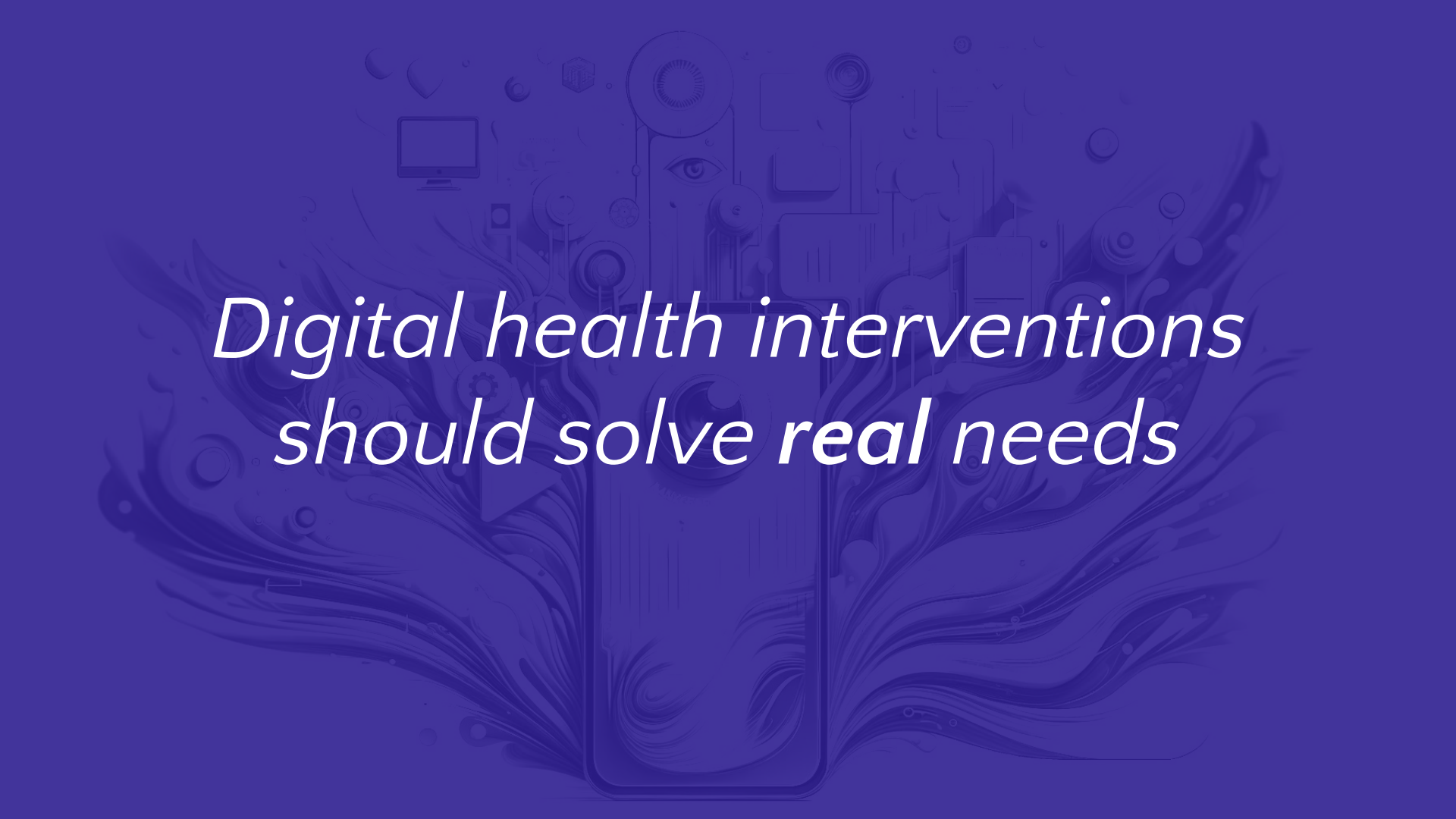


Hybrid Monitoring & Evaluation Service

- Real-time monitoring & evaluation
- Risk & harm detection
- Human-in-the-loop reviews
- Clinician oversight
- Periodic evaluations & adjustments

“I remember the first time using this… patients were so excited when seeing me taking pictures of the RDT. They asked why and I responded the photo will be seen by my supervisor… they said that is good because if I make an error, I will receive immediate feedback.”

–Francois, CHW, Rwanda

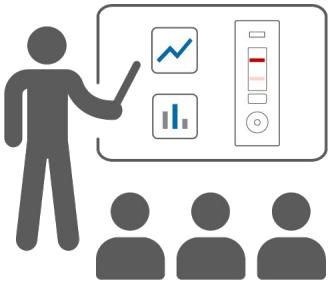

*Digital health interventions should solve **real** needs*


Benefits of **Digital Solutions** & **AI** in the real world

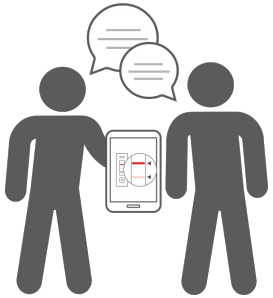
Paper → Pixels: Why Digitisation Matters

Streamlining processes, reclaiming time & cost, and increasing confidence in decisions

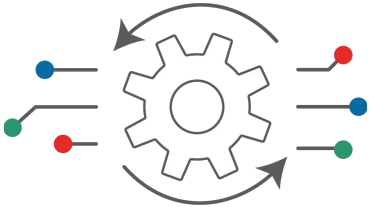
Data Quality & Safety



Trust

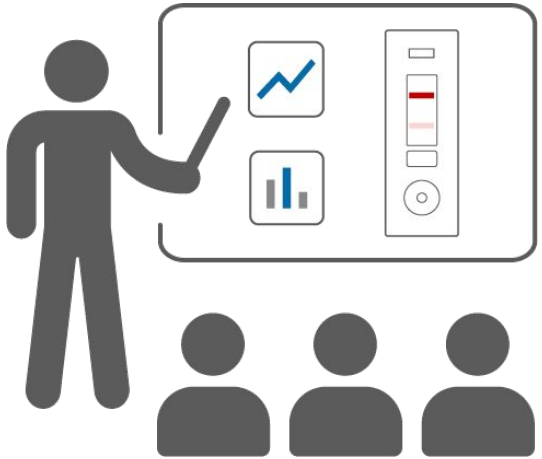


Efficiency



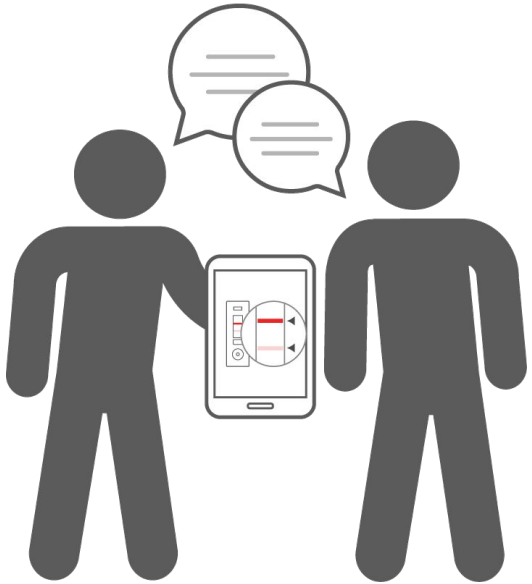
Data Quality and Safety

1. Higher data accuracy
2. Record safety
3. Better analytics
4. Rapid test digitisation
5. Broader medical record improvement
6. Improved outcomes



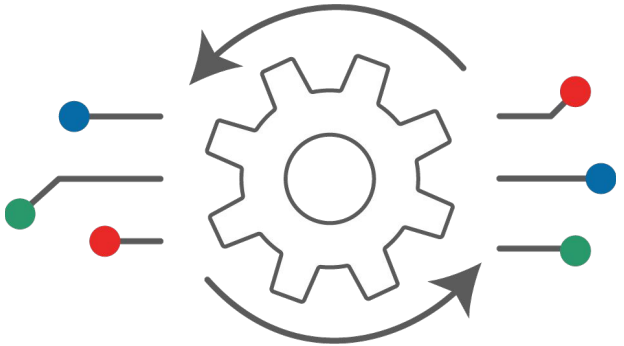
Trust

1. Trust in data
2. Trust from patients
3. Trust from health workers
4. Transparency
5. Consistency



Efficiency

1. Time savings
2. Operational speed
3. Reduced duplication
4. Scalability
5. Long-term value



Digital health solutions in action

Enabling opportunities for patient or health worker agency, access, and support

Health literacy

Trusted information and empathetic guidance for patients, health workers, and support personnel from basic to complex questions.

Clinician efficiency

Predictive analytics use historical patterns with outcomes to **predict future patterns.** One example is **targeting prevention resources** to those most at need through use of risk, or vulnerability models.

Remote telehealth

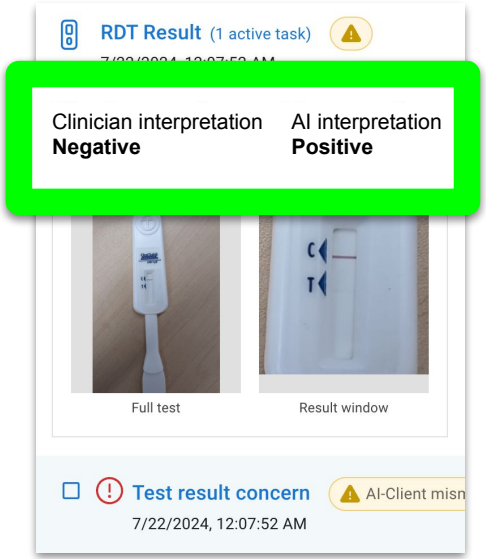
Quality assured **remote counseling** and self-testing (e.g. HIV) unlocks new channels for prevention, treatment, and retention.

Digital health solutions in action

Enabling informed decision making & support for health care workers

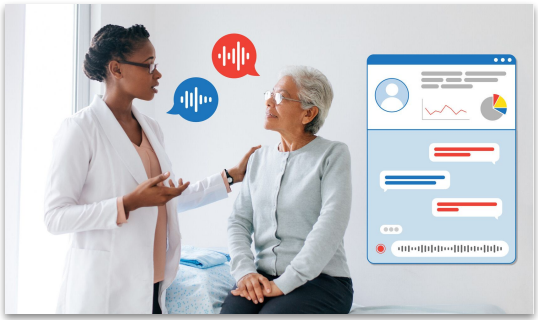
Supportive supervision

Identify those needing targeted technical assistance or training at scale while raising the overall level of health worker trust by the health system.



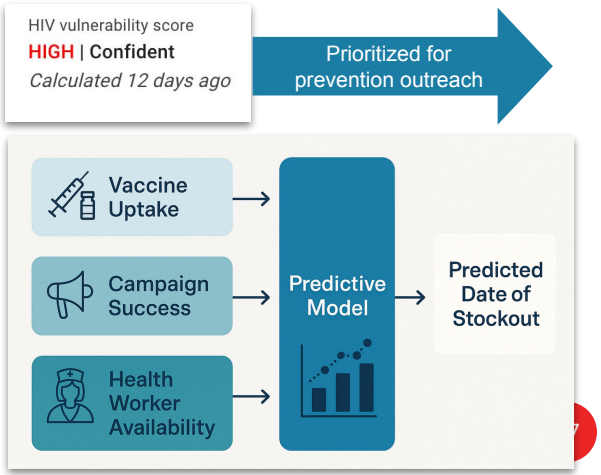
Patient care in clinics

Digital scribes that translate speech to text, across languages and accents, extract relevant medical codes, and translate into structured EMR data.



Resource prioritization

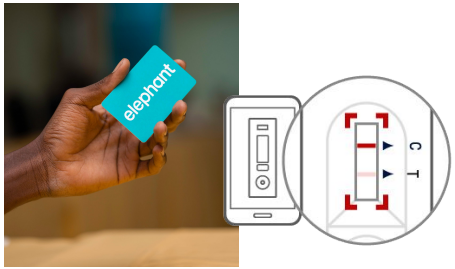
Big data and predictive analytics use historical patterns with outcomes to predict future patterns. For example, targeting prevention resources to those most at need through use of risk, or vulnerability models.




Use Cases for **Digital Health** & **AI** in the real world

AI in health centers in Nigeria to improve care with elephant

Audere AI integrated into Elephant OS improves the accuracy of diagnosis for malaria, helping combat drug resistance and improving care for conditions commonly mistaken for malaria, such as typhoid.



Objectives

-Improve accuracy of diagnosis and prescriptions for patients with malaria symptoms

-Reduce *(suspected fraudulent)* documented test positivity

Context

- 25 clinics across 2 states (Niger, Kaduna)
- 250 naira for completed patient journeys. Clinics not told how calculated

48%
Testing rate improvement for malaria

35%
Decrease in TPR as a result of AI-validated testing

10% reduction in patient out-of-pocket expenditures

17% reduction in antibiotic prescription

Confirmed diagnoses with test 37% ->77%

Patients receiving anti-malarials without a test 50% -> 10%

Scaling CV to 58,000 CHWs in Rwanda *(starting w/malaria)*

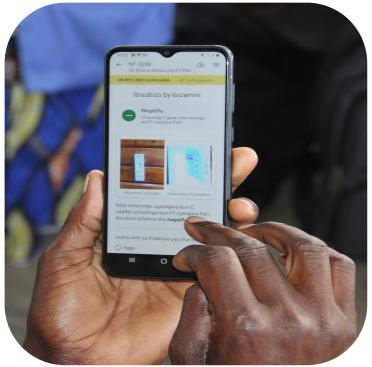
Pilot insights led to MoH approval to integrate into FLHW app

"I remember the first time using this… patients were so excited when seeing me taking pictures of the RDT. They asked why & I responded the photo will be seen by my supervisor… they said that is good because if I make an error, I will receive immediate feedback."

- Francois, CHW

9% of CHWs targeted for performance management

Improved ability to **read faint positive lines in 72% CHWs**



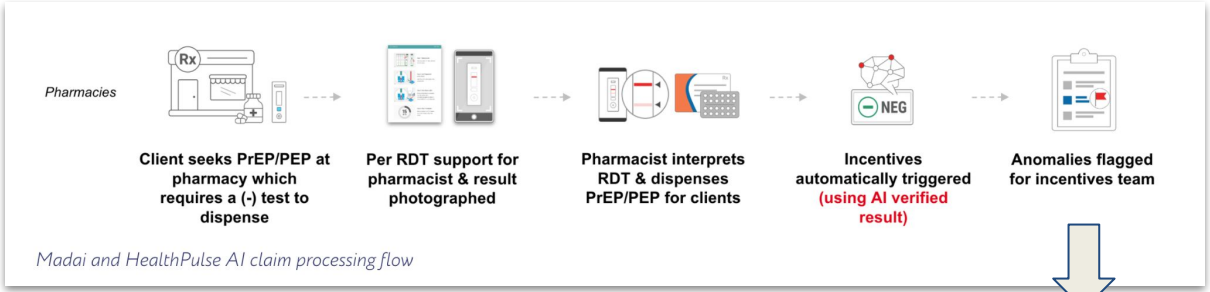
Republic of Rwanda
Ministry of Health

RWANDA BIOMEDICAL CENTER
A Healthy People. A Wealthy Nation

AI helps automate claim & incentive processing

Maisha Meds

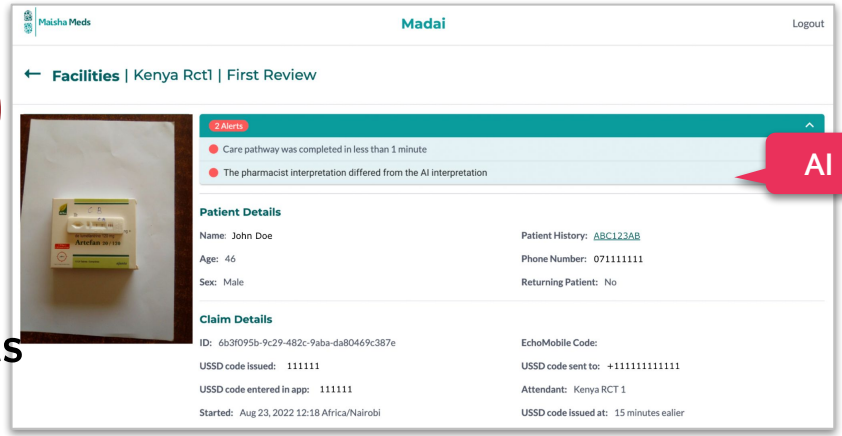
Efficiencies in the operational workflow - enabling program scale without extra resources.



85%
Avg time to process claims*

170%
# of claims able to be processed

Automated claims processing = faster pharmacy reimbursements

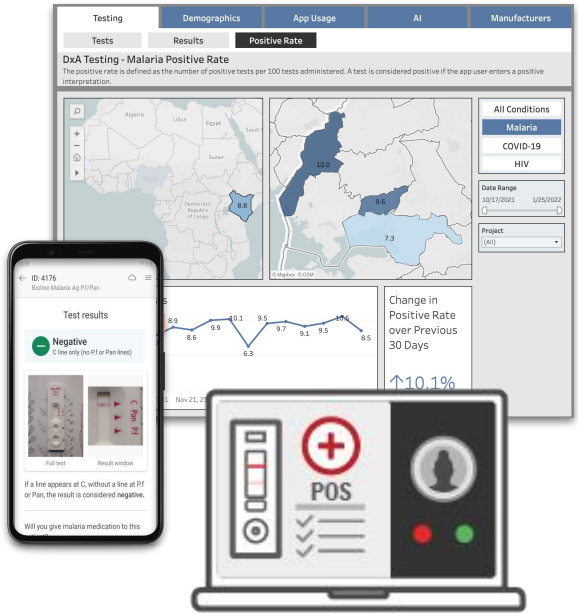


*5.9 days to <1 day

Digital Transformation in Global Health

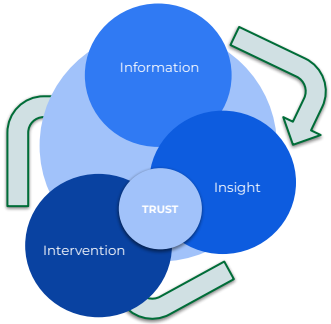
Expanding Access & Strengthening Service Delivery

- **Rapid response capacity:** Digital tools can enable quick deployment of new diagnostic, treatment, and support tools in response to emerging health challenges.
- **Accessibility & traceability:** Data collection enables monitoring across diverse settings.
- **AI-enabled support:** From large language models to computer vision, tech can expand frontline capacity, support health worker decisions, and directly serve patients.
- **Efficiency & scale:** Reusable digital components accelerate innovation enabling distributed rollout across regions.
- **Real-time monitoring:** Digital systems provide continuous visibility into uptake, performance, and safety—strengthening health system resilience.



Considerations when implementing digital health tools in low-resource settings

Factors which Support Co-design of Digital Solutions



Timely feedback needed to impact development

Plan for two levels of usability analysis – quick insights ***and*** full reports

Engage a core team of real users

Bring big and small decisions to real users throughout design and development

Cross-team & partner product use sessions

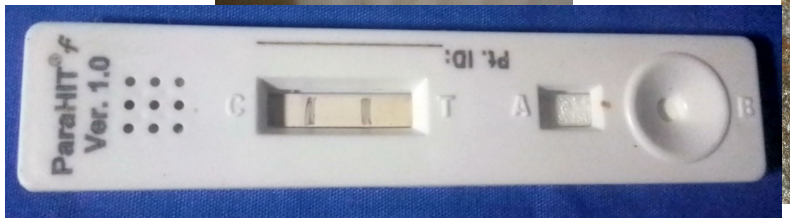
Everyone uses the product during development

Plan to integrate learnings

Assume shifts will be needed along the way – and use a methodology that supports those changes

Expect the Unexpected as the “majority” case

Systems must be resilient and work across “edge” cases



Building capacity for digital health & AI

Structural barriers to navigate

Training/Skills

- MoH & policy maker understanding & readiness to adopt.
- Health workforce training & support.
- Dashboard & system monitoring plan.
- End-user education and understanding of tools, their own data use, and their rights.
- Incident reporting plan.

Infrastructure

- *Mobile hardware:* Design for>10 year old phones with limited storage/RAM and 2G internet. *For WhatsApp based apps - consider people using WhatsApp only data bundles and non-Android users (e.g. Huawei).*
- *Tablets:* Support often alters designs.
- *Computers*: To monitor use.
- Cloud service availability
- MoH/district approvals
- Ability for AI services to run on non-commercial servers

Power & Internet

- Some AI tools are only accessible via the cloud (e.g. LLMs) and require internet connectivity
- Connection to the internet, use of compute-intensive models, or need for location services may lead to more battery consumption.

Use & Maintenance

- Many AI tools are services which have hosting fees (LLMs).
- AI systems must be monitored and maintained to ensure AI models do not drift in performance over time.

Connect with us:

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LinkedIn:
https://www.linkedin.com/in/natalie-maricich/

Speaker II

We deliver quality healthcare where there is no doctor

6 out of 10 women forgo or delay seeking healthcare

That's **280 Million women** in India

Source: Global Women's Health Index

Our Solution

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

30+ impactful telemedicine projects with Governments, NGOs & hospitals

End-to-end Solution for Telemedicine

6 STEP-IMPLEMENTATION METHODOLOGY

Step 1 : Program Design & Readiness

Step 2: Supply Side Strengthening

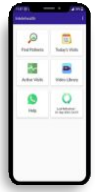
Step 3: Demand Side Strengthening

Step 4: Quality Assurance

Step 5: Monitoring Learning Evaluation

Step 6: Capacity building

OPEN-SOURCE TECHNOLOGY



Intelehealth Provider-to-Provider App
Connects lower-level providers with higher-level providers, eg: health workers to GPs

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.

POLICY ADVOCACY

- ✔ Effective program design
- ✔ Regulation of telemedicine
- ✔ Financing telemedicine
- ✔ Return on investment analysis
- ✔ Evaluation frameworks for telemedicine
- ✔ Policy briefs for effective implementation

Why Finance Telemedicine?

The Challenge

- ✔ Clinical evidence is clear: telemedicine improves access, efficiency, and patient satisfaction across diverse healthcare settings.
- ✔ Yet adoption remains slow in developing healthcare systems.

The Barrier

- ✔ Financing uncertainty and unclear return on investment.

Evidence-Backed ROI

Real deployment figures from international and regional implementations

Regional Case Studies

Case studies of Financial frameworks in Southeast Asian contexts

Sustainability Strategies

Strategies for long-term financial viability and growth

What Decision-Makers Want to Know

1

Cost Comparison

How much does telemedicine cost compared to conventional in-person care delivery models?

2

Financial Returns

When does telemedicine generate savings or produce measurable return on investment?

3

Funding Sources

Who should bear the costs—government, donors, patients, insurers, or healthcare providers?

These are the critical finance questions policymakers must answer before scaling telemedicine services nationally.

Components of Costs & Benefits

Costs to Consider

- ✔ Platform development and ongoing maintenance
- ✔ Medical devices and hardware
- ✔ Connectivity infrastructure
- ✔ Staff training programs
- ✔ Care coordinators
- ✔ EMR integration
- ✔ Cybersecurity measures
- ✔ Quality monitoring systems

Direct & Indirect Benefits

- ✔ Avoided patient travel costs
- ✔ Eliminated accommodation expenses
- ✔ Reduced missed appointments
- ✔ Fewer unnecessary hospital visits
- ✔ Optimized specialist utilization
- ✔ Faster clinical triage
- ✔ Improved patient retention
- ✔ Enhanced care continuity

Critical: Distinguish between one-time capital costs and recurring operational expenses when calculating total cost-of-ownership.

Simple ROI

Establish Baseline
Calculate unit cost per in-person visit, including both patient and health system expenditures

Model Shift to Telemedicine
Estimate percentage of visits that can be safely transitioned to remote teleconsultations

Quantify Savings
Add patient travel savings, wage recovery, and optimized health system time utilization

Calculate Net Benefit
Compare annualized platform and operational costs against aggregated savings to determine payback period

Modest assumptions often demonstrate rapid payback periods when patient volumes reach scale. The arithmetic is straightforward and compelling.

Public Sector Financing

01

Budget Allocation + Insurance Integration

Allocate capital for shared platform infrastructure across hospitals. Enable reimbursement through national insurance programs.

ROI Driver: Reduced emergency visits and preventable hospitalizations

02

Hub-and-Spoke (Specialist-Led)

Tertiary centers fund central platform while benefits flow to primary care facilities. Specialists receive modest incentives per consultation.

ROI Driver: Specialist time leverage and efficient case consolidation

03

Public-Private Partnership

Government provides infrastructure investment; private operators manage daily operations. Revenue-sharing models typically split 60-40 or 70-30.

ROI Driver: Operational efficiency combined with volume-based growth

Private Sector Financing Models

Direct Patient Pay

Per-consultation fees based on country income levels and specialty. Low overhead generates strong margins but may limit access for lower-income patients.

Corporate/Insurance Partnerships

Employers and insurers contract bulk services at per consultation. Volume guarantees improve financial predictability with 12-18 month payback periods.

Hybrid Freemium + Premium

Basic consultations supported by ads or subsidies. Premium services for specialty care, urgent needs, and follow-ups. Balances accessibility with sustainability.

Critical Success Factor: Adequate reimbursement—even modest rates—is essential for long-term sustainability. Without proper payment structures, services remain grant-dependent and unsustainable for providers.

Practical Financing

Public Financing

Best for universal access

- Dedicated budget line items for telemedicine in health ministry budgets
- Capitation models for remote follow-up care
- Integration into OPD programs

Donor & Catalytic Grants

Accelerate implementation

- Startup capital and infrastructure
- Capacity building investments
- Pilot program funding

Blended Models

Sustainable hybrid approach

- Government covers basic essential services
- Pay-for-value for specialty consultations
- Subscription for after-hours access

Insurance Reimbursement

Include teleconsultation tariffs in national insurance schemes and government health coverage programs

Provider Incentives

Time-based compensation, productivity bonuses, and shared savings models motivate clinician participation

Recommendation: Adopt a blended financing approach tailored to your country's fiscal capacity and equity goals.

Impact of eSanjeevani: Findings from a study in India-Jharkhand

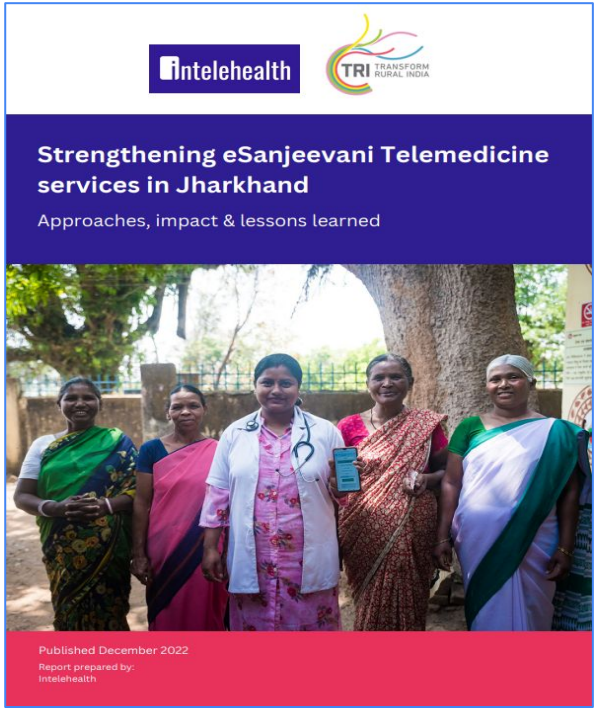
Intelehealth conducted a study in Jharkhand in collaboration with State Govt. on the impact of eSanjeevani on improving health access

Methods:

- Stratified random sampling survey in 5 districts of Jharkhand – Gumla, Khunti, Simdega, Lohardaga and Ranchi
- Sample size: 500 clients, 200 health providers (116 CHOs, and 13 doctors)

Overall, we estimate that the presence of the telemedicine facility saved per consult on average,

- 21.59 km in distance travelled
- INR 941.51 in money spent
- Savings for women clients were 1.5 times more than for male clients
- 75% are likely to use eSanjeevani services in the future



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

- **Measurable impact or change** after implementing telemedicine projects
- Assessing outcomes based on **time, distance, and money saved, teleconsultations conducted etc.**
- **Evidence generation** for data driven decision making

"One teleconsultation saves Rs 914 ($11) as it reduces travel for the patients and their family/friends" - **Hon Dr. (Shri) Mansukh L Mandaviya sir, Ex- Health & Family Welfare Minister during Parliament (Lok Sabha) session, 2024.**

TeleMedKG (Kyrgyzstan)

Program Overview

TeleMed.KG successfully delivered specialized remote services for pediatric and maternal health in rural districts, addressing critical access gaps in mountainous regions.

Evaluation Results

Comprehensive evaluation demonstrated technical feasibility, measurably improved healthcare access, and clear value proposition for both donor and government financial support.

1. **Blended Funding**
   Combined donor and government resources

2. **Local Buy-In**
   Community engagement ensured sustainability

3. **Proven Impact**
   Data-driven results secured ongoing support

Critical insight: Initial public and donor financing catalyzes programs, while strong local stakeholder commitment ensures long-term viability and expansion.

Global Evidence: Strong Returns

625%

Peak ROI Achieved

Telemedicine-only model in an Australian metropolitan orthopedic clinic**

1$: 4.1$

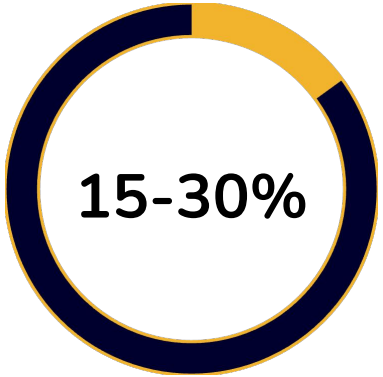
Median Return

Across 29 public health telemedicine studies globally*

2yr

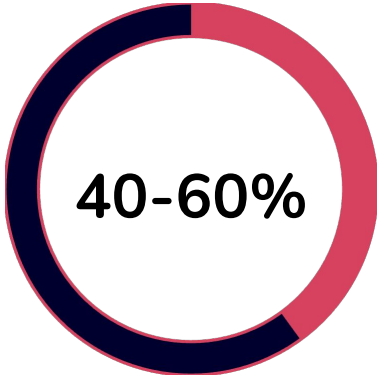
Break-Even

Typical timeframe for rural virtual health practitioner models**



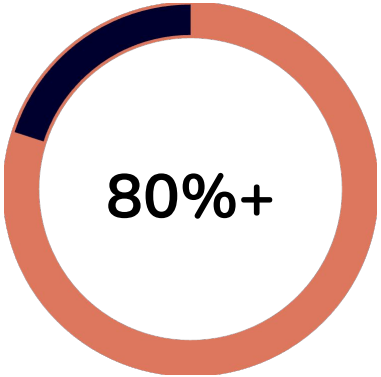
Cost Reduction

System-wide savings in virtual primary healthcare delivery***



Access Increase

Growth in remote consultations reaching underserved populations***



Patient Satisfaction

Positive ratings across diverse rural telemedicine programs***

*Return on investment of public health interventions: a systematic review | Journal of Epidemiology & Community Health
**https://pmc.ncbi.nlm.nih.gov/articles/PMC7709847/
***https://www.sciencedirect.com/science/article/pii/S2211883725000954

System-Level Benefits Beyond Direct ROI

WHO Analysis: Telemedicine ROI extends beyond individual consultations to comprehensive health system strengthening. In Southeast Asia, improved primary care telemedicine has potential to avert 15-20% of preventable hospitalizations*.

Patient-Level Impact

- Reduced lost wages from avoided travel and clinic time
- Lower out-of-pocket medication and transport costs
- Estimated savings: $20-50 per patient annually in low-income countries

Health System Gains

- Specialist productivity increases 2-3x patient capacity
- Reduced infrastructure burden and clinic congestion
- Better follow-up care prevents complications
- Bridges urban-rural healthcare equity gap

National Health Goals

- Supports UN SDG 3 (Health) and SDG 10 (Reduced Inequalities)
- Advances Universal Health Coverage initiatives
- Strengthens financial resilience of health systems

Source: Telemedicine supported strengthening of primary care in WHO South East Asia region: lessons from the COVID-19 pandemic experiences

Key Enablers and Risks

ROI Enablers

- Supportive government policy and reimbursement frameworks
- Strong care coordinator model
- Seamless EMR and PHC workflow integration
- Rigorous measurement of costs and clinical outcomes
- Engaged clinician champions

Implementation Risks

- Poor adoption and utilization rates
- Inadequate technology quality
- Absence of reimbursement mechanisms
- Underestimated operational costs
- Digital divide and connectivity gaps

Telemedicine is financeable and delivers positive ROI when properly integrated, rigorously measured, and supported by appropriate financing pathways.

Key Recommendations

1. **Run the Numbers**
   Build a simple ROI model with local travel, time, and volume data

2. **Start Strategic**
   Begin with high-volume, low-risk services like follow-ups and chronic care

3. **Secure Blended Financing**
   Combine capital from donors/government with operational reimbursement

4. **Measure & Iterate**
   Track utilization, savings, satisfaction, and clinical outcomes continuously

5. **Scale Deliberately**
   Expand only when unit economics are validated and sustainable

Thank you

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

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Objectives: Equip participants with knowledge about cost components and financing models for telemedicine.

- Explain how to build a business case for telemedicine investment.
- Share global examples of successful financing strategies.

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.

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	11 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

Webinar Evaluation and Feedback

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Q&A Session

Thank You For Joining Us!

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