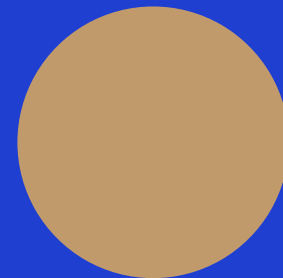


Who answers when the system fails a patient?



Leveraging ICT for Telemedicine, Early Warning Systems and Emergency Response: Governance, Data Sovereignty and Trust in Namibia's Digital Health Ecosystem

Dr Tuwilika Nafuka | Namibian Medical Doctor | Chevening Scholar 2025/26 | 9th National ICT Summit, 14 October 2026

Telemedicine is already here: two Namibian patients

Telemedicine: "the provision of health-care services at a distance through information communication technology" (National Digital Health Policy, glossary)

Model A: Platform

Dawa Afya Medical Tech.



- Online consultations, medical records, clinic and pharmacy software
- Digital Health Passport; **prepaid Health Units (NAMFISA)**
- Independent doctors hold clinical responsibility

Model B: Practice

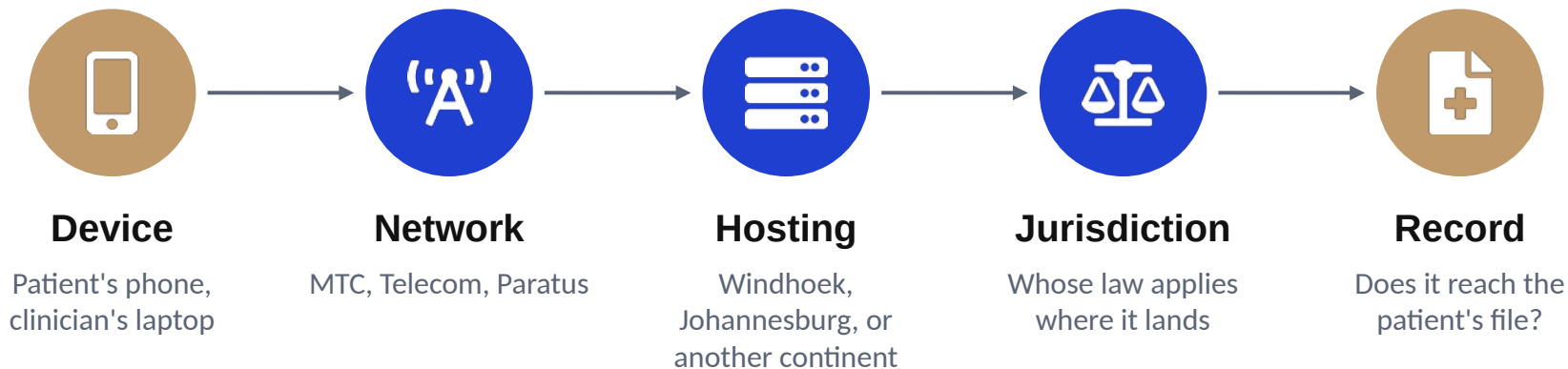
Macquarie Medical



- WhatsApp intake; doctor or nurse consults separately
- Own medical record; 40+ partner pharmacies in all 14 regions
- NAMAF-accredited; working toward ISO 27001

Sources: providers' published terms and descriptions supplied by both founders, October 2026. Cited as examples of innovation ahead of regulation.

Follow the data: every link is ICT infrastructure



Between the patient and the record, every link is ICT infrastructure. Health data governance in Namibia is being decided by infrastructure choices.

One chain, three loads



Telemedicine

The everyday load

One patient, one doctor. A dropped link mid-consultation is a clinical event, not just poor service.



Early warning

The system load

Surveillance reads silence as safety. A clinic that cannot connect reports zero cases: the quietest district may be the sickest.



Emergency response

The stress load

Floods and outbreaks need data to move fast across health, regions, utilities and borders, while networks are strained.



AI inherits every gap below it. Triage and outbreak models trained elsewhere need local validation; the Policy's AI guidelines are due in 2027.

Leveraging ICT starts with knowing where care is

NamCareMap

Find care that speaks your language

Search by specialty across all 14 regions of Namibia. Free to use, on any phone.

Search specialties

Search

- Hospitals, clinics, pharmacies and practitioners in all 14 regions, with hours, medical aids and languages
- Non-profit: public facilities listed free; private listings fund hosting and verification



Telemedicine

The consult ends with a referral: which pharmacy or practice near this patient is open?



Early warning

You can only notice a silent clinic if you know it exists. A complete facility list turns silence into a signal.



Emergency response

When floods close roads, people and responders need the nearest open facility, fast.

Disclosure: I founded NamCareMap (namcaremap.com.na), a registered non-profit. Shown as an example, not an endorsement.

We assure the doctor, the money and the claim, but not yet the data, platform or network

Assured today



The doctor

HPCNA registration



The money

NAMFISA, for prepaid credits



The claim

NAMAF accreditation



The contract

Namibian law, Windhoek courts

Not yet assured



The data

No Namibian data protection law; providers borrow POPIA, HIPAA and ISO 27001



The platform

No licensing until guidelines in 2028 - 29



The network

Connectivity risk left with the patient or disclaimed

Sources: OnCall and PatientCare published terms (accessed Oct 2026); National Digital Health Policy 2026 - 2036, s.5 and Annex 1

The Policy has the right instruments, and ICT co-owns it

6

policy objectives, **2026 - 2036**: governance, infrastructure, workforce, innovation, equity, financing

3

technologies named: telemedicine, electronic medical records, AI

1

interoperability spine: NAMIF standards, FHIR, NAM-X data exchange

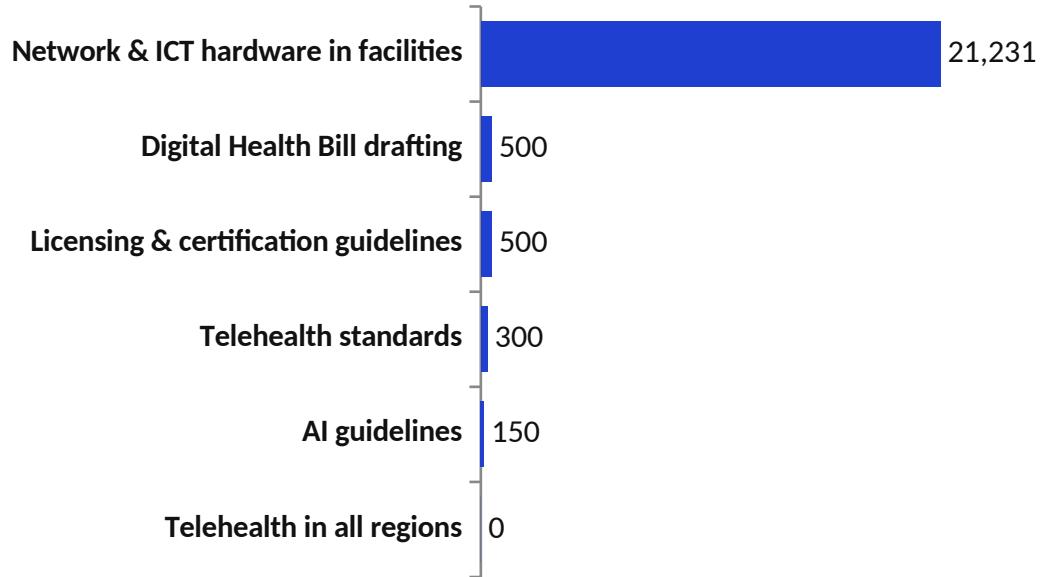


The ICT sector co-owns this policy

The National Digital Health Steering Committee is chaired by MoHSS and co-chaired by the Ministry of ICT (s.9.1.1).

The money follows the network

Five-year budget, N\$ thousand (Annex 1, as printed)



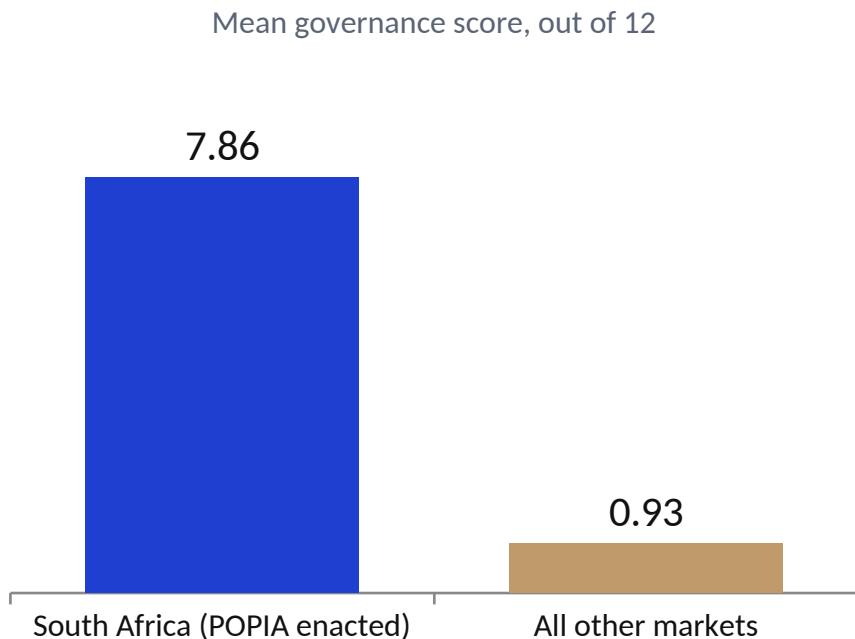
~N\$21m

for connectivity and hardware: the largest line in the plan

N\$0

and zero targets for "telehealth in all regions" (Strategy 5.1)

Across Africa, enacted law moves company behaviour



410

digital health and AI companies assessed across 46 African markets

1.6 / 12

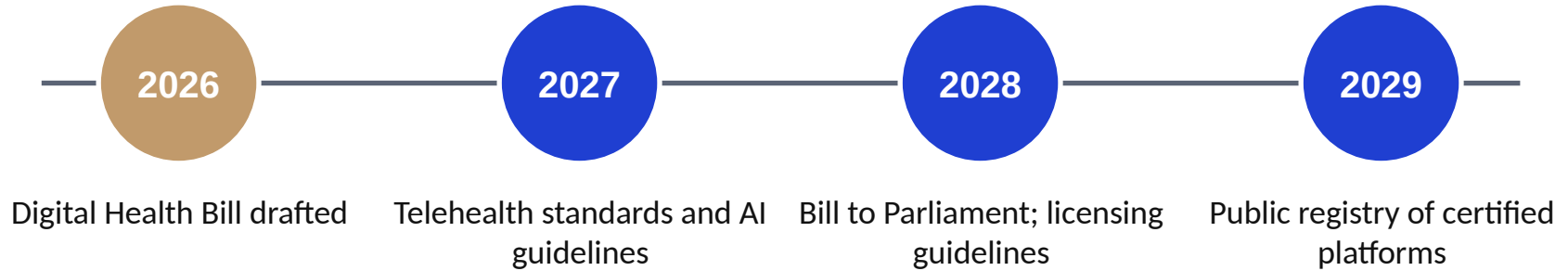
average score: an environment that never asked, not careless founders

~8.5×

higher where data protection law is enacted and enforced

Source: Nafuka (2026), Sovereignty Gap Assessment Framework (SGAF) dataset, Zenodo, doi:10.5281/zenodo.19483507

The window is open, and it has dates



Of the two consultations, which would pass certification? Nobody can say yet. The criteria will be written in the next 24 months.

Source: National Digital Health Policy 2026–2036, Annex 1 (Strategies 1.2–1.4)

Six questions to answer before certification



Residency

Where is patient data stored, under which law?



Access

Who can reach it: sub-processors, foreign authorities?



Resilience

Does it work offline and on 2G/3G?
How does it fail?



Vigilance

How are incidents and outages reported, and how fast?



Exit

Can patient and Ministry retrieve records in FHIR?



Validation

If AI is used, is it proven on Namibian patients?

The provider supplies the evidence; the state verifies it. Assurance, not obstacle, and no new institution needed.

Three asks for this room



Telecom, cloud and hosting providers

Offer in-country or SADC hosting designed and priced for health data, and consider zero-rating health platforms



CRAN and NAM-CSIRT

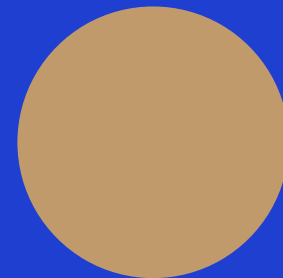
Give health a defined place in incident response: an outage affecting care is a clinical event



Ministry of ICT

Use the co-chair seat to put residency, continuity, incident and exit clauses into the Digital Health Bill

Trust is built in infrastructure



Namibia has the policy. The Bill is coming. The infrastructure is in this room.

I would be glad to support MoHSS and MICT on the certification criteria.

Thank you | Dr Tuwilika Nafuka

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