



The Lancet
Global Health
Commission
on AI and HIV

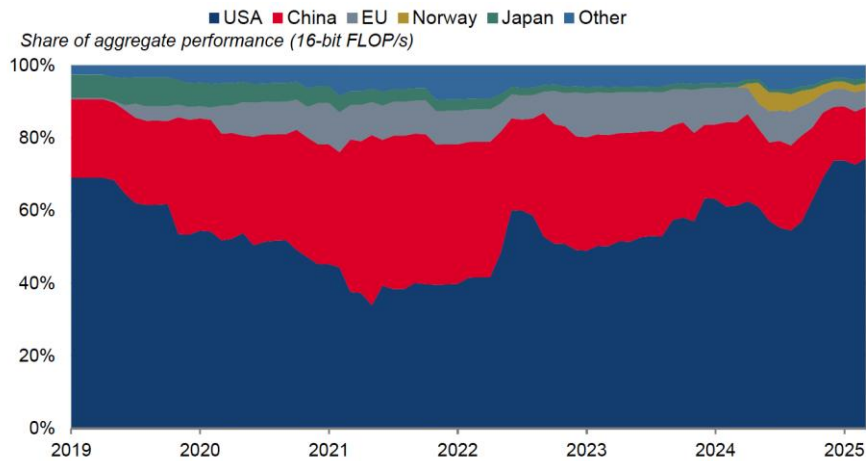
The Lancet Global Health
Commission on AI and HIV

mike Reid, MD

Associate Professor, UCSF

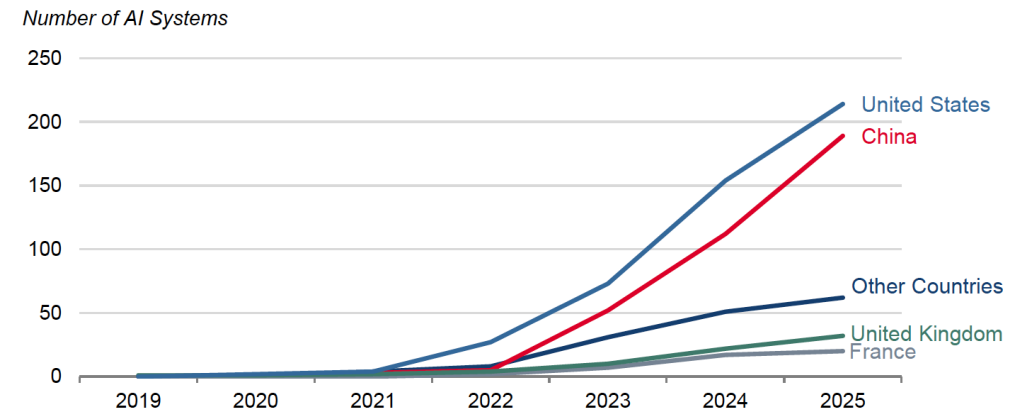
Massive expansion of AI

Share of GPU Clusters (Weighted by Cluster Performance) by Country



US possess 74% of global compute capacity (and almost all non-US hardware was originally made in the US)

Cumulative Number of Large-Scale AI Systems by Country



All the highest performing models are US

With AI infrastructure concentrated in the U.S., AI scale-up in HIV programs will reflect U.S. priorities — *unless LMICs actively shape how and where these tools are used.*

AI Will Reshape Global Health In One of Three Ways

Option 1: (Incremental Scenario)

AI optimizes scarcity but
doesn't change the systems

AI accelerates broken systems

- AI compensates for underinvestment
- Gains absorbed by demand & cost
- No shift in ownership

Option 2: (Extractive Scale Scenario)

AI scales
But under US and Big Tech dominance

Powerful tools, concentrated control

- Tied to U.S. & Big Tech platforms
- LMICs as users, not owners
- Dependency replaces aid

Option 3: (Public Infrastructure scenario)

Public infrastructure path,
governed as health system asset

AI as infrastructure, not products

- Open and interoperable
- Locally governed
- Regionally hosted
- Embedded in workforce

Commission Preferred Pathway

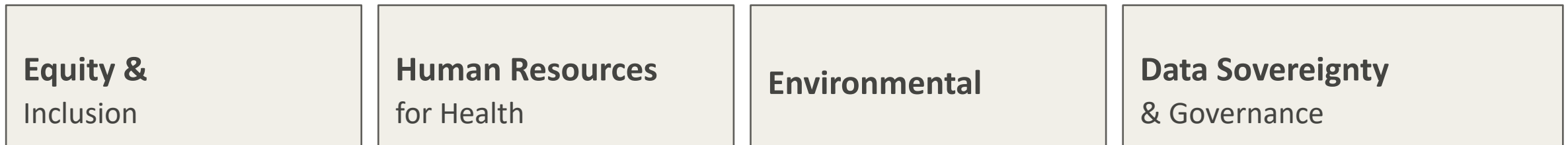
These are not scenarios — they are choices we make now...

The Lancet Global Health Commission Key Domains

FOCUS AREAS



CROSS-CUTTING THEMES



Systematic Review: AI in HIV programs

Approx. 500 AI use cases were mapped to the commission framework; only broad patterns are shown here.

AI Deployment Gap:

- 01 **SCALE framework** used to assess maturity across all use cases, from early concept through to national-scale deployment.
- 02 **The field clusters heavily at external validation** — many AI tools that have been tested, but never deployed into a real health system.
- 03 **This pattern appears to be structural, not isolated:** there is great “pilotitis” currently in the field.
- 04 **This is not an innovation problem.** It is a deployment and investment problem.

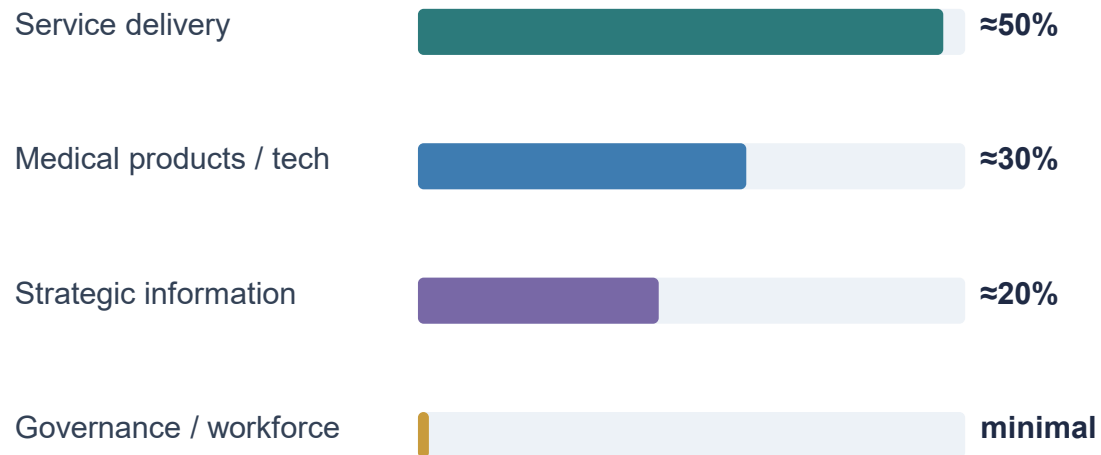
AI in HIV currently dies at the validation stage. It does not scale.

Systematic review: The field is concentrated in service delivery

Preliminary / embargoed

Where the literature sits

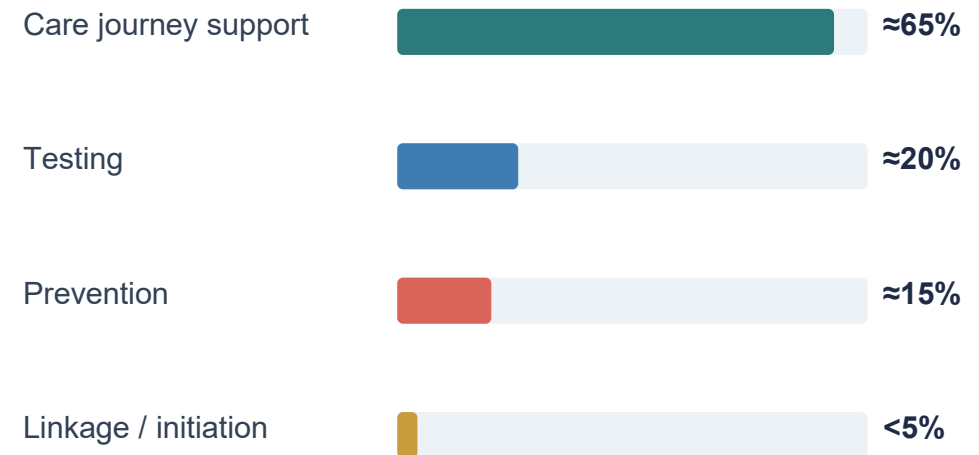
Rounded shares of all use cases



Leadership & governance and health workforce applications were rare.

Within service delivery

Rounded shares of service-delivery records only

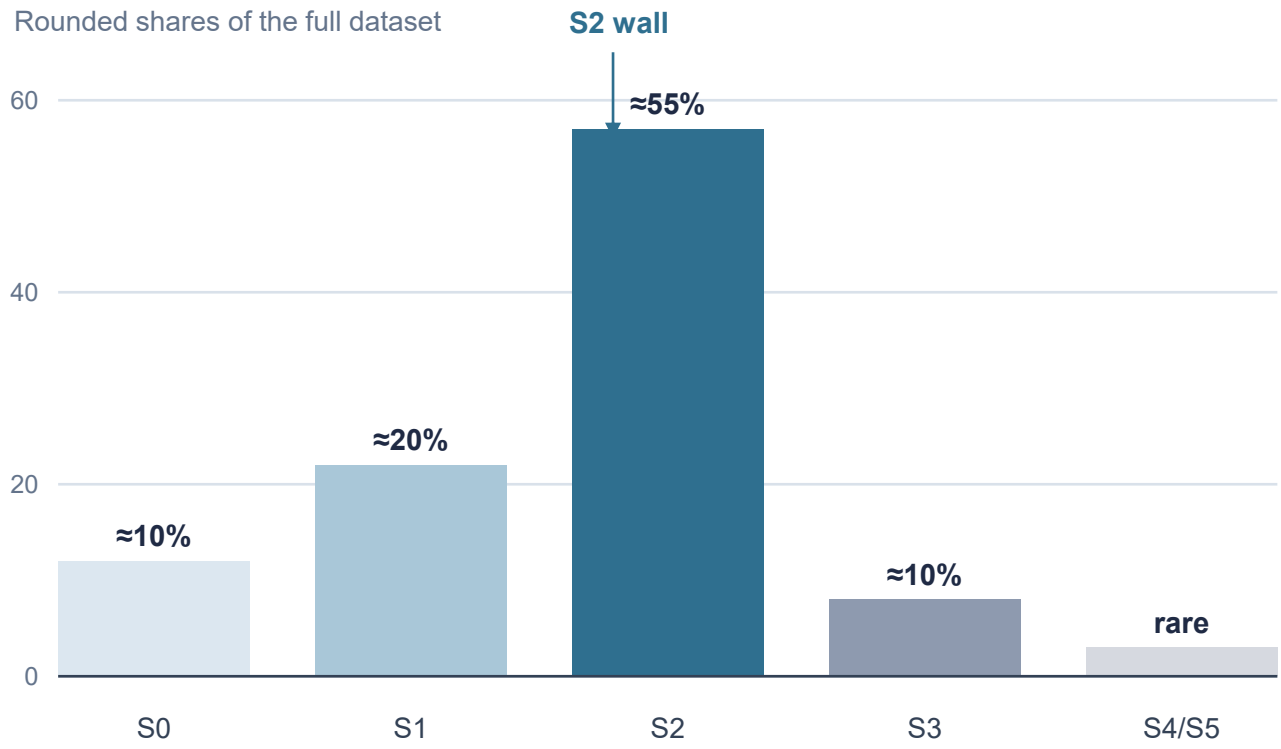


Most observed activity supports people already in care rather than the diagnosis-to-treatment transition.

Broad pattern: the evidence base is centered on service delivery, and within that, on tools that support ongoing care.

Systematic review: Maturity Profile - stable taxonomy, thin deployment

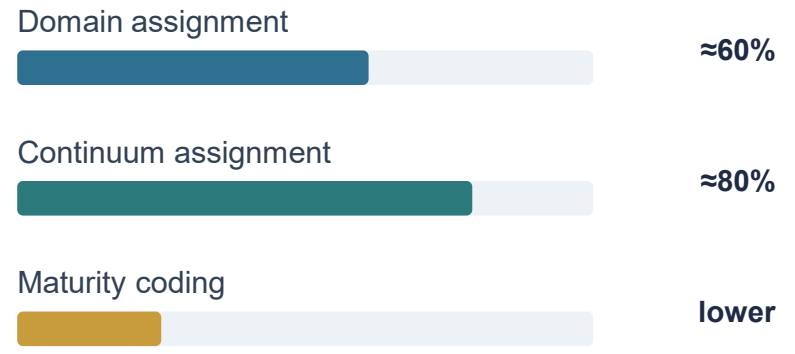
Approximate maturity profile



Most records still sit in the validation space rather than routine deployment.

Classification progress

Validation sample: broad agreement patterns



Lower maturity agreement mostly reflected coding-format inconsistency rather than total conceptual disagreement.

Real-world deployment remains uncommon, and linkage / treatment initiation still appears especially underrepresented.

The main bottleneck still looks more like implementation and governance than idea generation.

Broadly, AI in HIV still looks like a pipeline with many pilots and relatively few scaled deployments.

Why Governance Matters Now?

01

HIV is not a generic clinical domain. It is shaped by stigma, criminalisation, and structural inequality. AI deployed here without appropriate oversight can deepen existing harms rather than reduce them.

02

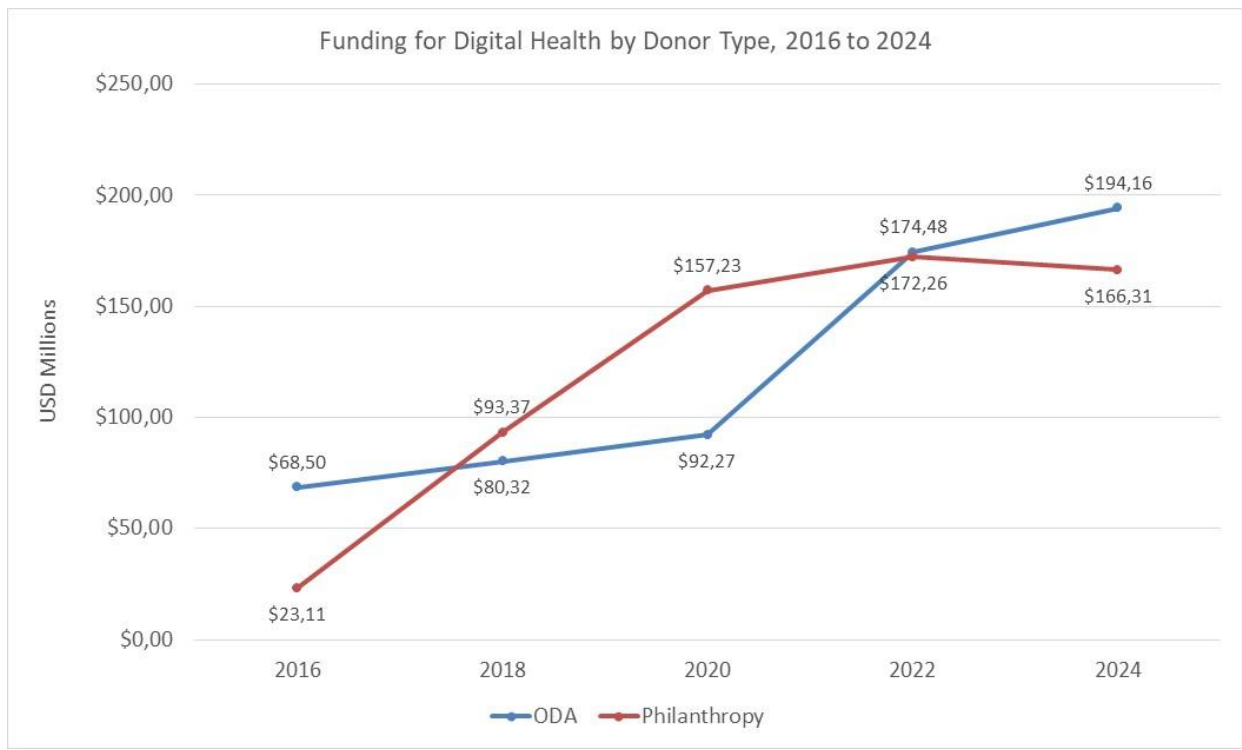
Responsibility for AI in HIV is dispersed. Health ministries, data protection authorities, device regulators, and ICT bodies all play a role — but no single institution typically holds end-to-end accountability.

Governance Readiness Matrix in HIV burden countries

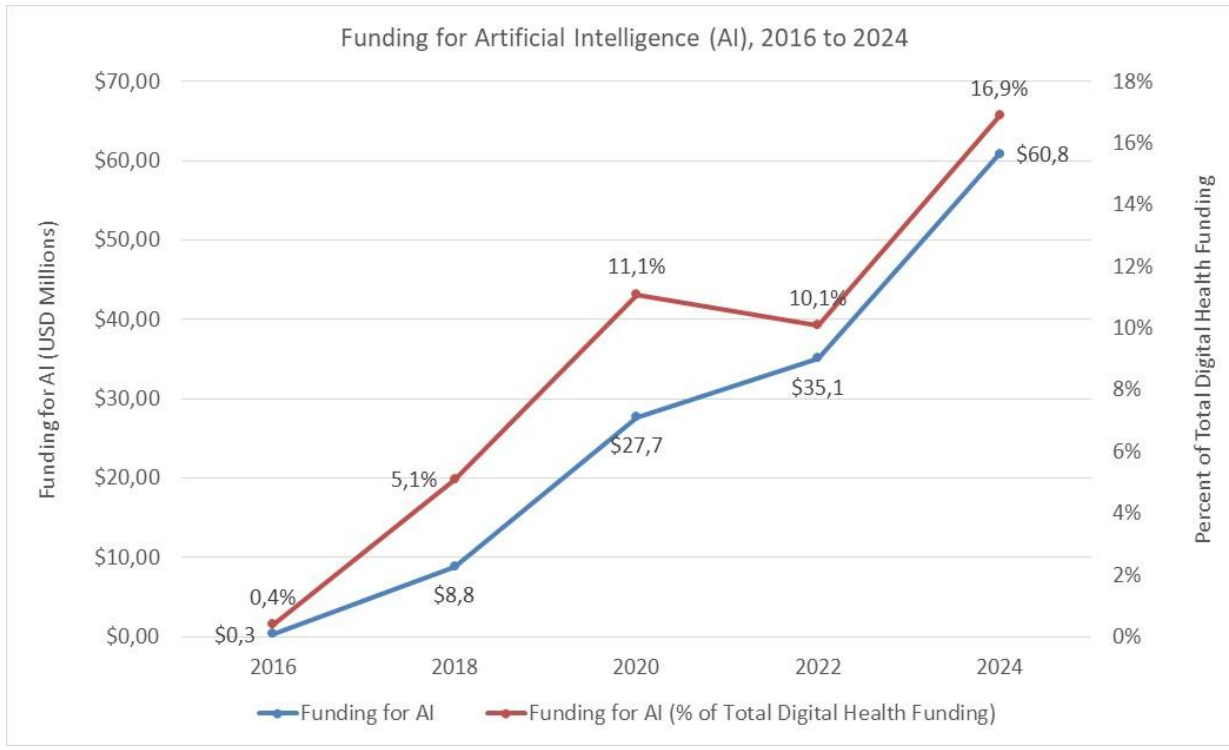
	Data protection	Digital health infrastructure	HIV-specific safeguards	Institutional coordination	AI-specific regulation
Kenya	●	●	●	●	◐
Rwanda	●	●	●	●	◐
Uganda	●	●	◐	◐	○
Tanzania	●	◐	●	◐	◐
Malawi	●	◐	●	◐	○
Rep. Congo	●	○	◐	◐	○
Gabon	◐	○	○	○	○

● Foundations present ◐ Partial / in development ○ Absent / significant gap

Investment in AI for GH: Rising Rapidly From a Very Small Base



Donor investment in Digital Health
\$91M → \$360M (2016–2024)
Growth driven by COVID-19 surge



Donor investment in AI for GH
\$0.4M → \$60.9M (2016-2024)
0.4% → 16.9% of digital health

Donor funding for digital health has grown ~4x since 2016 but still represents ~1% of total health financing. Without a clear donor financing strategy, AI risks becoming another fragmented vertical investment.

Global Commons

Building the Shared Infrastructure for Equitable AI

01

Move from **fragmented, proprietary pilots** → **shared, interoperable systems**

02

Treat AI as **public infrastructure for health systems**, not isolated innovation

03

Align with emerging governance models that emphasize sovereignty + shared stewardship

Building the AI Commons: Governance Architecture & Accountability at Scale

A Layered Governance Model for Sovereign, Scalable AI



A Global Accountability Index for Health AI

Illustrative Scorecard - demonstration only

Company	Governance & Accountability	Data Sovereignty	Interoperability	Affordability	Digital Public Goods Investment	Independent Evaluation	Pro	Overall Score
Google	4	3	4	4	4	3	3	3.1
Microsoft	4	4	4	4	4	4	4	4.0
amazon	3	2	2	2	2	2	2	2.5
Apple	2	2	2	2	2	2	2	2.4
Digital	3	3	3	4	3	3	2	3.0
Meta	5	5	4	5	4	4	4	4.3
Meta	2	2	2	4	2	2	2	2.3

Legend:

- 1-2 = High risk / weak alignment
- 3 = Moderate alignment
- 4-5 = Strong alignment
- 1-2 = Strong alignment

Benchmark major technology providers on:
Modeled on the Access to Medicines Index—shifting markets toward equity, transparency, and public value



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Summary

AI will not transform HIV outcomes unless it is governed, financed, and built as public health infrastructure — not as isolated innovation

- 01 **A Structural Gap:** AI is advancing — **but not scaling [yet]** (pilots > systems)

- 02 **The Real Constraint:** Not technology → governance, financing, and delivery

- 03 **The Risk:** Fragmentation, dependency, loss of sovereignty, community exclusion

- 04 **The shift:** Tools → Infrastructure; Pilots → Systems; Extraction → Stewardship