

# AI and HIV Programs: A Guide for Advocates

AI offers the HIV field an opportunity to expand reach, enhance prevention, and improve care if guided by responsible, community-focused practices

Artificial Intelligence (AI) refers to software that learns from data to perform tasks normally handled by people—like identifying patterns, predicting outcomes, or generating and summarizing content. Instead of simply following fixed rules, AI systems can make context-aware decisions. It powers tools such as chatbots that answer complex questions, computer vision that analyzes medical images, and natural language models that extract insights from large volumes of text.

## Confronting barriers to progress

Despite decades of progress, the HIV response continues to fall short in critical areas. Populations in low-resource and high-stigma environments remain unreached, and prevention efforts are losing momentum due to declining investments and low PrEP uptake. Missed diagnoses delay treatment, while supply chain breakdowns, fragmented pilot projects, and siloed data systems undermine efficiency. Without targeted action, these gaps will continue to slow progress. AI offers a timely way to strengthen impact in key areas:

### Information: Reaching More People

By utilizing health, social, and geographic data, AI can help find and reach often missed people, like those in remote areas or facing stigma. It gives them a trusted place to get information about HIV and LEN, meeting them where they are.

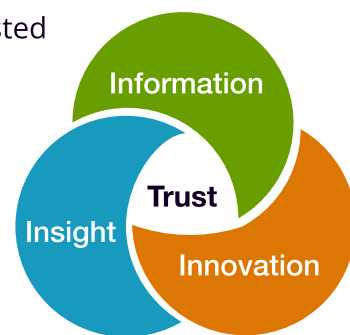
### Insights: Smarter Prevention

AI can predict where new HIV cases are likely to appear, helping programs target prevention tools like PrEP or testing. It can also give people personal insights about their own risk, helping them reflect and become more open to using an intervention. This helps limited resources go further.

### Innovation: Better Testing & Treatment Interventions

AI tools like computer vision can read HIV tests more accurately, and chatbots can guide people through testing and link them to care when they are ready. AI can also accelerate vaccine design, improve target selection, and enhance clinical trial operations

**Finally, trust.** It grows when we understand and address the real barriers people face around testing, disclosure, and staying connected to services. Without trust, interventions stall; with it, they progress.



⚠️ **However, this potential comes with risks.** Weak data privacy protections, biased algorithms, and lack of regulation can deepen inequities and erode trust. To use AI responsibly, every stage of design and deployment must be guided by equity, ethics, and community engagement. By centering communities and equity, AI can help the HIV response move from fragmented pilots to scalable and sustainable solutions, transforming disruption into opportunity for global health.

## Translating Pilots into Scale & Impact



### What can advocates do now?

To seize this opportunity, HIV advocates can take concrete actions in key areas to lead responsible and impactful AI adoption:

- Push donors to invest in digital and AI literacy across health systems and communities and encourage collaboration amongst implementing partners.
- Engage communities to understand what AI means to them and what questions or concerns they have, so advocacy reflects their priorities.
- Ensure policymakers align national digital health plans to use AI ethically by setting community-informed principles, continuously monitoring AI for safety, and ensuring equitable access.
- Break down silos to work across stakeholders, build joint financing mechanisms, and shared regulatory frameworks to scale proven tools.
- Empower civil society organizations to lead local implementation and community-led monitoring, ensuring that community-generated data informs AI systems and aligns them with local needs.
- Ensure continuous data quality, transparency, and community feedback.

