

AI in Global Health Education and Curriculum Design

CUGH AI Working Group

April 9, 2026

CUGH's 17th Annual Conference
The Future of Global Health
April 9-12, Washington, DC



Agenda

Session Overview

Intro to AI & Global Health Education

AI & the Global Health Workforce

AI in Clinical Education

Closing & Evaluation

CUGH AI Working Group Mission

The AI Working Group at the Consortium of Universities for Global Health seeks to improve the wellbeing of people and the planet by advancing innovative, ethical, and equitable integration of artificial intelligence into global health. Through **education**, we create accessible resources to deepen understanding of AI's potential and challenges. Through **research**, we drive innovative AI solutions to address global health disparities. Through **service**, we foster cross-sector partnerships to implement cutting-edge AI applications. Through **advocacy**, we promote policies that ensure equitable access to transformative AI technologies, aligning with CUGH's mission to enhance health equity and sustainability worldwide.

Key Activities:

- Webinars with leaders in AI
- Two-pagers introducing AI topics
- AI curriculum needs
- Guidance on AI use in global health education
- Commentaries on AI integration in global health
- Conference sessions

Session Goals

1.

To share and document perspectives and priorities among the CUGH community related to AI

2.

To identify opportunities for the AI WG to support cross-cutting needs within CUGH

3.

To refine the AI Working Group Scope of Work to align with CUGH member priorities

4.

To recruit working group participants with diverse perspectives who can lead CUGH AI WG activities

AI and Global Health Education

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GEORGETOWN UNIVERSITY

**Center for Global Health
Practice and Impact**

What is AI?

FUTURE SKILLS | TOP 10 USES OF AI IN DAY-TO-DAY LIFE

DIGITAL ASSISTANTS

AI-driven tools like Siri, Alexa, or Google Assistant help manage daily tasks, provide answers to queries, and control smart home devices, making everyday life more convenient.



SOCIAL MEDIA

AI curates personalized content feeds, moderates user-generated content, and suggests friends or interest groups based on behavior, enhancing social connectivity.



DRIVING

AI powered self-driving cars and real-time traffic predictions improve road safety and enables efficient transportation.



FACIAL RECOGNITION

AI secures devices, verifies identities, and enables seamless user access through face-based authentication.



FRAUD DETECTION

AI detects suspicious transactions and patterns in real-time, protecting users from financial fraud and cyber threats.



SPAM DETECTION

AI filters out unwanted emails or messages, ensuring a cleaner inbox and protecting against phishing scams.



RECOMMENDATION SYSTEMS

AI suggests products, shows, or music tailored to individual preferences, enhancing user engagement.



CONTENT STREAMING

AI optimizes streaming quality, recommends content, and personalizes viewing experiences on platforms like Netflix.



SMART KEYBOARDS

AI predicts and autocorrects text as users type, improving typing speed, accuracy, and overall communication efficiency on smartphones and computers.



SEARCH ENGINES

AI enhances search engines by ranking and delivering the most relevant search results quickly, making it easier to find accurate information online.



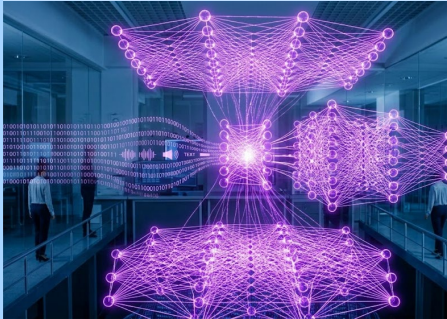
Artificial Intelligence:
systems that perform tasks that normally require human intelligence (ability to learn, reason, make decisions, and adapt)

AI is a toolbox, not a single technology

What is AI?



Machine Learning
Algorithms and models for prediction



Deep Learning
Machine learning using artificial networks



Generative AI
Creation of images, text, or videos

How is AI used in Global Health?



Study & learn

- Literature reviews
- Brainstorming
- Note taking
- Editing
- Quizzing & studying
- Data analysis & interpretation
- Synthesizing research
- Personalized learning paths



Do our Work

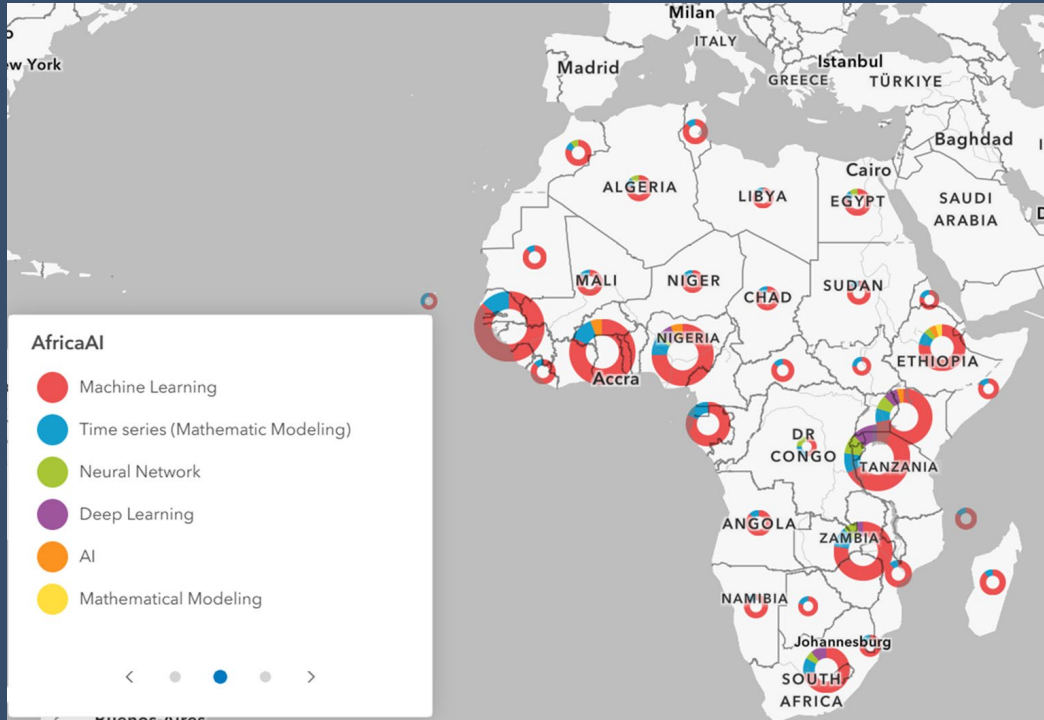
- Notation and meeting notes
- Grant writing
- Automation
- Report generation
- Automating data entry
- Creating presentations
- Document summarization



Implement Health Programs

- Clinical Decision Support
- Chatbots
- Outbreak risk prediction models
- Supply chain management
- Predictive modeling for resource allocation
- Early disease detection
- Health worker training tools
- Monitoring program effectiveness

Case Study: Predictive AI in Global Health



Scoping review of predictive AI in Africa

- 80 predictive AI studies
- 54 African countries
- Infectious disease focus (61%)
- Machine learning most common (67%)

Case Study: Predictive AI in Global Health



The image shows a presentation slide with a white background and a dark blue header. The header contains the text 'Mapping Uses of Artificial Intelligence in Global Health' and a small logo for the Center for Global Health Practice and Impact. The main content area features a large title 'Mapping Uses of Artificial Intelligence in Global Health' in a bold, dark blue serif font. Below the title is the text 'Center for Global Health Practice and Impact & Center for New Designs and Learning Scholarship at Georgetown University' in a smaller, dark blue sans-serif font. The date 'February 26, 2026' is displayed at the bottom left of the content area. On the right side of the slide, there is a graphic of a world map with glowing lines and nodes, and three circular icons containing a plus sign, a question mark, and another plus sign. At the bottom of the slide, there is a navigation bar with four links: 'About this Project', 'Predictive AI in Africa', 'Mapping Real-world examples', and 'Share your work!'. A QR code is located in the bottom right corner of the slide.

Center for Global Health Practice and Impact

Mapping Uses of Artificial Intelligence in Global Health

Mapping Uses of Artificial Intelligence in Global Health

Center for Global Health Practice and Impact
& Center for New Designs and Learning
Scholarship at Georgetown University

February 26, 2026

[About this Project](#) [Predictive AI in Africa](#) [Mapping Real-world examples](#) [Share your work!](#)



Case Study: Predictive AI in Global Health

Africa AI Scoping Review Shared

+ Create notebook Share Settings

Sources

+ Add sources

This notebook has reached its source limit. [Upgrade.](#)

Search the web for new sources

- Select all sources
- 1. Bekele 2022.pdf
- AI x GH Manuscript.pdf
- Abegaz 2023.pdf
- Adeoti 2021.pdf
- Agbelusi 2020

Chat

The primary value of these ML models is their ability to provide **actionable insights** for health policy and clinical interventions ²⁷. By identifying specific attributes related to LBW, health systems in countries like Ethiopia can better target **intervention targets**, such as nutritional counseling, improved ANC access, and socioeconomic support for high-risk mothers ¹¹ ...

I can generate a **tailored report** specifically on the feature importance findings for LBW or a **quiz** to help you review the different ML algorithms mentioned. Would you like to proceed with one of these?

Today • 11:10 AM

Start typing... 81 sources

Studio

- Audio...
- Slide Deck **BETA**
- Video...
- Mind Map
- Reports
- Flashcards
- Quiz
- Infograp... **BETA**
- Data Table

Predictive AI Application... 6d ago

Mac... 80 so...

NotebookLM can be inaccurate; please double check its responses.

Case Study: Predictive AI in Global Health

The screenshot displays the Elicit AI interface. The top navigation bar includes the Elicit logo, 'Recents', 'Library', and 'Alerts' icons, a 'Help' dropdown, and a user profile for Katherine Robsky. The left sidebar lists 'WORKFLOWS' (Research agent, Report, Systematic review) and 'TOOLS' (Find papers, Chat with papers, Extract data). The main content area shows a workflow for the question: 'What are the applications of predictive artificial intelligence using individual patient or participant data in global health contexts in Africa from 2020-2025?'. A feedback message states: 'Good research question. Consider adding these elements for better results: Specificity of outcomes, Specificity of health conditions, Implementation and effectiveness, Barriers and facilitators'. The workflow configuration bar at the bottom shows 'Systematic review' as the workflow, 'Source Research papers' as the source, and 'Format General Review' as the format, with a green arrow button to execute the search.

Elicit

Recents Library Alerts Help Katherine Robsky

WORKFLOWS

- Research agent
- Report
- Systematic review

TOOLS

- Find papers
- Chat with papers
- Extract data

What are the applications of predictive artificial intelligence using individual patient or participant data in global health contexts in Africa from 2020-2025?

Good research question. Consider adding these elements for better results:

- Specificity of outcomes
- Specificity of health conditions
- Implementation and effectiveness
- Barriers and facilitators

Systematic review Source Research papers Format General Review →

Conclusions

AI is a toolbox with many potential uses in global health, including how we study & learn, do our work, and implement health programs

- 1 AI is already embedded in global health
- 2 Global health as a field needs to adapt - quickly
- 3 AI neither good nor bad - it depends on its use

What are your thoughts, concerns, and questions regarding the AI in the context of global health education?

Consider:

1. How is AI currently reshaping how you learn, teach, or share knowledge within the global health community?
2. What specific skills or competencies must students and practitioners develop to use AI effectively and ethically in their work?
3. What resources or initiatives should CUGH prioritize to support your understanding and use of AI?

Activity: Networking & sharing (10 min)
Report back (10 min)



slido.com/3848943

AI in Clinical Education

What's actually happening — and what we're still missing

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What AI promises clinical education

- Adaptive learning, personalized feedback
- AI-generated clinical cases & simulations
- Decision support embedded in training
- Scale: reach learners in any setting
- Automated assessment and competency tracking

[1]

VS.

What frontline clinicians actually face

- Tools built for high-resource, EHR-rich contexts
- No bandwidth, no validation data, no support
- Learners using AI unsupervised with no framework
- Educators without AI literacy
- AI adding complexity, not reducing it

[2]

WHERE AI IS SHOWING UP IN CLINICAL EDUCATION

Case-Based Learning

- AI-generated patient cases
- Adaptive difficulty based on learner response
- Simulation scenarios for rare/high-stakes events

But: cases reflect training data biases

Assessment & Feedback

- Automated written assessment scoring
- Instant, iterative feedback on reasoning
- Formative feedback at scale (esp. in resource constrained settings)

But: risk of shortcutting clinical reasoning

Clinical Decision Support

- Point-of-care tools integrated in training
- Differential diagnosis aids
- AI as a "second opinion" for learners

But: black box, limited LMIC validation

AI in clinical education is removing the wrong things

Cognitive load ≠ useless friction

[5]

Learners who delegate reasoning to AI without reflective processing risk cognitive deskilling. Struggling through a case builds pattern recognition — AI that short-circuits that may produce clinicians who can prompt, but can't think.

Efficiency ≠ competence

[6]

Faster feedback loops don't automatically build clinical judgment. AI systems that disrupt existing reasoning workflows add cognitive burden rather than removing it — a well-documented barrier to real-world adoption.

Access ≠ equity

[7]

An AI tool that works in Boston and fails in Kigali isn't a global health solution. LLM deployment remains heavily concentrated in high-income countries — raising real concern that technology amplifies rather than closes health disparities.

A framework for clinician-led AI integration in education

01

Clinician-Centered Design

Frontline physicians and educators must shape AI tools not just validate them after the fact.

Clinical context is not a use case. It's the foundation.

02

AI Literacy for Educators First

We cannot teach what we don't understand.

All clinicians and educators need accessible, non-technical AI literacy before they can meaningfully guide learners.

03

Context-Appropriate Evaluation

Which AI tools are actually validated for which settings?
Who decides?

We need shared criteria not brand marketing.

04

Protect the Human Elements

Clinical reasoning, patient communication, ethical judgment, and cultural humility are not "soft skills."

They are the core and AI must be built around them.

GUIDED DISCUSSION — YOUR TURN

15 minutes | Small groups → report back

Q1

Has AI changed how you or your learners approach clinical reasoning — for better or worse?

Think: a specific moment. Not a theory.

Q2

What's one thing AI should NOT be allowed to replace in clinical training?

What's the line you'd draw — and why?

Q3

What would "context-appropriate AI literacy" actually look like for your setting?

What are the 2-3 things every clinician-educator in your context needs to know?

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Join the discussion

3 questions. No login needed.

Type your response — watch the room think in real time.

- 1 Open your phone camera
- 2 Scan the QR code — or go to slido.com/1576755
- 3 Type your answer — no account needed



slido.com/1576755

15 minutes total | ~4 min per question

Q1

Has AI changed how you or your learners approach clinical reasoning — and if so, how?

Think of a specific moment, not a general trend. A case, a shift, a concern you've actually seen.

Type 1-2 sentences. Responses appear live on screen.



slido.com/1576755

4 minutes | responses visible now

Q2

What is the one thing AI should not be allowed to replace in clinical training?

Name it specifically. Then tell us why — what breaks if we lose it?

Type 1-2 sentences. Responses appear live on screen.



slido.com/1576755

4 minutes | responses visible now

Q3

In your setting, what does AI literacy for clinician-educators actually require?

Name the 1-2 most essential things — skills, knowledge, or conditions. Short phrases work best.

3-5 words max. Submit multiple times for multiple ideas. Watch the cloud build.



slido.com/1576755

3 minutes | cloud builds in real time



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“When we were on the far side of the moon, looking back at Earth, you really felt like you weren’t in a capsule.”

*Jeremy Hansen, CSA Astronaut
Artemis II, April 6, 2026*

**In a time of global health uncertainty —
humans working without ego,
across every difference,
achieved the impossible.**

Thanks, Artemis, for the reminder.