

2026 IPAS Healthcare in the
Heartland CME Conference

AI in medicine: What PAs need to know, question, and do

Kuan Xing, PhD^{1,2}, & David Asprey, PhD, PA-C^{3,4}

1 Associate Director/Consultant, Office of Consultation and Research in Medical Education (OCRME);

2 Clinical Assistant Professor, Department of Family and Community Medicine;

3 Professor, Chair and DEO, Physician Assistant Studies and Services;

4 Associate Dean for Medical Education and Professional Programs, Carver College of Medicine,
University of Iowa



IOWA

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Disclosure:

- The presenters have no disclosure to report.

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Session Objectives:

- Describe the growing influence and use of AI in medical education & clinical practice;
- Identify common strengths, limitations, and potential biases of AI-generated information and explain their implementations for clinical decision-making and learning;
- Apply practical strategies for the ethical and responsible use of AI in medical education and clinical practice.

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Join by Web PollEv.com/kuanxing665
Or scan the QR code:

- **Q1. How often are you currently using AI in your clinical or educational role?**
- **Q2. Use a single word to describe your view of AI:**



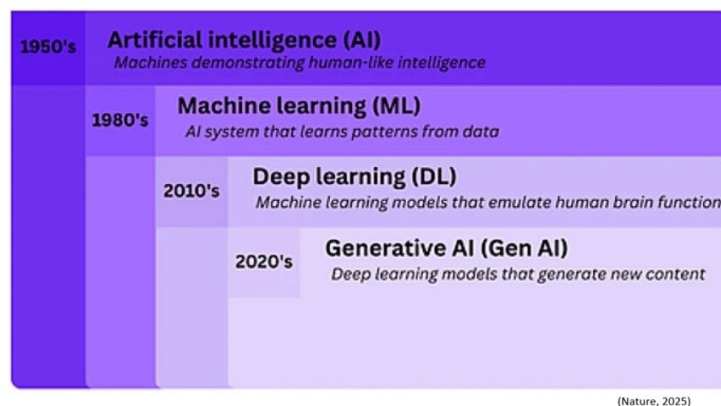
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- Poll Everywhere results

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Background

- A little bit history on AI: The evolution of AI concepts



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1950 - Alan Turing Can Machine Think?

• This article is more than 10 years old

Google's AlphaGo AI defeats human in first game of Go contest

Machine takes 1-0 lead in historic five-game matchup between computer program developed by DeepMind and world's best Go player Lee Sedol



Science

Current Issue Fir

HOME > SCIENCE > VOL. 228, NO. 4698 > INTELLIGENT TUTORING SYSTEMS

SPECIAL ISSUE ARTICLE

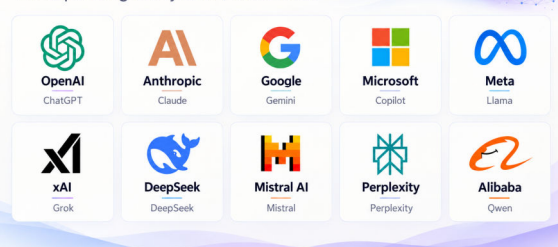
Intelligent Tutoring Systems

JOHN R. ANDERSON, C. FRANKLIN BOYLE, AND BRIAN J. REISER [Authors Info & Affiliations](#)

SCIENCE • 26 Apr 1985 • Vol 228, Issue 4698 • pp. 456-462 • DOI: 10.1126/science.228.4698.456

The Generative AI Era

An expanding ecosystem | 2022-2026



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Growing Influence: From chatbot to AI agent and beyond

EDUCATION > CHANGEMED ED INITIATIVE

ChatGPT passed the USMLE. What does it mean for med ed?

By Jennifer Labell, Contributing News Writer

Mar 3, 2023 • 4 Min Read

AEM Education and Training

A GLOBAL JOURNAL OF EMERGENCY CARE

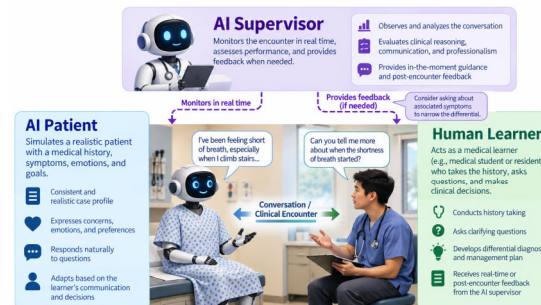
► AEM Educ Train. 2024 Nov 20;8(6):e11044. doi: [10.1002/aet2.11044](https://doi.org/10.1002/aet2.11044)

AI passed the test, but can it make the rounds?

[Christian Rose](#)^{1,✉}, [Carl Preiksaitis](#)¹

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THE NUTSHELL

Anthropic's Secretive AI-Powered Wet Lab Breaks Cover and Makes First Discovery

AI giant Anthropic announced the opening of a new wet lab to tackle overlooked biology problems. The lab just announced its first discovery: a novel CRISPR-like system.

Written by [B.J. MacKenzie](#)

Sep 24, 2023 | 3 min read

[SAVE FOR LATER](#)

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How do PAs use AI?

AAPA survey findings point to a profession that is adopting AI — but asking for transparency.

Some highlights:

56%

already use AI

in clinical practice

89% **believe**

AI will dramatically change PA practice

87% **report**

needing to learn more about AI.

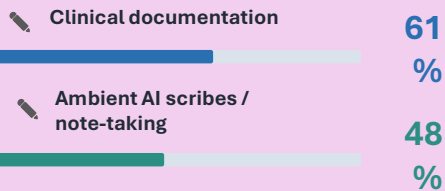
83% **want**
formal employer-led AI training.

Only 32% **report**
having clear workplace guidelines for safe AI use.

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Where do they use it?

Leading applications among practice PAs:



These findings mirror broader physician surveys: reducing documentation & administrative burden

PA students: Using AI as a learning + preparation partner.

 **Practice questions**

 **Clarify difficult concepts**

 **Prepare for clinical assessments**

 **Review clinical information**

Viewed AI as useful and efficient but recognized concerns regarding inaccuracy and hallucinations

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What AI tends to do well?

AI's strengths:

- Information retrieval,
- Summarizing,
- Ambient documentation,
- Workflow automation,
- Drafting and rewriting,
- Time saving(?),
- ...

But, they need **human oversight** or adopt the “**human in the loop**” approach.

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What could go wrong with AI?

- **Making things up**
hallucination, fabricated
- **Get things wrong**
outdated knowledge, misuse (billing and coding),
- **Treat people differently**
demographic, culture/language bias
- **Influencing your thinking**
automation bias,
- **Change how you think/work**
Deskilled/never-skilled, over-reliance, speed vs. quality dilemma



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Billing and Coding Manipulation

AI-assisted coding tools can increase efficiency but may be misused.

Examples:

- Upcoding based on AI-generated documentation.
- Automatically inserting elements that justify higher billing levels.
- Documentation inflation.
- Because AI is increasingly used for coding and billing documentation, compliance monitoring remains important.

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No AI tool is perfect.

What is the task, risk, and how much trust we should give to AI?

LOW RISK

FORMATIVE LEARNING

Student feedback dashboard

TASK Individualized, purely formative insights from evaluation data.

STAKES Low

RISK Bias in evaluations; misprioritized feedback.

Entrustment Level • Full AI autonomy

MEDIUM RISK

ASSESSMENT SYNTHESIS

Clerkship narrative summary

TASK AI summarizes written feedback about a learner's competency.

STAKES Moderate

RISK Embedded bias; missed context or coded language.

Entrustment Level • Constant human supervision

HIGH RISK

SUMMATIVE DECISION

Resident graduation decision

TASK Competency committee determines whether a resident graduates.

STAKES High

RISK Limited explainability; insufficient contextual expertise.

Entrustment Level • No autonomous AI role

AI autonomy decreases → Human oversight and accountability increase

Source: Gin BC et al. Entrustment and EPAs for Artificial Intelligence (AI): A Framework to Safeguard the Use of AI in Health Professions Education. Academic Medicine. 2025;100:264-272.

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Strategies for human oversight with AI use: Same tool. Different setting. Same risk?

Consider how context changes what “responsible use” looks like.



Where are you practicing?

Academic / campus

Enterprise tools • governance • support

Private practice

Different resources • policies • oversight

How does your healthcare system utilize the AI tool? Any oversight at the system level?

Takeaway: Evaluate the tool AND the context in which you use it.

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Strategies for human oversight with AI use: Would you paste this into an AI tool?

Use a quick privacy stop-check before entering patient information.



Patient name

STOP

DOB / MRN

STOP

De-identified case

CHECK

General clinical question

CHECK

Which item above creates the greatest privacy concern in a non-approved AI tool?

Ethical use of AI: Don't enter identifiable or sensitive patient information into tools that are not approved for that use (e.g., violation of HIPPA).

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Strategies for human oversight with AI use: Approved ≠ assumed

Before clinical use, know the security level your healthcare system has approved.

Can I use this AI tool?



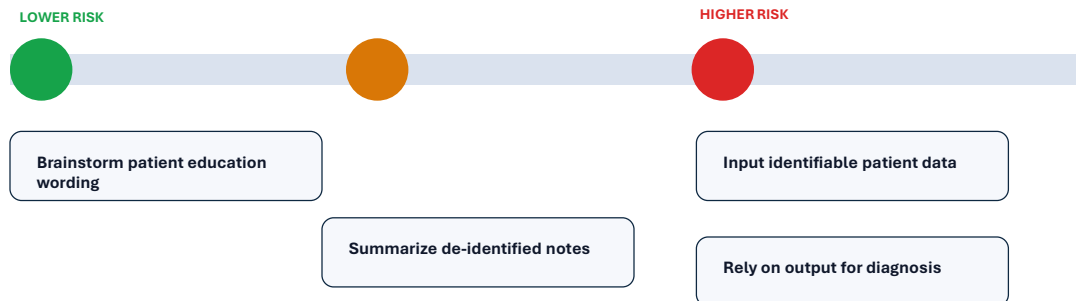
AI governance: Who in your organization decides whether an AI tool is safe for clinical use?

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Strategies for human oversight with AI use: How much risk are you accepting?

Not every AI task carries the same consequence.



YOUR TURN: Where would you place your most common AI use on this continuum?

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Strategies for human oversight with AI use: AI gave you an answer. Now what?

The key question is not whether AI can suggest. it's how you validate.

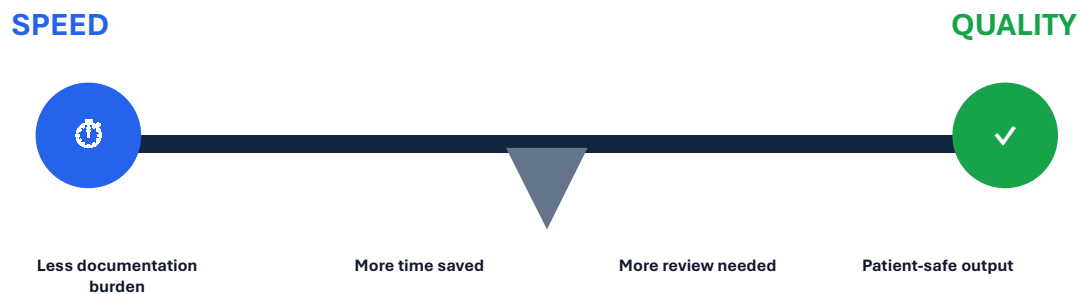


CASE PROMPT: What would you independently verify before acting on an AI-generated differential diagnosis?

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Strategies for human oversight with AI use: Speed vs. quality: where is your line?

Efficiency matters—but only if the output remains clinically trustworthy.



FINISH THIS SENTENCE: "AI saves me time only when..."

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The main takeaways:

- While AI use is **increasing** dramatically, there is still **lack** of **guideline** or policies to govern AI use

Takeaways:

- Can be a very powerful tool for clinicians, expand our ability to clinical problems/patient care,
- Responsibility of using that tool lands on clinician, AI literacy
- Due diligence: Ensuring appropriate and responsible use of AI tools.
- Reflection: On your personality (personal difference) and potential bias
- Policy/Guidance: [AAPA Urges HHS to Include PAs in Future Reimbursement Rules for Use of AI Technology - AAPA](#)

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Ethical and responsible use of AI

AI misuse in medicine is usually not malicious. More often, it involves using AI beyond its validated capabilities, relying on inaccurate outputs, or compromising privacy and professional judgment.

Extra UI/Health Care resources:

- AI training: [AI in Clinical Settings | Artificial Intelligence - The University of Iowa](#)
- Tool specific training: [Support | Artificial Intelligence - The University of Iowa](#)
- Ambient AI training: <https://epicsupport.sites.uiowa.edu/epic-resources/nabla-ambient-technology>

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Thank You! Questions?

Kuan Xing: kuan-xing@uiowa.edu;
Dave Asprey: david-asprey@uiowa.edu

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