

### Building Trust & Transparency in the Age of AI: Behind the Data Curtain

February 28, 2024

Association of American Medical Colleges

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## **Speakers**



Lynn Cleary, MD Vice President for Academic Affairs and Distinguished Teaching Professor of Medicine SUNY Upstate Medical University



**Cecilia Barry, JD** Senior Corporate Counsel AAMC



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#### **Ernie Perez, MS**

Associate Provost and Executive Director Medical Campus Information Technology Boston University





Building Trust and Transparency in the Age of AI: Behind the Data Curtain

AAMC Series on AI

Lynn Cleary February 28, 2024

# Conversations about AI, Data, and the Questions They Prompt

- Curriculum Dean
- Chief Diversity Officer
- Student Affairs Dean
- Director of Admissions
- Graduate Studies Dean
- Hospital CEO
- Chief Information Officer

- VP of Research
- Residency Director
- Faculty Affairs Dean
- Faculty
- Students
- Hospital CMO



# Considerations

- Al needs data to act, but there is bias in training data, algorithms, learners
- Not all AI is the same (purpose, accessibility, resources required, technical sophistication, etc.)
- Difference in control between institutional data and publicly available web-based tools
- Do you have an AI Steering Committee or some other working group? Who is on it?



# What concerns do students have about AI?

"We recently introduced AI literacy into our curriculum using a case-based approach. I had assumed most participants would be focused on technical areas. Our pre- and postsurvey results, however, revealed a major interest around ethical and legal aspects of AI. Most striking was that this concern INCREASED after discussion in our pilot sessions. Anxiety about both future patient [and] clinician use of AI in the medical arena was apparent."



# Student perspective

"I had one conversation with a student and it had to do with the use of AI to ensure a personal statement was grammatically correct. The student was concerned, post submission, that she had been unethical in some way."



# What about use of AI in applications?

"With the use of AI on the rise and a movement away from objective measures of performance for residency applications, are programs at risk of seeing anything but authentic and holistic representations of candidates as personal statements, faculty letters, Dean's letters replace human perspectives with artificial ones? Should we push for more objective measures as a result?"

"Discussion of AI in admissions is generally in two categories:

Applicant (mis)use in applications and particularly essays
 The use of AI to screen applications by an admission office
 We recently hosted several other medical schools on campus where this came
up. While the two topics are very common in discussion it was consensus that
virtually no medical school yet has implemented a clear policy relative to #1
and no medical schools I've talked with are using AI in the review process."



# Can we trust data? Accuracy? Bias?

"AI [discussions] largely fall into a theme of bad data in and bad data out. ...AI hallucinates and provides information that is wrong. In imaging specialties ... worries include validation ... Constantly normalizing data to give what is most often correct results in bias. There are problems with the ethics of AI algorithms being proprietary to a company. How do you evaluate safety and efficacy of AI algorithms?

"If I had to pick one of the most egregious ethics problems with AI it is insurance companies using AI to deny care. [It's] cheaper than doctors evaluating on behalf of insurance companies [and they] can easily blame the AI system for denying legally required care."



# Research and data security

"What greatly concerns me is the proven ability of AI to re-identify de-identified PHI data."



# Can we limit academic misuse of AI?

"In our Bioethics class...Dr. 'Smith' spent two hours discussing AI, its implications and when it was ok to use it. For the final paper ... 6 of 25 students were tagged by Turnitin as using AI extensively, despite being told that it was not allowed. Three of the papers were on the ethics of AI. In another class, two students out of three did the same for a writing assignment.

"At our Graduate Council meeting two weeks ago, it was decided that all qual exams and dissertations be screened for the use of AI. We set up a Brightspace course to enable students to submit documents. Originality reports go to the chair of the committee."



# How do we use AI in teaching/presenting?

"I've used ChatGPT to help with the talk I'm giving tomorrow. It created a really good definition of "xxx." Is it really good, or is it that I did not do enough research and was lazy and did not come up with it myself? (Yes, I'm citing ChatGPT, although I did edit the content)."



# Questions- data and its use

- What data do you collect? (institutional level to individual students)
- Do you have infrastructure for data governance, data definitions, data repositories?
- Who owns data, who can use it, who can access it?
- Do you have a structure to determine what decisions can be appropriately made or informed by AI?
- Are you approaching this institution-wide or is it a distributed model?





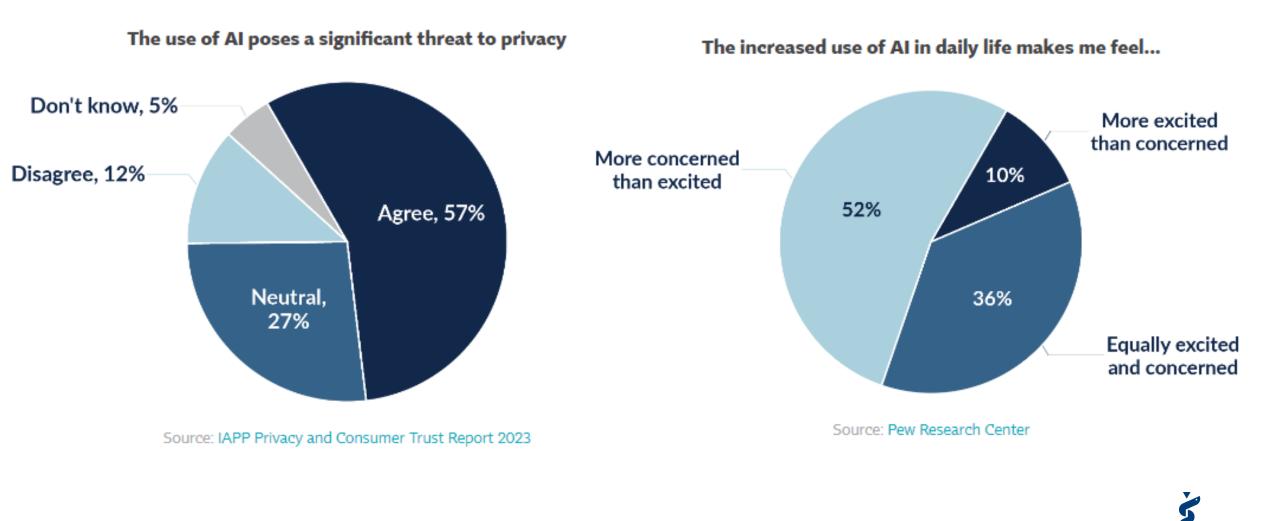
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Cecilia Barry, JD, CIPP/US, CIPT, CIPM Senior Corporate Counsel February 28, 2024

> Association of American Medical Colleges

# **Consumers' Concerns about Al**

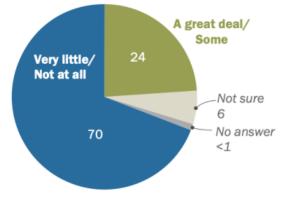


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Source: https://iapp.org/resources/article/consumer-perspectives-of-privacy-and-ai/

#### Most Americans who have heard of AI don't trust companies to use it responsibly and say it will lead to unease and unintended uses

Among those who have heard of artificial intelligence, % who say they **trust companies to use AI responsibly** ...



Among those who have heard of AI, % who say that as companies use AI to collect and analyze personal information, this information **will** be used in ways that ...

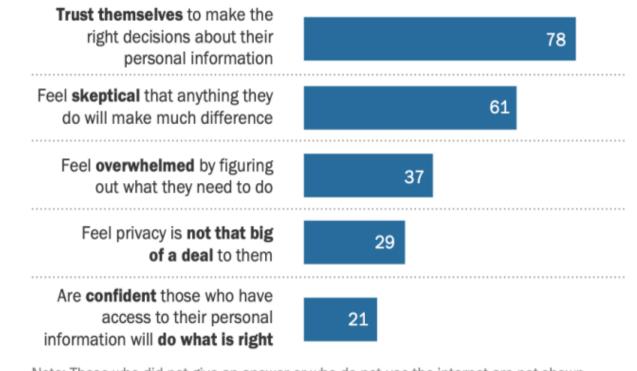


Note: "Definitely/probably will happen" are combined. Figures may not add up to 100% due to rounding. Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted May 15-21, 2023. "How Americans View Data Privacy"

#### PEW RESEARCH CENTER

# Many trust themselves to make the right privacy decisions but are also skeptical their actions matter

% of U.S. adults who say that when they think about managing their privacy online, they ...

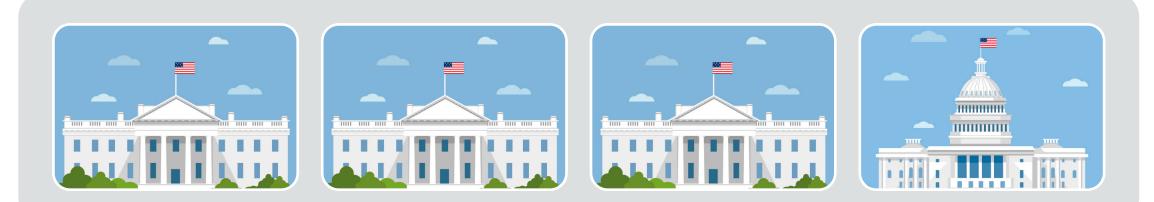


Note: Those who did not give an answer or who do not use the internet are not shown. Source: Survey of U.S. adults conducted May 15-21, 2023. "How Americans View Data Privacy"

#### PEW RESEARCH CENTER



## **Emerging Efforts to Regulate Al**



Blueprint for an Al Bill of Rights, October 2022 Voluntary Commitments for Leading Al Companies, July 2023

Executive Order on Safe, Secure, and Trustworthy Development and Use of AI, October 2023 Task Force on Artificial Intelligence, February 2024



# **Al and Student Privacy**

Al models are generally not developed with educational usage or student privacy in mind

Consider whether use of AI systems and interactions with students create educational records that must be protected by law

Consider whether the AI system should be treated as a third-party contractor under FERPA with appropriate constraints in place

Reference: <u>https://tech.ed.gov/ai/, https://studentprivacy.ed.gov/sites/default/files/resource\_document/file/Vendor%20FAQ.pdf</u>



# **Al and Health Privacy**

Consider whether HIPAA privacy and security rules apply and whether the AI system is a business associate

Can deidentified data be used, especially for training AI models, rather than PHI? What protections are in place to prevent reidentification of the deidentified data in the AI model?

Reference: <u>https://www.wilmerhale.com/insights/publications/20231027-privacy-concerns-at-the-intersection-of-generative-ai-and-healthcare; https://iapp.org/news/a/filling-the-void-the-2023-state-privacy-laws-and-consumer-health-data/</u>



# **Al and Health Privacy**

Consider health privacy laws beyond HIPAA and application to your contractors:

- Section 5 of FTC Act prohibits "unfair or deceptive acts or practices in or affecting commerce"
- California Confidentiality of Medical Information Act
- State comprehensive privacy and consumer health data laws

Reference: <u>https://www.wilmerhale.com/insights/publications/20231027-privacy-concerns-at-the-intersection-of-generative-ai-and-healthcare; https://iapp.org/news/a/filling-the-void-the-2023-state-privacy-laws-and-consumer-health-data/</u>



# **AAMC Principles for Responsible AI Use**



Developed by the Privacy Champions Community of Practice for AAMC internal application (Draft, Fall 2022)



Two-pronged approach: internal and external Recognize existing programs Promote current policies while reviewing for gaps Consider whether a generative AI policy is needed Be sensible at exposing AAMC data to AI systems





### **Al and Student Affairs**

Katherine Chretien, MD, Associate Dean for Medical Student Affairs







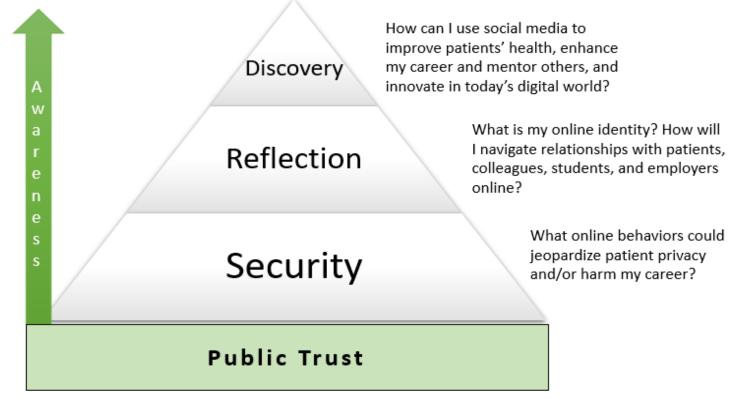


## **Lessons from Social Media Adoption**

- Safety and security
- Defining central ethical issues
- Policies
- Education
- Faculty development
- Student professional development



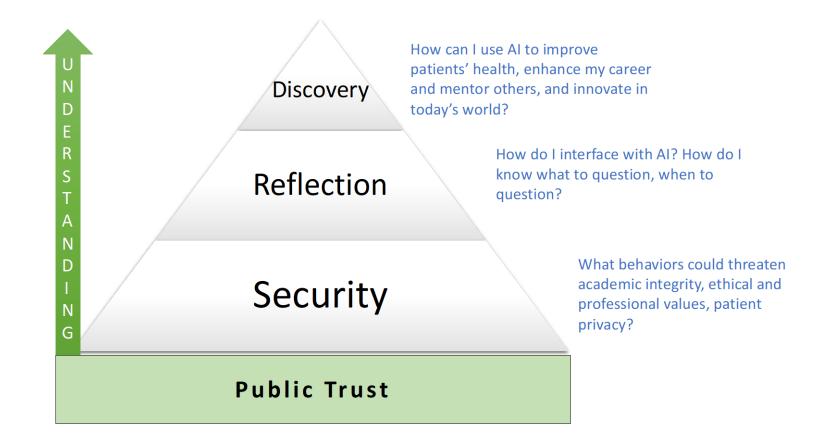
## Social media in medicine hierarchy of needs



Chretien KC, Kind T. Acad Med 2013



## Al in medicine hierarchy of needs





## **AI : Trust and Transparency**







## **Upcoming AAMC AI Webinars**

AI & Healthcare Delivery: Navigating the Clinical Reality and Expectations – March 26, 2024

Leveraging AI in Teaching & Evaluation – April 30, 2024

## Past AAMC AI Webinar

Al in Medical Education: Using the Missions of Medical Education as a Guide – January 2024

- Video recording
- Presentation slides
- Q&A section summary

Register for the monthly series! And find resources from past webinars.





# **AAMC AI Resources**

**AAMC AI Webinar Series** 

AAMC AI Resource Bundle

International Advisory Committee for Artificial Intelligence

AAMC Center for Health Justice

- Foundations for Responsible NLP Use for Maternal Health Equity
- Polling Snapshot: Artificial Intelligence August 2023

Links may be found in the chat.



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#### August 1, 2023

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#### Policy Advocacy Workshop Tools for Training Medical Students to Act on Climate Change

#### August 17, 2023

These three 90-minute workshops cover climate policies and advocacy guidance and utilize example factsheets and active learning exercises to significantly improve learners' readiness to advocate for climate legislation.



Considering Culture and Conflict: A Novel Approach to Active Bystander Intervention

#### August 29, 2023

This workshop uses a psychologically informed approach to microaggression training to increase participants' ability and willingness to intervene as active bystanders.

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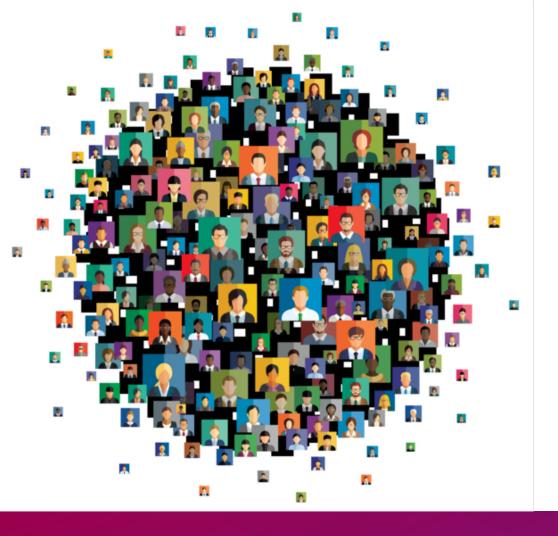
academicmedicineblog.org



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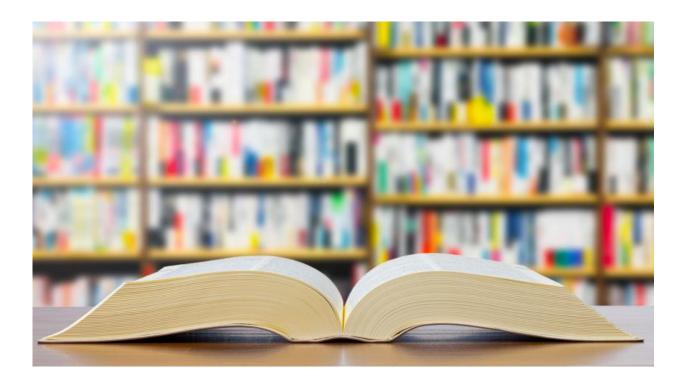




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# Make the AAMC Your Medical Education Home



The AAMC Curricular Resources & MedBiquitous are collecting feedback from the health professions community regarding the standardized vocabulary for instructional methods, assessment methods, and resources.



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- Discussion threads

https://communities.aamc.org/resource-bundles/artificialintelligence



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communities.aamc.org





A national questionnaire collecting medical education program data regarding curriculum structure, content, organization, process, and evaluation

The Curriculum SCOPE Survey



#### 2

#### Learn more at aamc.org/SCOPE

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