AAMC AI in Academic Medicine Webinar Series

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Webinar Episode: "AI in Medical Education: Using the Missions of Medical Education as a Guide"
Jan. 23, 2024

Summary of Question and Answer Segment

Facilitator: Alison J. Whelan, MD, FACP, Chief Academic Officer, AAMC

Presenter: Marc Triola, MD, FACP, Associate Dean for Educational Informatics, NYU Langone Health

Presenter: Stephanie Mann, MD, MS HPEd, Senior Associate Dean for Academic Affairs, Methodist University/Cape Fear Valley Health School of Medicine

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Q: Are you using the free or pay versions of ChatGPT? If using the pay versions, how do you make it accessible to students, faculty, and staff?

Marc Triola: We are using the pay version of ChatGPT via Microsoft's Azure cloud. The tools are funded centrally from our health system.

Q: Can you share any info about how you survey medical students about their use or interest in AI? Do you have any specific survey results or questions that can be shared?

Marc Triola: We have not surveyed, but we have formed an AI Advisory Council made up of students to give us advice. We also are very transparent with our students about how we are using AI for their education.

Q: The NYU-made AI tool showed study resources for students based on the Epic chart. Was there anything special done regarding patient identifiers/HIPAA?

Marc Triola: We are fortunate that our education apps run on the same infrastructure as our clinical apps, so they can talk to each other without the data ever leaving. For that project, we are not bringing over any PHI, only a diagnostic area that is recommended to a student.

Q: You mentioned using ChatGPT for tagging with USMLE keywords and MESH terms. Have you studied the fidelity of the output (e.g., compared results to manual tagging, calculated F-1 scores, etc.)? My understanding is that the fidelity of generative pre-trained transformers for tagging with controlled vocabularies really isn't great.

Marc Triola: We are working on this now and it is very prompt dependent. Simple prompts will not give good results and this has taken some prompt engineering.

Q: Dr. Triola - when you say NYU is using ChatGPT for those purposes, which platform are you building these with? Are they GPTs or did you build your own internal system with Azure or something along those lines?

Marc Triola: We are using Azure's GPT 3.5, 4, and 4 32k. We have both API integration with local apps and a custom front end for internal community web-based use.

Q: Dr. Triola - Could you speak more to your processes of using AI for curriculum mapping? How do you obtain instructional and assessment methods and durations, for instance? Or is it more so content tracking?

Marc Triola: At present, itis focused on content, domain, and subject tracking and not the rest of the curriculum inventory elements.

Q: Dr. Triola - How did you set it up for summarizing evaluation comments? Do all the comments get manually input from a particular source? Or do you get the comments specifically submitted directly to AI somehow?

Marc Triola: We wrote our own evaluation software. All data from that flows in realtime to our Education Data Warehouse. The AI acts on the centralized data in the warehouse and the results are visualized through a Tableau dashboard.

Q: What are strategies for involvement, both leadership buy-in and faculty/learner engagement?

Marc Triola: At NYU Langone, the dean is also the CEO. The clinical and research missions are growing together within the same infrastructure. Those who lead informatics across mission spaces approached their CIO and CEO and advised early on of the disruptive nature of AI and the importance of getting ahead of the curve. Identified opportunities include improvements to efficiencies, value, consistency of work (e.g., improved coding and documentation), and the lessening of physician burnout due to aforementioned opportunities. AI also supported the investment in integrated data, such as comprehensive data warehouses across the medical school (e.g., education, clinical, research data warehouses). NYU Langone also had a pre-existing relationship and data sharing agreement with Microsoft, which helped to quickly ensure HIPAA compliance and privacy for the Azure instance of ChatGPT. NYU Langone is trying to make AI fun and participatory, and also democratizing access by the local version of ChatGPT. The biggest challenge is keeping up with the pace of change.

Stephanie Mann: Buy-in is integral and also the biggest challenge. We cannot wait, we have to start now and have proper resource allocation.

Q: How are you 1) managing accuracy and accountability, and 2) communicating with faculty and learners?

Marc Triola: Hallucinations exist, but with each iteration of the model there is improvement. Does AI understand sacrosanctity in health care? No. But everywhere users encounter AI there are tools to provide feedback.
Regarding summarizing text (e.g., evaluation comments), with the right prompt hallucinations are minimized. Regarding true creativity, risk still exists, though different models have different levels of risk. These errors still need to be figured out before AI is used more heavily in health care.

Stephanie Mann: We see this as a tool to help students learn. Regardless of which model is used, output needs to be accurate? Similar to all that Marc shared, the challenge is confirming accuracy.

Q: What is one recommendation to move forward?

Stephanie Mann: Cautious optimism. It's important to truly understand what AI is beyond the coding level. Understand what AI can and cannot do, then collaborate with people who have more in-depth knowledge to strategize implementation.

Marc Triola: Recognize that your trainees, faculty, and students are already using AI tools. Create a safe space via technology and policies regarding safe usage of public tools, and build out with fun experimentation. That can help build momentum and inform how to achieve strategic priorities across the missions.