2024-03-07: Physicians of 2030: What Skills Will They Need in a World of AI?

The following links were shared during the chat:

- Adapted large language models can outperform medical experts in clinical text summarization
- Ambient Artificial Intelligence Scribes to Alleviate the Burden of Clinical Documentation
- Transforming Otoscopy Using Artificial Intelligence
- A scoping review of artificial intelligence in medical education: BEME Guide No. 84
- The clinical potential of counterfactual AI models.
- Development and Validation of an Automated Classifier to Diagnose Acute Otitis Media in Children



MedEd Chat (hosted by ACE) @MedEdChat9 hours ago

TOPIC 1: It's the year 2030. Generative AI and machine learning are highly advanced. What do you expect from your doctor who's using these tools? #MedEdChat #meded https://t.co/SkZTIU8CIY



Gary Beck Dallaghan @GLBDallaghan9 hours ago

T1 To think of me as an individual....and not a by-product of synthesized patient data. Al can inform, but even with advances physicians need to listen to patients to determine a diagnosis #mededchat



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh9 hours ago

#mededchat Dr. Sateesh Arja from Avalon University School of Medicine, Curacao #meded



Alliance4ClinEd @Alliance4ClinEd9 hours ago

T1 Al may help physicians be more efficient. This article points out how it can help with clinical reasoning and offer potential solutions doctors can confirm or refute https://t.co/xMEZYpelfG #MedEdChat



Alliance4ClinEd @Alliance4ClinEd9 hours ago

T1 Two other studies make note of decision support tools being accurate in otitis media diagnosing https://t.co/51LduakZ37 https://t.co/51LduakZ37 https://t.co/51LduakZ37 https://t.co/51LduakZ37 https://t.co/studiagnosing https://t.co/studiagnosing <a



Tim Dyster @timdyster9 hours ago

An awesome & important topic — and one that is top of mind for us @GlassHealthHQ!



MedEd Models @MedEdModels9 hours ago

RT <u>@MedEdChat</u>: TOPIC 1: It's the year 2030. Generative AI and machine learning are highly advanced. What do you expect from your doctor who's using these tools? #MedEdChat #meded https://t.co/SkZTIU8CIY



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh9 hours ago

<u>@MedEdChat #mededchat</u> T1 still the physician needs to be professional, ethical, empathetic, compassionate, advocate to the patient which cannot be replaced by machines and AI <u>#meded</u>



Gary Beck Dallaghan @GLBDallaghan9 hours ago

<u>@ArjaSateesh</u> <u>@MedEdChat</u> T1 Exactly. Although I use Al quite a bit, it can't replace people #mededchat



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh9 hours ago

@GLBDallaghan #mededchat T1 agree with you. Physician still needs to be a good listener and good observer #meded



MedEd Chat (hosted by ACE) @MedEdChat9 hours ago

TOPIC 2: What knowledge and skills that are taught now will need to change to adapt to these emerging technologies? #MedEdChat #meded https://t.co/qaqm9xQx9W



MedEd Models @MedEdModels9 hours ago

We want to see what our <u>#MedEdAl</u> guru, <u>@BraydonDymm</u>, is thinking about tonight's @MedEdChat!



Gary Beck Dallaghan @GLBDallaghan9 hours ago

T2 Although the tech can do a lot, judgment on the part of the physician is essential. Many of the core foundational content of <u>#meded</u> still needs taught. Communication skills education won't change either in my opinion. #mededchat



Jasminka Criley MD, FACP, FHM @criley md9 hours ago

By 2030, physician's role will evolve with more automated diagnostic tools and personalized medicine. However, humanistic aspect of being a doctor generative AI will NEVER be able to replace. #MedEdChat #MedEd #MedTwitter



Kristina Dzara, PhD, MMSc @KristinaDzara9 hours ago

RT <u>@MedEdChat</u>: TOPIC 1: It's the year 2030. Generative AI and machine learning are highly advanced. What do you expect from your doctor who's using these tools? #MedEdChat #meded https://t.co/SkZTIU8CIY



Kristina Dzara, PhD, MMSc @KristinaDzara9 hours ago

RT <u>@MedEdChat</u>: TOPIC 2: What knowledge and skills that are taught now will need to change to adapt to these emerging technologies? <u>#MedEdChat #meded https://t.co/gaqm9xQx9W</u>



Alliance4ClinEd @Alliance4ClinEd9 hours ago

T2 Tasks may change that may be better suited with Al....such as summarizing med record data prior to a clinic encounter <u>#MedEdChat https://t.co/zOPwWUdwuJ</u>



Kristina Dzara, PhD, MMSc @KristinaDzara9 hours ago

RT <u>@GLBDallaghan</u>: <u>@ArjaSateesh</u> <u>@MedEdChat</u> T1 Exactly. Although I use Al quite a bit, it can't replace people <u>#mededchat</u>



Kristina Dzara, PhD, MMSc @KristinaDzara9 hours ago

RT @GLBDallaghan: Gary here in Texas....looking forward to hearing how people think AI is transforming #meded #mededchat



Jasminka Criley MD, FACP, FHM @criley_md9 hours ago

<u>@MedEdChat</u> T1 By 2030, physician's role will evolve with more automated diagnostic tools and personalized medicine. However, humanistic aspect of being a doctor generative AI will NEVER be able to replace. #MedEdChat #MedEd #MedTwitter



Alliance4ClinEd @Alliance4ClinEd9 hours ago
T2 Additionally, Al scribes may help alleviate the burden of documentation #MedEdChat https://t.co/aG9hmkMyK2



Kristina Dzara, PhD, MMSc @KristinaDzara9 hours ago

Kristina here from Saint Louis checking in to <u>#MedEdChat</u>. Mostly lurking and learning and checking in to support our <u>#MedEdChat</u> community.



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh9 hours ago

<u>@MedEdChat #mededchat</u> T2 AI might help with clinical reasoning, critical thinking and evidence-based medicine. The physicians should have strong skills of history taking and physical examination. So their senses should work better listening, observing/seeing and touch #meded



Gary Beck Dallaghan @GLBDallaghan8 hours ago

<u>@ArjaSateesh</u> <u>@MedEdChat</u> T2 So let me ask this....if AI can help with clinical reasoning, are we going to need to focus on training learners differently to discern if the AI output aligns with the Hx & PE? I anticipate there will be a need for that. #MedEdChat



Jasminka Criley MD, FACP, FHM @criley md8 hours ago Listening to the patient is foundational to determine correct diagnosis. #MedEd #MedEdChat #PatientCare



Alliance4ClinEd @Alliance4ClinEd8 hours ago

T2 This rapid scoping review actually notes that #meded is using AI to teach clinical reasoning....along with other skills...however they also note the need for much more research on the pro's and con's of AI #MedEdChat https://t.co/7Ro6uGptgX



MedEd Chat (hosted by ACE) @MedEdChat8 hours ago

TOPIC 3: What knowledge and skills need to persist regardless of how advanced AI and machine learning become? #MedEdChat #meded https://t.co/ZIOV0y7Wxg



Alliance4ClinEd @Alliance4ClinEd8 hours ago

T3 I think it has been stated already, but nothing will replace a solid history and physical examination. The softer skills of medicine cannot be replaced by a large language model #MedEdChat



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

@GLBDallaghan @MedEdChat #mededchat T2 even though machines help with these, I would still encourage fostering clinical reasoning and critical thinking for trainees #meded



Gary Beck Dallaghan @GLBDallaghan8 hours ago

RT <u>@ArjaSateesh</u>: <u>@GLBDallaghan</u> <u>@MedEdChat #mededchat</u> T2 even though machines help with these, I would still encourage fostering clinical reasoning and critical thinking for trainees <u>#meded</u>



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

<u>@MedEdChat #mededchat</u> T3 patient care, communication and interpersonal skills, professionalism and system-based learning (advocacy to patients), scholar, and leadership competencies/skills still remain the same <u>#meded</u>



Jasminka Criley MD, FACP, FHM @criley_md8 hours ago

T2 Number of those. Including: more emphasis on developing critical thinking skills and analysis. Generative AI will spit out things that are correct, but also those that are not. It will be important to be able to separate the wheat from the chaff. #MedEdChat #MedEd #indeliblemd



Gary Beck Dallaghan @GLBDallaghan8 hours ago

RT <u>@ criley md</u>: T2 Number of those. Including: T2 Number of those. Including: more emphasis on developing critical thinking skills and analysis. Generative AI will spit out things that are correct, but also those that are not. It will be important to be able to separate the wheat from the chaff. #MedEdChat #MedEd #indeliblemd



MedEd Chat (hosted by ACE) @MedEdChat8 hours ago

TOPIC 4: How nimble should medical schools become to adapt to the changes with AI? What are the benefits, barriers, or risks that result in changing too quickly? #MedEdChat #MedEd https://t.co/Vbt2r45INT



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

RT <u>@ArjaSateesh</u>: <u>@MedEdChat #mededchat</u> T3 patient care, communication and interpersonal skills, professionalism and system-based learning (advocacy to patients), scholar, and leadership competencies/skills still remain the same <u>#meded</u>



Alliance4ClinEd @Alliance4ClinEd8 hours ago

<u>@ArjaSateesh</u> <u>@MedEdChat</u> T3 Do you see a role for AI to complement some of these skills? I'm thinking the system-based learning could be enhanced with AI as well as scholarship. Still needs human intervention, but as a tool it could streamline things. Thoughts? #MedEdChat



Jasminka Criley MD, FACP, FHM @criley md8 hours ago

T3 Physicians of the future still need to have solid medical foundation/knowledge in anatomy, physiology etc.; good core clinical skills, sound clinical reasoning, clinical decision, problem-solving skills. And of course, great soft skills. #MedEd #MedEdChat #indeliblemd



Kristina Dzara, PhD, MMSc @KristinaDzara8 hours ago

RT <u>@MedEdChat</u>: TOPIC 4: How nimble should medical schools become to adapt to the changes with AI? What are the benefits, barriers, or risks that result in changing too quickly? #MedEdChat #MedEd https://t.co/Vbt2r45INT



Gary Beck Dallaghan @GLBDallaghan8 hours ago

T4 Changing too quickly is not something I've found the House of Medicine does. Al is here to stay and we can't be afraid of it. I think the rapid scoping review <a>@alliance4clined posted identifies a lot of the questions we need to wrestle with as we proceed <a>#mededchat



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

<u>@MedEdChat #mededchat</u> T4 medical schools must develop ethical principles and ethical frameworks regarding AI before letting the students and faculty use them in medical education. This might help in outweighing benefits over risks <u>#meded</u>



Jasminka Criley MD, FACP, FHM @criley md8 hours ago @MedEdChat T4 Not nimble at all. #MedEdChat #MedEd



Alliance4ClinEd @Alliance4ClinEd8 hours ago

RT <u>@criley_md</u>: T3 Physicians of the future still need to have solid medical foundation/knowledge in anatomy, physiology etc.; good core clinical skills, sound clinical reasoning, clinical decision, problem-solving skills. And of course, great soft skills. #MedEd #MedEdChat #indeliblemd



Alliance4ClinEd @Alliance4ClinEd8 hours ago

RT <u>@ArjaSateesh</u>: <u>@MedEdChat #mededchat</u> T4 medical schools must develop ethical principles and ethical frameworks regarding AI before letting the students and faculty use them in medical education. This might help in outweighing benefits over risks <u>#meded</u>



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

<u>@ Alliance4ClinEd</u> <u>@ MedEdChat #mededchat</u> T4 of course AI can help with system-based learning. Still physician is the advocate to the patient. Undoubtedly AI can help with scholarship. Already it seems that there are some ethical frameworks around using AI for scholarly work <u>#meded</u>



Jasminka Criley MD, FACP, FHM @criley md8 hours ago

<u>@GLBDallaghan</u> <u>@Alliance4ClinEd</u> Agree. It is not less work. It is different type of work. <u>#MedEd #MedEdChat</u>



Sateesh Arja, M.B.B.S., PhD, MHPE @ArjaSateesh8 hours ago

<u>@GLBDallaghan</u> <u>@Alliance4ClinEd #mededchat</u> T4 Agree. There is no need to be afraid of AI. Embracing the AI and adopting to these technologies with appropriate ethical frameworks for using AI in medicine and medical education is critical #meded



MedEd Chat (hosted by ACE) @MedEdChat8 hours ago

We have about 5 more minutes left in our discussion. Please feel free to give some final thoughts #meded #MedEdChat



Tim Dyster @timdyster8 hours ago

<u>@ MedEdChat #MedEdChat</u> — not sure I know for sure, but we will absolutely need to use framings like distributed cognition and sociomateriality to inform our future MedEd standards and answer these questions



MedEd Chat (hosted by ACE) @MedEdChat8 hours ago

Join us the 2nd Thursday next month at 9 PM ET/NYC Thursday. Don't forget to suggest topics by DM or email #meded #MedEdChat



MedEd Models @MedEdModels8 hours ago

We would love to learn how <u>@ammacleod</u> and other sociomaterial experts are thinking about AI! #MedEd #MedEdChat #MedEdAI



Tim Dyster @timdyster8 hours ago

RT <u>@MedEdModels</u>: We would love to learn how <u>@ammacleod</u> and other sociomaterial experts are thinking about AI! #MedEd #MedEdChat #MedEdAI



Jose Carlos Del Castillo M.D. @RunRunlover7 hours ago

RT <u>@MedEdModels</u>: We would love to learn how <u>@ammacleod</u> and other sociomaterial experts are thinking about AI! <u>#MedEd #MedEdChat #MedEdAl</u>



Teresa Hartman @thartman2u6 hours ago

RT <u>@Alliance4ClinEd</u>: T2 This rapid scoping review actually notes that <u>#meded</u> is using AI to teach clinical reasoning....along with other skills...however they also note the need for much more research on the pro's and con's of AI <u>#MedEdChat</u> https://t.co/7Ro6uGptgX

The #MedEdChat Influencers

Top 10 Influential



@MedEdChat 100



@Alliance4ClinEd 65



@GLBDallaghan 63



@ArjaSateesh 44



@criley_md 35



@timdyster 18



@ammacleod 11



@MedEdModels 11



@GlassHealthHQ 6



@BraydonDymm 6

Prolific Tweeters



@ArjaSateesh 10



@Alliance4ClinEd 9



@criley_md 7



@GLBDallaghan 7



@KristinaDzara 6



@MedEdChat 6



@MedEdModels 3



@timdyster з



@RunRunlover 1



@thartman2u 1

Highest Impressions



@MedEdChat 59.0K



@KristinaDzara 44.4K



@GLBDallaghan 14.8K



@Alliance4ClinEd 7.6K



@MedEdModels 7.0K



@criley_md 7.0K



@thartman2u 3.3K



@timdyster 2.8K



@ArjaSateesh 2.3K



@RunRunlover 320.0

The Numbers

148.517K_{Impressions}

53_{Tweets}

10 Participants



Twitter data from the #MedEdChat hashtag from Thu, March 7th 2024, 8:05PM to Fri, March 8th 2024, 4:55AM (America/Chicago) – Symplur.