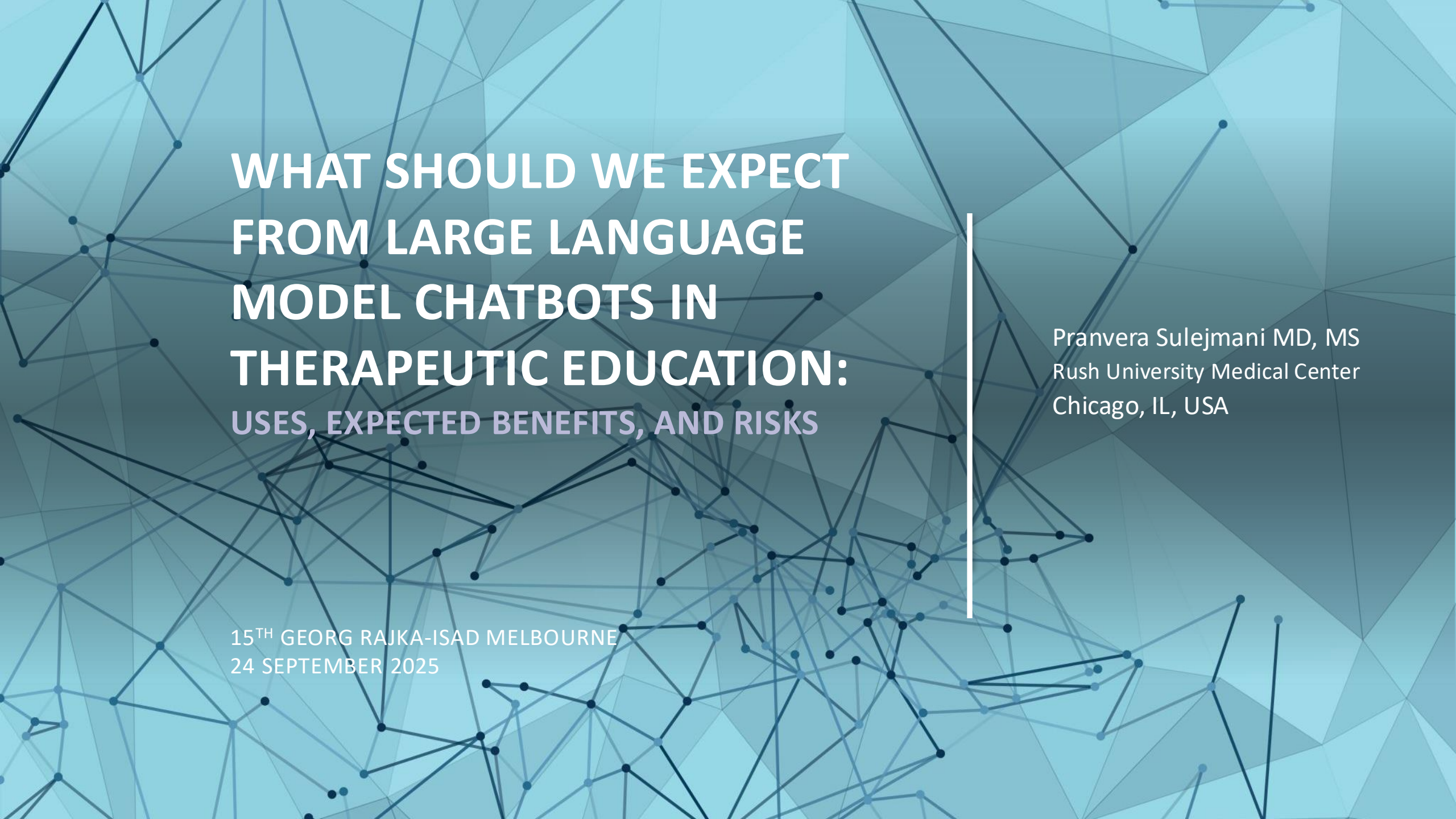




WHAT SHOULD WE EXPECT FROM LARGE LANGUAGE MODEL CHATBOTS IN THERAPEUTIC EDUCATION: USES, EXPECTED BENEFITS, AND RISKS

Pranvera Sulejmani MD, MS
Rush University Medical Center
Chicago, IL, USA

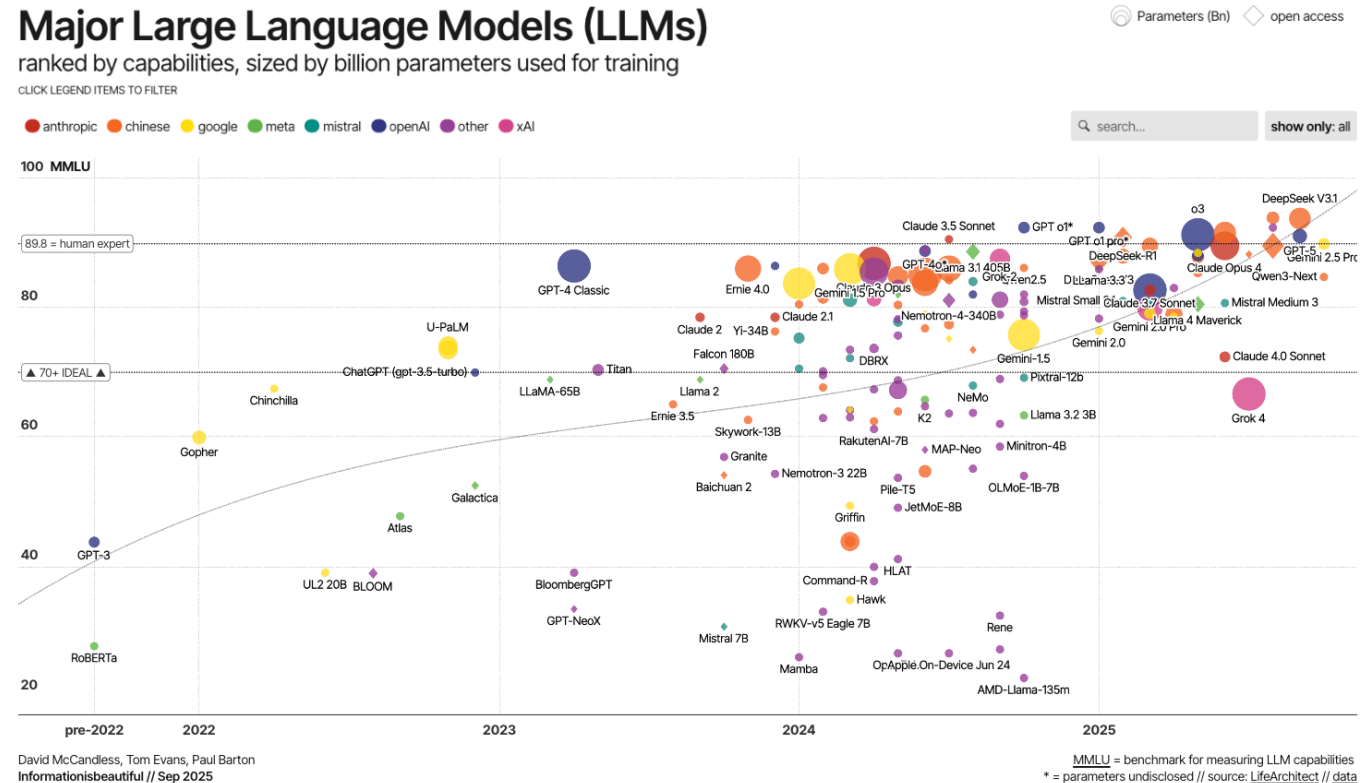
15TH GEORG RAJKA-ISAD MELBOURNE
24 SEPTEMBER 2025

DISCLOSURES

- None

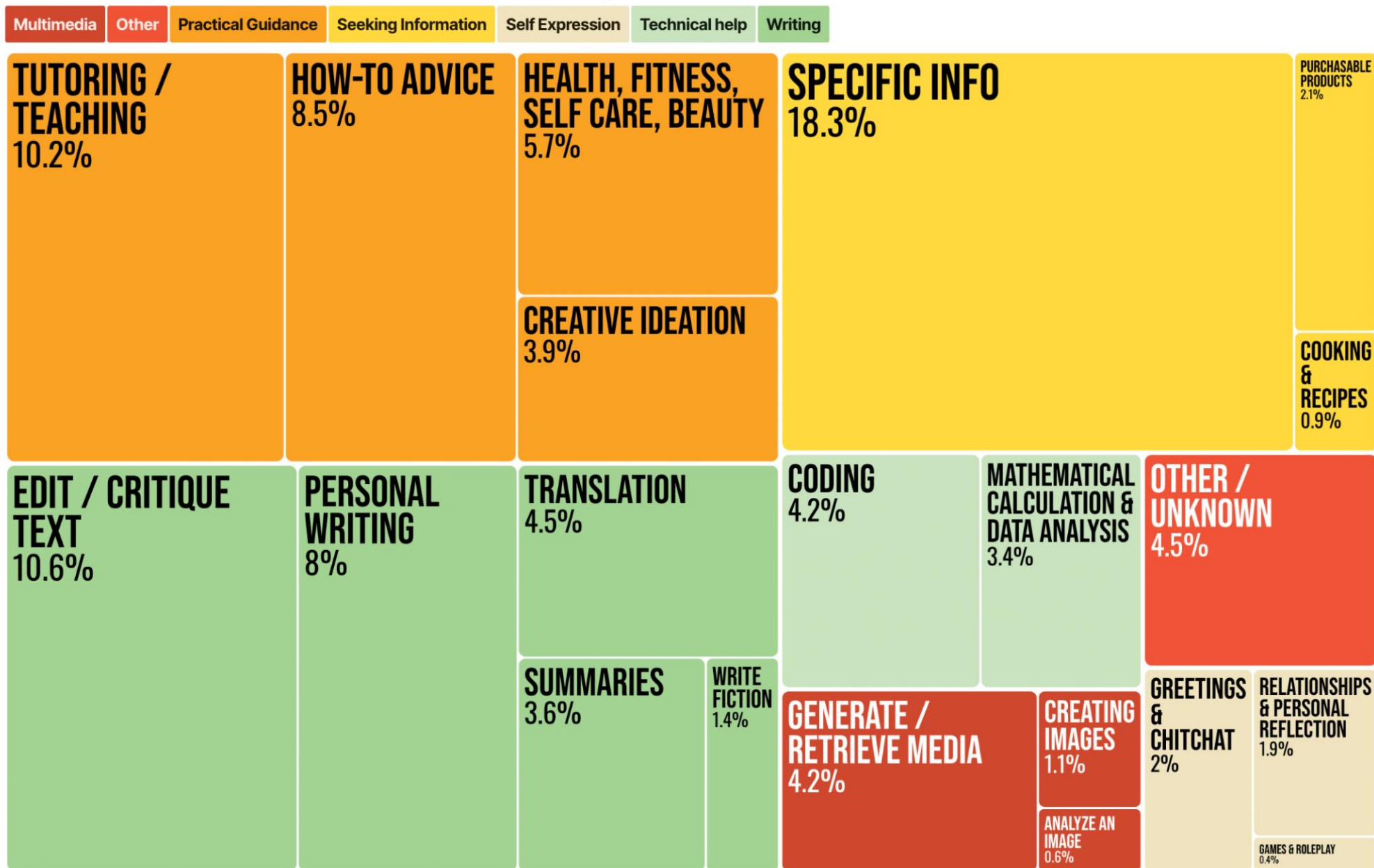
HOW DO THEY WORK?

- Deep learning algorithms trained on *vast* amounts of data to generate responses to user prompts
- The largest large language model (LLM) in the world is OpenAI's Chat GPT-5

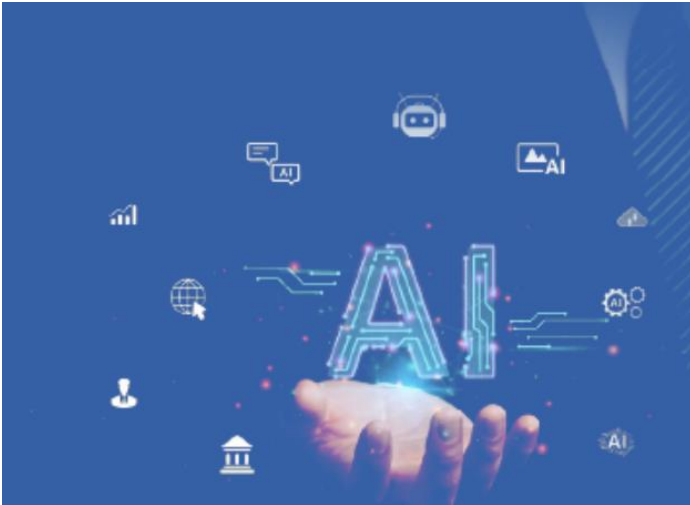


A visualisation of major large-language models (LLMs), ranked by performance, using MMLU (Massive Multitasks Language Understanding) a benchmark for evaluating the capabilities of large language models.

What are people using ChatGPT for?



ROLE OF AI IN THERAPEUTIC PATIENT EDUCATION



<https://www.biz4group.com/blog/ai-business-ideas>



AI is transforming the way we deliver medical and therapeutic education.



Therapeutic Patient Education (TPE) empowers patients with chronic diseases to manage their care.



Access to TPE programs remains limited by cost, geography, and staffing.



LLM chatbots like ChatGPT may help bridge these gaps through scalable, interactive, and personalized education.

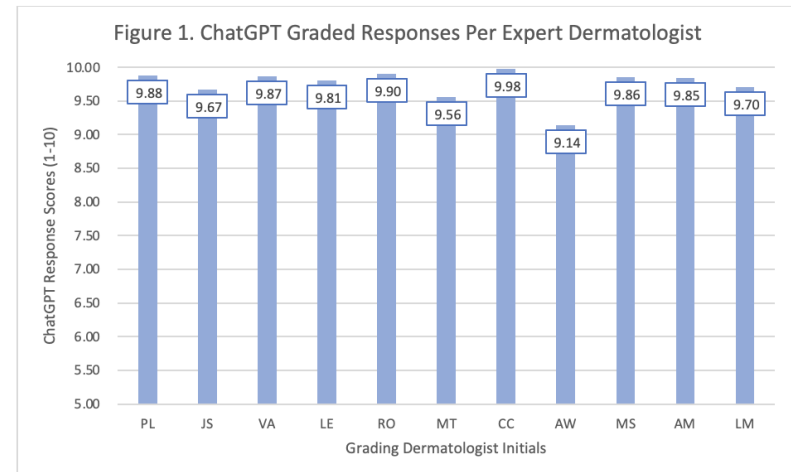
CURRENT AND EMERGING USES

- ChatGPT-4 study: 99 real patient questions on atopic dermatitis (AD).
- Evaluated by 11 international experts; English responses scored 8.18–10/10.
- No harmful content; model often advised consultation with a clinician.
- Expert survey (ISAD–OPENED):
 - 86% said AI facilitates patient–clinician interaction
 - 93% said it improves consultation prep.

> J Eur Acad Dermatol Venereol. 2024 Jun;38(6):e531–e535. doi: 10.1111/jdv.19737. Epub 2024 Jan 3.

A large language model artificial intelligence for patient queries in atopic dermatitis

Pranvera Sulejmani ¹, Olivia Negris ¹, Valeria Aoki ², Chia-Yu Chu ³, Lawrence Eichenfield ⁴, Laurent Misery ⁵, Ana Mosca ⁶, Raquel Leão Orfali ², Markéta Saint Aroman ⁷, Jean-Francois Stalder ⁸, Magdalena Trzeciak ⁹, Andreas Wollenberg ¹⁰, ¹¹, Peter Lio ¹²



EXPECTED BENEFITS



<https://www.sharp.co.uk/news-and-events/blog/benefits-of-247-it-support-that-every-business-should-know>

- **Accessibility**
 - Available anytime, anywhere
 - Supports low literacy users
- **Personalization**
 - Adaptive responses for individual learning needs
- **Engagement**
 - Conversational and interactive format enhances understanding

RISKS AND LIMITATIONS



- Accuracy concerns
 - Accuracy declined across 8 non- English languages
 - Missing key treatments (JAK inhibitors)
- Inconsistency in non- English languages
 - Multilingual follow-up: same queries in 8 languages, revealed performance variation 3.98–4.62/5

> JAAD Int. 2024 Sep 15:17:158-159. doi: 10.1016/j.jdin.2024.08.013. eCollection 2024 Dec.

The global reach of artificial intelligence in atopic dermatitis: The quality and reliability of ChatGPT responses in 8 languages

Pranvera Sulejmani ¹, Olivia Negris ², Valeria Aoki ³, Hélène Aubert ⁴, Chia-Yu Chu ⁵, Mette Deleuran ⁶, May El Hachem ⁷, Lawrence Eichenfield ⁸, Ana Mosca ⁹, Raquel Leão Orfali ³, Marketa Saint Aroman ¹⁰, Jean-Francois Stalder ⁴, Alain Taieb ¹¹, Antonio Torrelo ¹², David Troya ¹³, Magdalena Trzeciak ¹⁴, Christian Vesttergaard ⁶, Andreas Wollenberg ¹⁵ ¹⁶, Peter Lio ¹⁷

Language	Average pertinence score (1-5)
Brazilian Portuguese	3.98
Chinese	4.23
Spanish	4.24
Polish	4.31
German	4.33
French	4.33
Danish	4.44
Italian	4.62



FUTURE DIRECTIONS

- AI should augment, not replace, therapeutic educators.
- Develop validation frameworks and multilingual optimization.
- Include patients in co-design to preserve trust and shared decision-making.
- Conclusion: LLMs can transform global therapeutic education—but only with human guidance and ethical oversight.

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THANK YOU!

Contact information:

Pranvera Sulejmani MD, MS

Chicago, IL, USA

Email: psulejmani14@gmail.com

Collaborators: International Society of Atopic Dermatitis (ISAD), OPENED Network.
