Artificial Intelligence-Based Chatbots as Oculoplastic Consultants:
Are They Good Enough?

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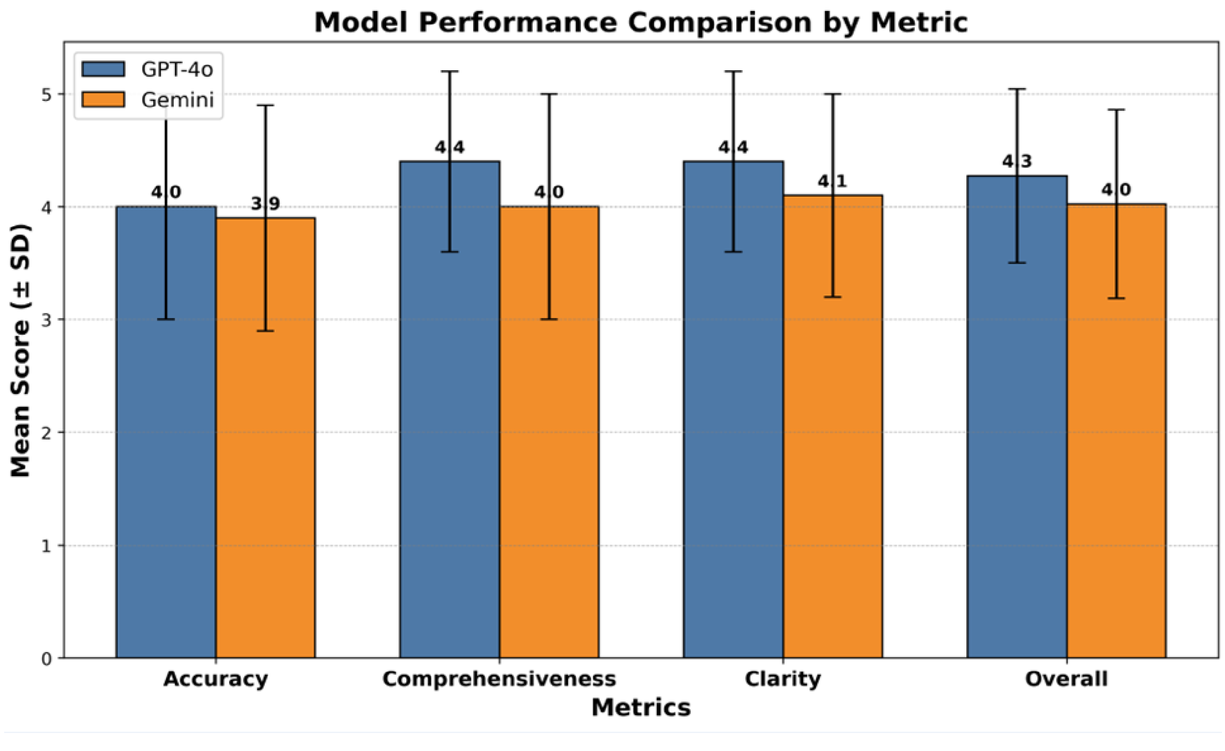
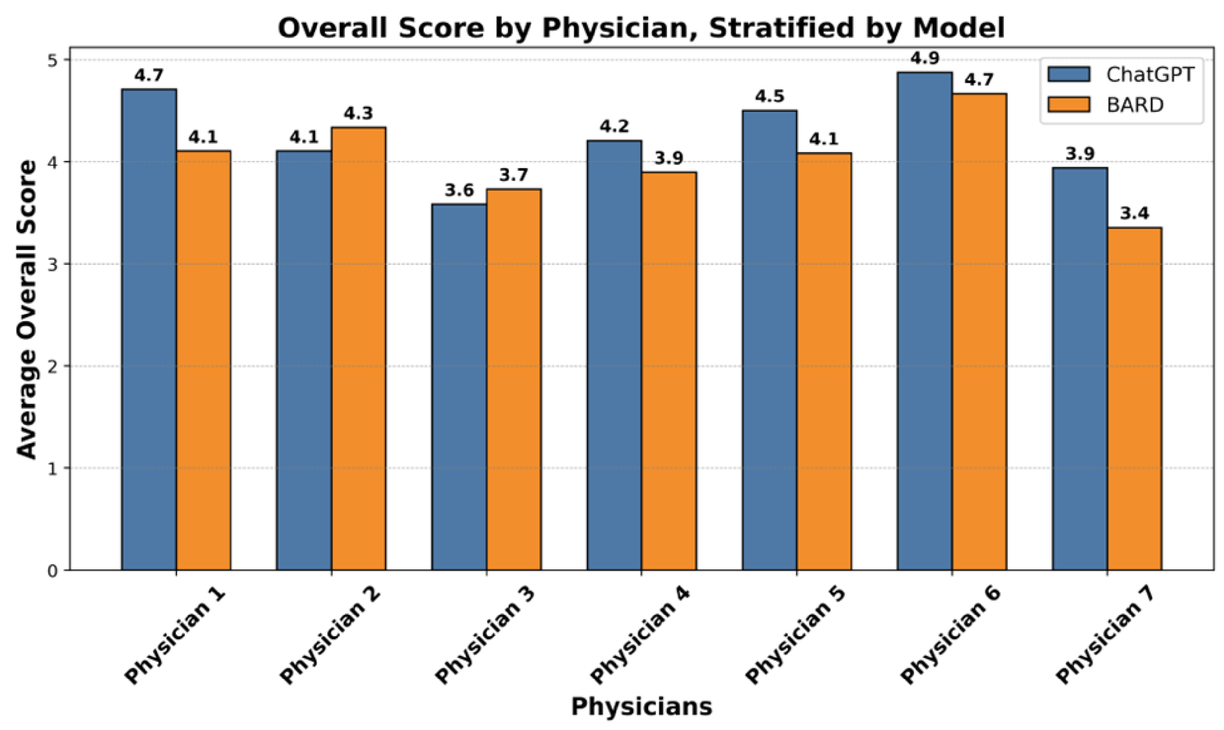
PURPOSE

To compare the responses of ChatGPT and Gemini to a series of questions related to oculoplastic surgery by seven highly experienced oculoplastic surgeons evaluated 16 representative questions

Results

- **In an overall assessment across all metrics—Accuracy, Comprehensiveness, and Clarity—GPT-4o and Gemini demonstrated differing levels of performance.**





When comparing question subtypes (table 1) , ChatGPT provided statistically significantly more comprehensive and clearer answers for eyelid-related questions compared to Gemini (t-test, p<0.01) , whereas Gemini performed statistically significantly better in comprehensive and clarity for questions related to the lacrimal system compared to ChatGPT (t-test, p=0.01, p=0.03, respectively).

Conclusions

- **both GPT-4 and Gemini provide accurate, comprehensive, and clear answers to these questions, with ChatGPT outperforming Gemini, particularly in eyelid-related topics. These results highlight the potential utility of chatbots, especially ChatGPT, as supplementary tools for addressing common patient inquiries in oculoplastic.**