Consent-GPT

Would it be ethical to delegate surgical consent-seeking to large language models (LLMs)?

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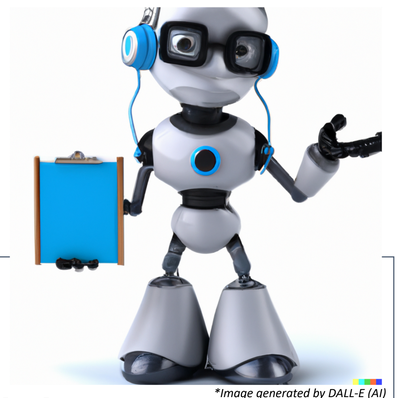


*Image generated by DALL-E (AI)

BACKGROUND & AIMS

- Delegating key parts of the consent-seeking process is common in medicine.[1]
- Often, consent-seeking fails to adequately promote patient autonomy and informed decision-making,[2] exposing clinicians to claims of medical negligence.
- The consent process may technically be improved by delegating consent-seeking to large language models (LLMs), a type of conversational artificial intelligence.[3]
- This study aims to evaluate whether it would be ethically valid and publicly acceptable to delegate consent-seeking to LLMs, if technically possible.

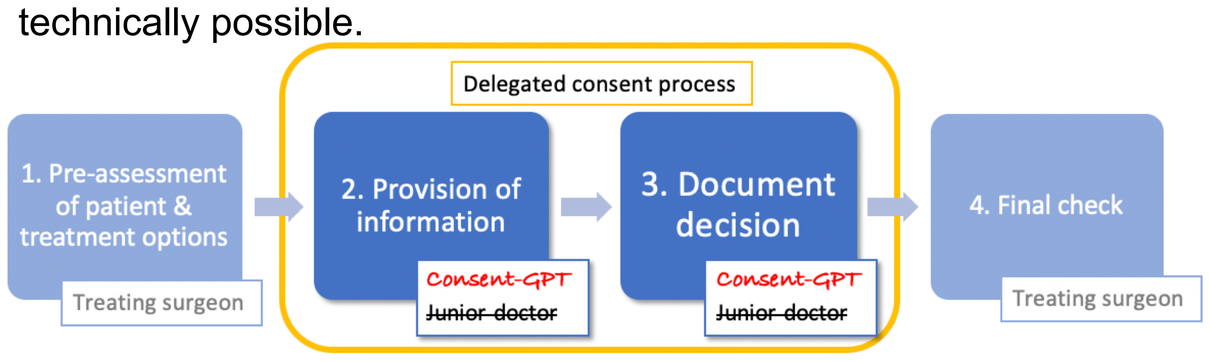
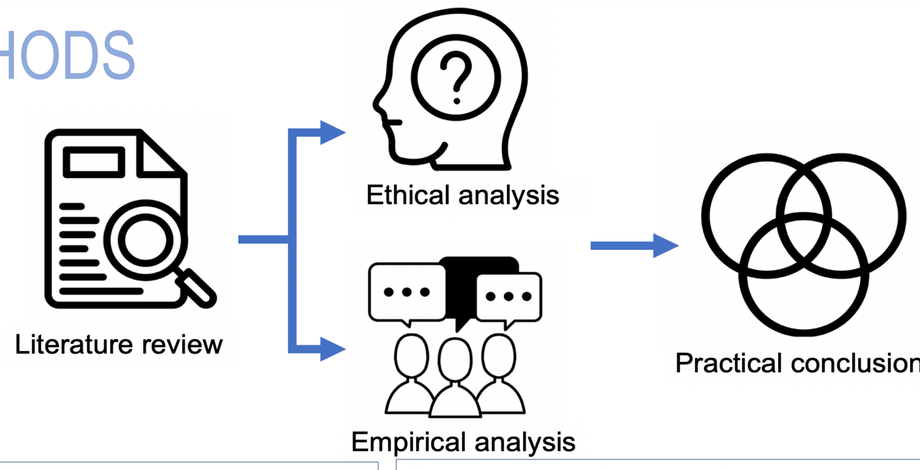


Figure 1: Delegated surgical consent process – junior doctor vs Consent-GPT

RESEARCH QUESTIONS

1. In theory, would it be ethical to delegate surgical consent-seeking to LLMs?
2. What are public views on this topic?

METHODS



Ethical analysis methods:
i) Ethical goals of consent
ii) Clinical criteria of valid consent
iii) Practical objections

Empirical analysis methods:
Online survey (n=269), recruited via *Prolific*, created using *Qualtrics XM,* randomised to:
A. Junior doctor consent scenario (n=135)
B. Consent-GPT consent scenario (n=134)

I. ETHICAL FINDINGS

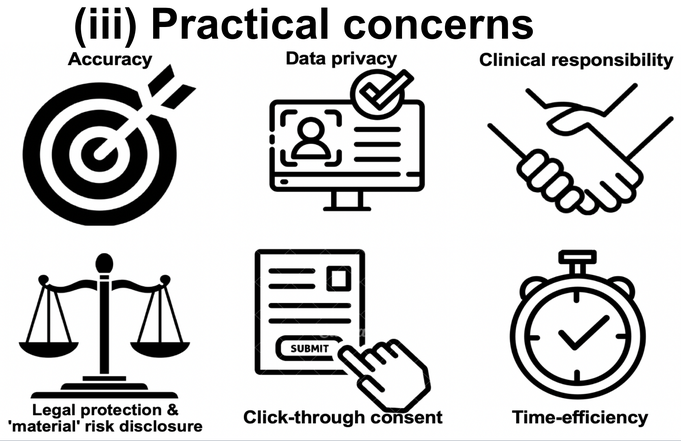
(i) LLMs meet the ethical goals of consent
(according to Koplin's PROMICE framework[4])

- *Improve patient agency and decision-making capacity (autonomy & wellbeing)*
- *LLMs should warrant a degree of trust from patients, but LLMs would not replace patients' trust in their doctor*

(ii) LLMs may supersede current standards for valid delegated consent

- *Enhanced information disclosure and understanding*
- *Detailed documentation of consent process*
- *Should LLMs formally assess capacity, voluntariness and understanding (usually assumed in delegated consent-seeking)?*

(iii) Practical concerns



II. EMPIRICAL FINDINGS

Overall, the vast majority of participants perceived consent delegation as valid, regardless of whether it was delegated to a junior doctor (95.6%) or Consent-GPT (80.6%). Although, the consent process was perceived as statistically significantly more valid when delegated to a junior doctor, p<.01.

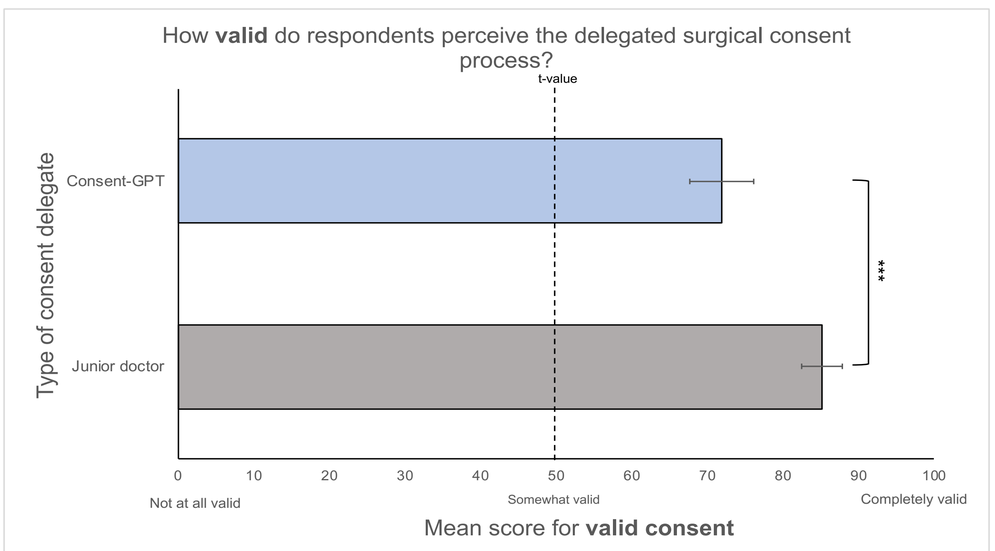


Figure 2: How valid do participants perceive the surgical consent process when delegated to a junior doctor or LLM?

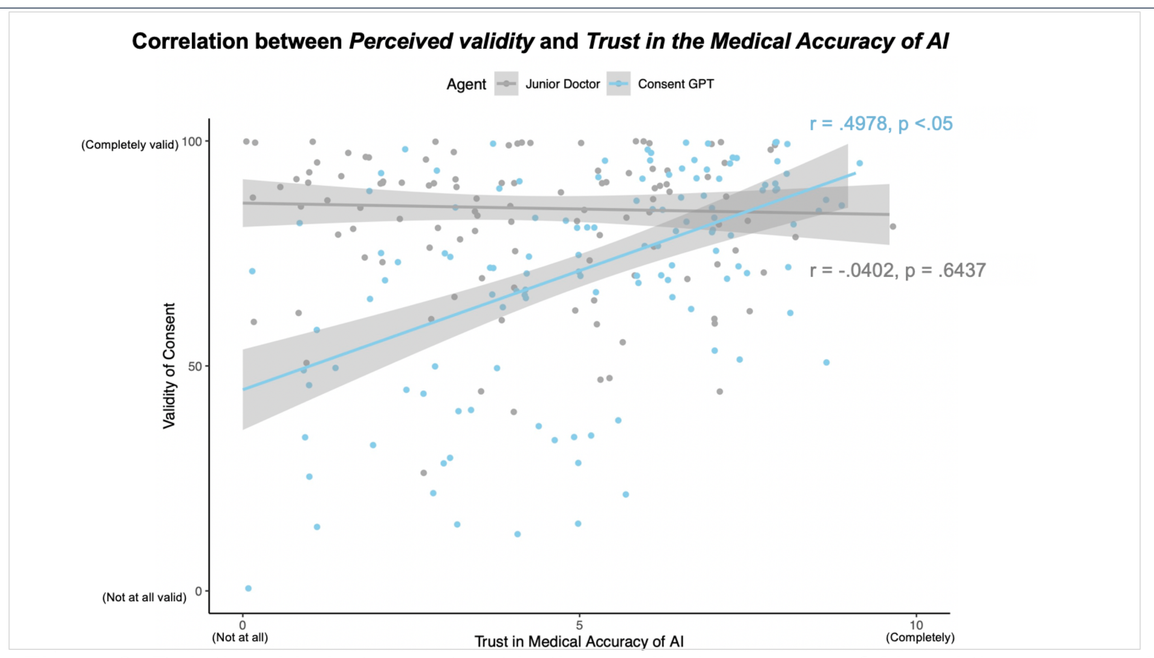


Figure 3: Relationship between trust in the medical accuracy of AI and the perceived validity of delegated consent according to agent type (i.e. junior doctor, Consent-GPT)

People's belief about whether delegating consent to LLMs was valid was related to their level of trust in the accuracy of these systems (i.e. people who had more trust in LLMs' accuracy were also more likely to perceive delegating consent to LLMs as valid).

CONCLUSION

Under the right conditions, **delegating surgical consent to LLMs** may be **ethically defensible**, and might even represent an important evolution in patient care.

PAPER

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