


Invitation to join the Healthcare AI Language Group: HeALgroup. AI Initiative

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The recent emergence of large language models (LLMs) has led to a revolution in information technology, with healthcare being at the forefront of this transformation. LLMs simulate and reproduce human language expression and understanding. When trained with appropriate data, they can accurately generate medical information.¹ The potential of LLM in the medical realm is vast, and many future applications of this technology remain yet to be discovered. Publications around this topic appear rapidly, and systematic reviews have sought to provide an oversight of the current body of knowledge.^{2 3} As we look to the future, it is essential to understand the diverse roles LLM might play in healthcare and the enormous benefits it can bring while recognising its potential drawbacks and identifying factors relevant for safe application of this technology in the healthcare setting.⁴ Even though initiatives surrounding the field of artificial intelligence (AI) and LLM in healthcare and medicine have previously been announced, there is a need for an open, low-threshold collaborative for clinicians, researchers and patient representatives alike (table 1).

The HeAL (Healthcare AI Language) Group—HeALgroup.AI was founded to better understand medicine-science applications of LLM and its implication on medical practice.⁵ We aim to provide a community-based, low-threshold, open platform for healthcare providers, researchers and patient representatives. This contrasts with previously announced initiatives and research collaborations, which have a higher entry threshold due to their academic and institutional purpose or seek to provide collaboration between the healthcare industry and

academia. Our initiative serves as a platform to connect individuals interested in LLM research within the medical context to exchange research ideas, bundle efforts and accomplish research goals. A low entry threshold allows individuals without previous academic track record or institutional affiliation to join. This initiative therefore is not competing with ongoing institutional research groups but aims to complement those efforts and create collaborations wherever possible. Research must be conducted within the ethical as well as quality standards previously defined.⁶ Sought to be tackled with this initiative, the major challenge will be active contribution and steering of the development of LLM applications, rather than taking on the role of a bystander, faced with a *fait accompli*. Usage of human intelligence to identify applications for LLM in healthcare, defining rules of engagement and active exchange of ideas will stand at the core of HeAL Group's mission. Identification of gaps of knowledge, defining research aims, creation of an active community and laying groundwork for the safe implementation of LLM in healthcare will be the first targets of this collaboration.

With this letter, the authors would like to issue an invitation to all interested healthcare professionals, researchers, and patient representatives to join and contribute to the platform.

The future of healthcare is undoubtedly linked to the advancements in LLM. Its integration into medical research and practice holds a potential that might not yet be understood in its entirety. As we learn to use this technology to our advantage, it is pivotal to ensure that ethical considerations and patient safety remain



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Table 1 Previously announced initiatives surrounding artificial intelligence (AI) and large language models (LLMs) in healthcare (not exhaustive)

Initiative	Participants	Scope
Alan Turing Institute	Academic collaboration	Research focused on understanding and advancing models, techniques and principles that underpin AI/LLM
Health Data Research UK	Academic and institutional collaboration	Clinical AI data analyses
HealTex.org	Academic, institutional and industrial collaboration	Healthcare-related text analysis
AI4Health	Academic	Research group
The Partnership on Artificial Intelligence for Health (PAIHealth)	Academic, civil society, media, industry	Not focused on medical applications
Allen institute for AI	Non-profit research institute	Development of AI applications, including medical
The Chan Zuckerberg Initiative	Philanthropic organisation	Development of AI applications, including medical
Digital Medicine and AI (DiMeAI)	Academic, clinical and industrial collaboration	Advancement of AI in healthcare

at the core of AI's healthcare journey, keeping the patient as our focus of attention.

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