

The ethical issues in the use of AI in healthcare

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March 2, 2024

1 INTRODUCTION

Based on the improvement of certain theories and the improvement of computer computing power, AI has achieved rapid development in the 21st century. It raises huge expectations, has attracted significant investment especially in Medical and healthcare area (Figure 1.1 and Figure 1.2). So far, advocates of healthcare AI (HCAI) have promised the technology will improve the accuracy of screening and diagnosis, increase the availability of care in remote regions and free up physicians' time so that they can engage more with patients [1]. Meanwhile, questions around the potential exacerbation of health disparities due to modeling biases have raised notable ethical concerns regarding the use of this technology in healthcare [2]. Including concerns about privacy and data ownership, the risk of harm through biased systems and a lack of human oversight [3]. Here we are going to discuss, how did this issues arise and what should we do to solve it.

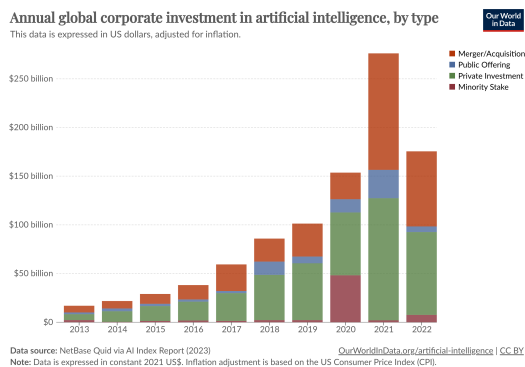


Figure 1.1: Annual investment in AI by type

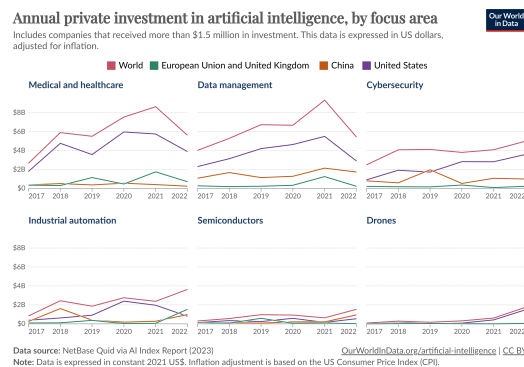


Figure 1.2: Annual investment in AI by area

2 SECTION1

Public may be both beneficiaries of new HCAI technologies and the greatest sufferers of AI-related harms. The result highlight that there are still noticeable concerns about implementing HCAI in diagnostics and treatment recommendations for patients eith both acute and chronic illnesses, even if these tools are used as a recommendation system under the physician experience and wisdom. Individuals may still not be ready to accept and use HCAI [4]. Patients and publics are important voices In developing effective and ethical AI governance, but engaging patients and pbulics meaningfully in research about ethical HCAI is challenging. Most people have no first hand experience with HCAI, and some are unfamiliar with the concept of AI in general, Pulics may have limited understaing of how HCAI may be implemented and limited knowledge about the potential wrongs and harms that could arise from implementing HCAI [1]

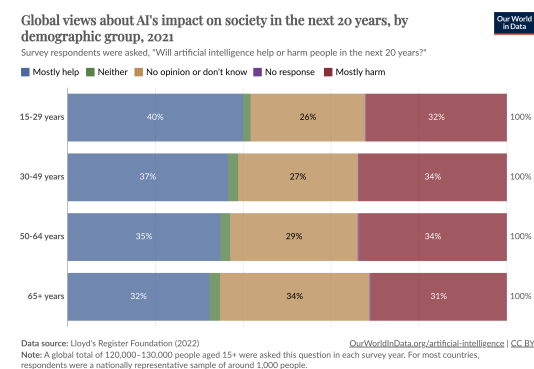


Figure 2.1: Annual private investment in AI

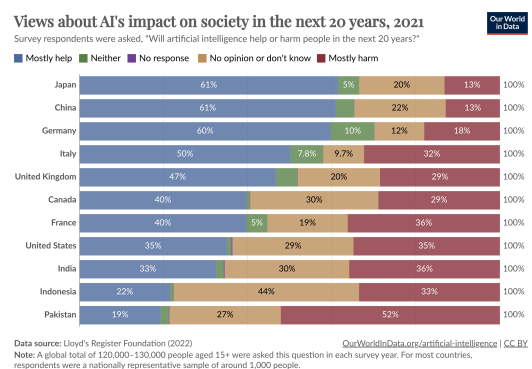


Figure 2.2: Views on AI's impact on society

3 SECTION2

Public may be both beneficiaries of new HCAI technologies and the greatest sufferers of AI-related harms. The result highlight that there are still noticeable concerns about implementing HCAI in diagnostics and treatment recommendations for patients eith both acute and chronic illnesses, even if these tools are used as a recommendation system under the physician experience and wisdom. Individuals may still not be ready to accept and use HCAI [4]. Patients and publics are important voices In developing effective and ethical AI governance, but engaging patients and pbulics meaningfully in research about ethical HCAI is challenging. Most people have no first hand experience with HCAI, and some are unfamiliar with the concept of AI in general, Pulics may have limited understaing of how HCAI may be implemented and limited knowledge about the potential wrongs and harms that could arise from implementing HCAI [1]

In general terms it refers to questions involving moral concepts such as right and wrong, or good and bad. In most familiar contexts humans intuitively know what is right and wrong, a knowledge of ethics that is acquired during human socialisation. Sometimes this intuition

fails or conflicts with others' intuitions, at which point ethics appears as a set of explicit statements in the form of "you should never / always do X". Where such statements are not accepted and need justification, ethics as a set of philosophical theories is called for. Ethics can be descriptive or normative, abstract or applied.

AI and advanced digital technologies are set to transform healthcare and healthcare systems in a significant way in the twenty-first century

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