"How I would like AI used for my imaging": Children and Young Persons' Perspectives

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Background

Existing literature lacks research exploring the views of children and young people (CYAP) regarding the implementation of AI for paediatric imaging

Objective

To explore opinions regarding AI use for different disease processes

Methodology

- Online survey created with local institution patient and public steering committee
- Survey aimed at children and young people aged up to 23 years old
- The survey was live from June 2022 to May 2023
- Links to the survey were shared between local and national contacts such as school administrators, university student union representatives and on the Great Ormond Street Hospital and Brittle Bone Society websites

The survey consisted of 31 questions collecting:
- Demographic information
- 5-point Likert scale responses to determine self-reported computer and AI literacy as well as gather opinions regarding AI implementation in paediatric imaging

Data analysis:
- Simple descriptive statistics were used
- Free text comments, where appropriate.

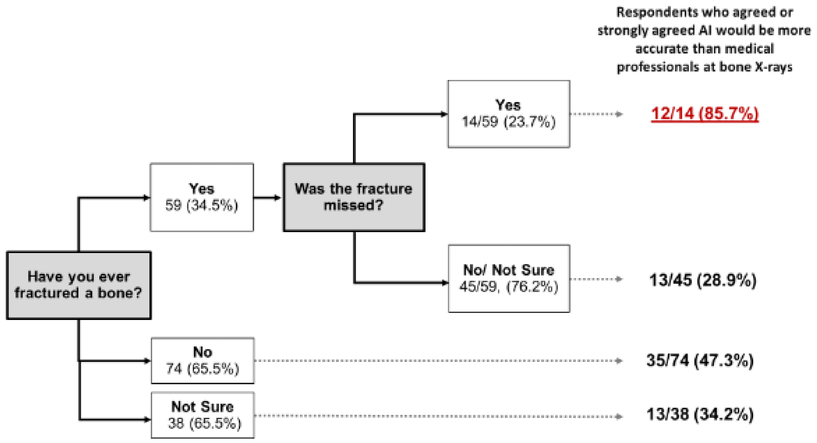
Results

Respondent Demographics
171 respondents aged 6- 23 years old

Computer and AI literacy
Most respondents **rated their computer skills as average or higher** (114/171,66.7%)

Majority of respondents **rated their understanding of AI as average or just below average** (116/171,67.8%)

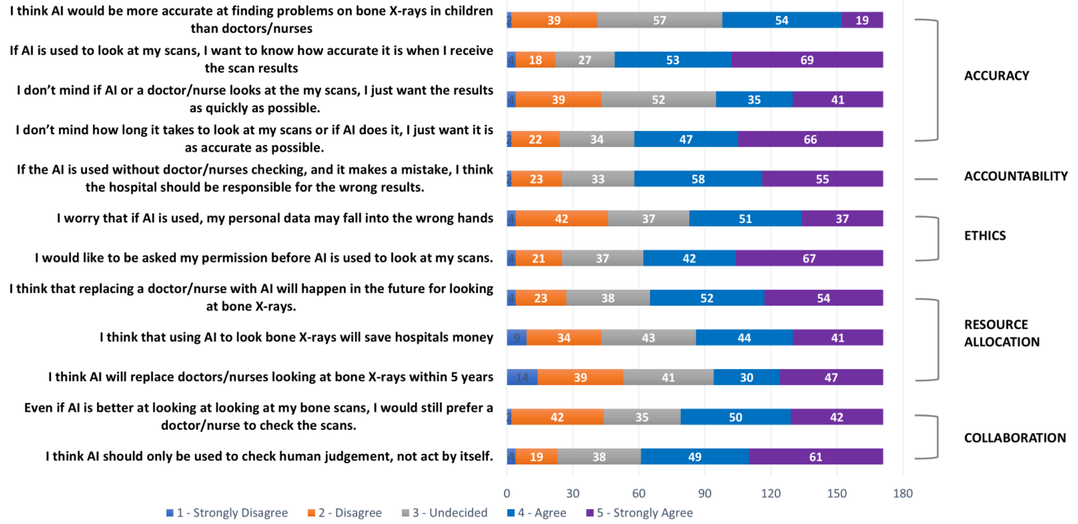
Accountability
Most respondents **believed the hospital should be responsible for any inaccurate results produced by autonomous AI use** (113/171, 66.0%)



Resource Allocation
Free text: "… hospitals will not save money by using AI, mainly due to how it is very hard to make a piece of tech that is exceptionally accurate for a cheap price. … hospitals will still keep doctors and nurses anyway"

Ethical Issues:
Most respondents **want to give permission before AI is used for their imaging** (109/171, 63.7%)

Human/ Machine Collaboration
Free text: "I strongly disagree with the use of the word 'replace' when referring to AI in relation to nurses/doctors. I would hope there would always be collaboration between the 2 and AI would never be left to make decisions for the patient's course of treatment alone."



Take Home Messages

- CYAP are generally positive about AI for their imaging but want to be informed about its use and give consent
- Involving stakeholders such as CYAP and their parents/guardians will aid in successful implementation of AI