How Do Transplant Stakeholders Perceive AI?

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Introduction

• In kidney transplant healthcare, 20% of kidneys are procured but not utilized. [1]
• Historically, there has been evidence of racial bias in transplant decision outcomes. [2]
• An AI decision support system may address these challenges if designed well
• Literature suggests that it is valuable for users to interact with an AI interface to better understand how and why it makes mistakes.

Main Goals of Our Project

To use stakeholder input to prioritize the design of an AI interface that promotes stakeholder’s trust

Approach

• Interview & survey:
  • transplant surgeons,
  • organ procurement professionals,
  • transplant patients, and the
  • general public
• Questions related to:
  • interest in AI interactivity features
  • barriers to AI adoption
  • fairness notions,
  • risk perceptions,
If your medical judgement and AI’s judgement differ, which will you follow?
A) My own opinion
B) AI’s opinion
C) Not sure

Please rate the following statement based on the instructions.
1= strongly disagree  2= disagree  3= neutral  4= agree  5 strongly degree.

I trust in the accuracy and predictive powers of current AI algorithmic models used in the medical context

Potential Findings

• If the stakeholders choose to follow their own opinion or are unsure:
  • Address trust issues with AI
  • Provide explanations for AI predictions
• If the stakeholders choose to follow the AI’s opinion:
  • Address concerns about over reliance
  • Calibrate user's mental model of AI
• Stakeholders may have different opinions:
  • Transplant surgeons may value accuracy
  • Transplant recipients may focus on fairness

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