Decision Support System

Using AI to help psychiatrists assess patients

Overview

Psychiatrists working for the NHS have been given access to an AI system that can guide their decisions during the initial assessment and diagnosis of a patient.

The AI system uses natural language processing to monitor patient speech and identify which sections of a patient's answers are particularly relevant to the diagnosis. The system also draws conclusions from the patient's intonation and pace while speaking.

Using this information, the system makes recommendations to the psychiatrist. For example, it may recommend that the psychologist asks a follow-up question or changes the topic to ask the patient about a different aspect of their life.

Many of the recommendations made by the system are deliberately vague and so require the psychiatrist to interpret the recommendation and come up with their own question. No automated decisions are made by the system and the psychiatrist can ignore recommendations.

Key Consideration

🔒 **The system is designed to support psychiatrists in their work.**

Are there ways in which this system could negatively impact the ability of the psychiatrist to help their patients?

Deliberative prompts

1 **If this system was being designed from scratch, how do you think patients should be involved in its design?**

2 **Does it matter to you that this is not a fully automated system and human judgment is always involved? If so, why?**

3 **Should patients be able to see the prompts offered by the decision support tool?**

Datasheet

This datasheet gives details on the information collected by this service and available to the developers.

Category	Details
Available Data	• Automated transcription of the conversations between patient and psychiatrist • Data on the volume, speed and tone of the patient's voice • Relevance feedback from the psychiatrist on how useful they found recommendations • Electronic health record of patient, including prescriptions.
Type of technology	The AI system uses a technique known as deep learning to combine many sources of data together and make a recommendation for the psychiatrist. The psychiatrist sees a transcript of the conversation with key phrases highlighted and a recommendation such as a follow-up question or an automated prediction about why there was, for example, a change in tone or emotion.
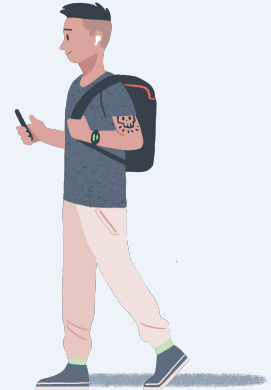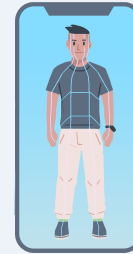
Groups, Organisations and Affected Individuals

1   **Patients**

2   **Psychatrists**