

# Will AI in Healthcare hasten the dystopian views seen in movies?

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In the movie Idiocracy, a man named Joe is cryogenically frozen and wakes up in a distant future where the world has become a dystopian wasteland. One of the most striking scenes in the movie is when Joe goes to the doctor for a checkup. The doctor and the staff are completely clueless and subject Joe with ridiculous questions, such as why he doesn't have a tattoo (bar code), or cluelessly handing out probes to be inserted at all the wrong places.

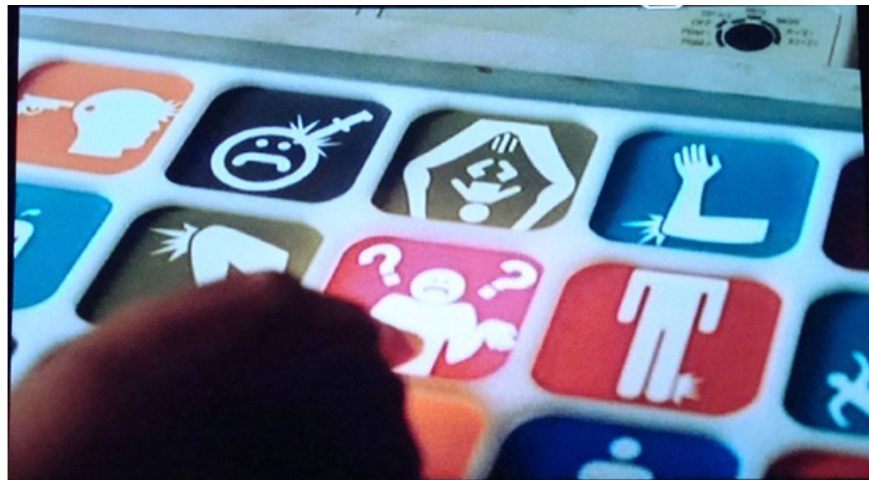


Figure 1: Image source: Flickr Creative Commons

Though the scenes were hilarious and satirical looking into a distant future, reality looks like it is knocking at the door with the advent of tools in Artificial Intelligence made available to the public recently. Not surprisingly, many top tech CEOs and leaders have started voicing their concerns. Their voices have been equally balanced by the rest of the top tech leaders. Where does this leave us? Especially when AI has started making heavy inroads into healthcare.

## Concerns of human empathy and disparities

The increasing use of AI in healthcare has raised concerns about the potential loss of human empathy and compassion in patient care. As AI algorithms are increasingly used to make decisions regarding patient

treatment, there is a fear that patients may be reduced to mere data points, with little regard for their emotional and psychological needs. If healthcare becomes solely algorithm-based, patients may be treated more like machines, with little personal attention paid to their unique circumstances.

Additionally, the use of AI in healthcare could exacerbate existing disparities in healthcare access and outcomes. This is because AI algorithms rely on data to make decisions, and if that data is biased, the resulting decisions will also be biased. For example, if AI algorithms are trained on data that is not representative of the entire population, it could lead to inaccurate diagnoses and treatments for certain groups of people. This could further perpetuate existing disparities in healthcare outcomes, ultimately resulting in poorer health outcomes for certain groups of patients. It is therefore essential that AI algorithms are developed and trained using unbiased data that represents the entire population to ensure that the use of AI in healthcare does not worsen disparities in healthcare access and outcomes.

## Promises of enabling accuracy and earlier diagnoses

The potential benefits of AI in healthcare are numerous, and they extend far beyond the examples mentioned above. One promising area of application is in the development of personalized treatments for patients. AI algorithms can analyze large amounts of patient data to identify patterns and correlations that may not be visible to human doctors. By using this data to create individualized treatment plans, healthcare providers can improve patient outcomes and reduce the likelihood of adverse effects from medications or other treatments.

In addition to improving patient outcomes, AI can also help address some of the systemic challenges facing the healthcare industry. For example, AI-powered scheduling systems can help reduce wait times for appointments and streamline the process of booking follow-up visits. This can improve the overall patient experience and reduce the burden on healthcare providers.

Another area where AI can be particularly useful is in the field of public health. AI-powered tools can analyze large amounts of data from sources such as social media and search engines to identify trends in public health concerns, such as outbreaks of infectious diseases or the spread of misinformation about vaccines. This can help public health officials respond more quickly and effectively to emerging threats.

Despite the potential benefits of AI in healthcare, it is important to recognize that its implementation must be done thoughtfully and with a focus on patient needs. This includes ensuring that AI-powered tools are accessible to all patients, regardless of their background or socioeconomic status, and that they are used in a way that respects patients' privacy and autonomy. By doing so, we can ensure that AI is used to enhance, rather than replace, the human touch that is so critical to effective healthcare.

## Complementary approach

To ensure that AI in healthcare is used in a way that benefits patients and society as a whole, there are several steps that need to be taken. First, it is essential that AI algorithms are developed and trained using unbiased data. This means that data must be collected from diverse populations to ensure that AI algorithms are accurate and unbiased.

Second, there must be transparency in the use of AI in healthcare. Patients should be informed when AI is being used to make decisions about their care, and they should have access to the data that is being used to inform those decisions. This will ensure that patients are able to make informed decisions about their care and have a say in how their data is being used.

Third, healthcare providers must ensure that AI is used in a way that complements, rather than replaces, human expertise and judgement. AI should be used to support and augment human decision-making, not

replace it. This will help ensure that healthcare remains personal and compassionate, and that patients receive care that is tailored to their individual needs.

AI has the potential to revolutionize healthcare in many positive ways. However, it is important to be aware of the potential risks and take steps to ensure that AI is used in a way that benefits patients and society as a whole. By developing unbiased algorithms, ensuring transparency in the use of AI, and using AI.