[Scientific debate essay](https://iu.instructure.com/courses/2216631/discussion_topics/13381448):

This was my first scientific discussion, so to start, I was both excited and curious about what might happen. What a fantastic experience it was when I rolled back. I opposed the motion on the ethical implications of AI use in healthcare, emphasizing the importance of the patient-physician relationship's emotional development. There was a final division of pro and con stands after this debate. My position hasn't altered, but AI contributions can not be overlooked. Overall, I've become more proficient at seeing different situations in which AI can be widely applied without compromising ethical standards. (Montemayor et al., 2021)

Several supporters proposed that AI may reduce physicians' fatigue by automating tedious administrative tasks and enabling more efficient workflows. I agree with Abitha when she says that artificial intelligence (AI) has several uses in the healthcare sector, ranging from automated administrative tasks like appointment scheduling to improved environmental health monitoring. Since this activity typically does not require patient-physician contact, I felt it may have extra value in the healthcare industry. Abhigna, on the other hand, mentioned how AI is improving our ability to predict patient admission rates, estimate personnel needs, maximize equipment maintenance, and promote workflow efficiency. I was also looking forward to these two implementations because they don't include any additional ethics and can be accelerated in the healthcare industry without compromising any ethics. By lessening the workload and anticipating when and where the workers will be needed, this can enhance the final result. (Davenport & Kalakota, 2019)

According to Srilekha, AI systems can efficiently and reliably process vast amounts of healthcare data, enabling instant comparison of treatment guidelines with patient information and symptoms. She also emphasizes how costly and dangerous drug errors may be, as well as how AI can automate prescription checks, cut down on errors, and stop allergic reactions. I was moved to release how AI aligns with harnessing technology to minimize errors and improve patient safety,  and how emphasizing on the technology's role in automating prescription checks is helpful. Healthcare professionals can reduce adverse reactions while improving medication management by proactively identifying and mitigating potential risks through the utilization of AI-driven solutions. Architha talks about the advantages of utilizing AI to comprehend patient health, emphasizing the technology's capacity to gather and process data for improved assessment of patients. She talks about how chatbots powered by AI can provide knowledgeable medical advice to distant locations, improving patient outcomes. Additionally, Architha emphasizes how AI is revolutionizing medical research for uncommon genetic illnesses and how it can use cloud computing to analyze massive volumes of data while maintaining privacy. I concur that having medical advice is crucial in isolated locations since it's the only way that people in rural and isolated areas may receive the care they need. (Abdallah et al., 2023)

I admired how Ramya acknowledged the potential benefits of AI in healthcare while bringing up significant ethical issues, in contrast to all of the advocates who claimed that the benefits outweighed the ethical considerations. Although she acknowledges the need for implementing AI, she is convinced that these moral concerns need to be addressed before AI is quickly integrated into healthcare systems. I thought it was imperative to express this since, in my opinion, overlooking the issue only makes it worse. It is important to consider how to advance AI while addressing ethical issues. Also, Alekhya has pointed out a good study where results generated by AI misled the reported illness, and how doctors can follow automation leading to blindly accepting AI reports without cross-verifying it. I felt overdependence can also ruin one intellectual thinking which can ultimately lead to diminishing the thinking capacity. I agree with how she emphasized the grave ethical dangers associated with AI in healthcare. Discrimination may be spread by biased datasets via AI systems. Physician responsibility and skill may be compromised by an over-reliance on AI. The majority of us took part in the rebuttal that followed as the conversation continued. We instantly reacted because time was running out. I wasn't sure whether to join this time, but after realizing there was one thing AI could barely handle, I began carefully preparing my counterarguments and publicly expressed my perspective about how AI can't achieve patient care individualization, using an image scan of a non-cancerous tumor as an example. Here, Nigama brought up the issue of job loss as a result of employing AI, but she also brought up the possibility of new career opportunities arising from the development of AI in the healthcare industry. Her perspective offered me a fresh perspective on both job loss and the potential for new chances presented by the use of new technology. (Challen et al., 2019)

In the end, I found this argument to be incredibly informative and fascinating. To my surprise, I witnessed some students who had shown little interest in participating join in, and others who had been prepared to speak in favor of the motion instead changed their minds throughout the debate and spoke against it. It became clear that continued oversight and development, in addition to ethical and responsible application, are essential as AI advances. During the argument, automation, prediction, speed, optimization, and innovations were listed as advantages of AI; bias, ethics, privacy, dependency, and security were listed as disadvantages. My once idealistic viewpoint has evolved into one that is a little broader and thoughtful. Although there are too many advantages of AI to overlook, we must also address legitimate concerns and work to foster ethical use of AI and innovation. My knowledge of the complexities surrounding AI in medicine and the need for gradual advancement has increased as a result of this debate.

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