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Pharmaceutical Marketing Major

MI-462

Areas of Risk	**Steps to Take**
Data Privacy and Security	Pharmaceutical companies deal with patient data on a consistent basis thus alluding to the potential chance of any cyber attacks from AI. Proper security measures must be in place in order to prevent the likelihood of this occurring. This includes ensuring strong access controls like restricting access to any AI system and implementing a multifactor identification process when handling any data. (AI Bill of Rights)
Bias	Any AI algorithms that are used can create a bias they are trained on. Within the pharmaceutical industry, this can lead to biased treatment recommendations and even unequal access to healthcare for specific groups or populations. To prevent this from occurring the implementation of human interaction and conclusions from physician to patients when deciding the right treatment. The use of AI should be limited when conducting these practices. (Timnit Gebru)
Fairness and Equity	Implement “Traps” to AI algorithms. EX-Framing trap (adopting a “heterogeneous” framing approach), Solutionism trap (Considering when to design). (Timnit Gebru)
Processes for disabilities	During the employment process, the use of AI has been prevalent. There has been a problem with screening candidates with disabilities. Overall unemployment rate has been twice as high since the use of AI compared to those without disabilities. A solution would first and foremost be to take a look into the AI algorithm to understand why this problem is occurring. Next, a vendor should provide someone with a disability to request accommodation on their platform. (EEOC)

Regulatory compliance/governance	Within the pharmaceutical industry, AI applications must adhere to regulatory guidelines such as the FDA. It is crucial that when creating AI algorithms specific to patient data and treatment, AI is ethically responsible and accountable to any conclusions it comes to. This means training the model based on any rules it must follow.(EU AI compliance act)
Toxicity	When utilizing a dataset, Emily Denton reported that when AI comes up with images that are stereotypical and inappropriate when describing a subgroup or even population. She states that it is essential to train the AI model to report specific words or categories as “toxic” or “non toxic” to prevent the model from creating inappropriate images. (Emily Denton)
Language Barriers	When communicating with patients, digitally or in person, AI language translation has a theme to be very literal when translating communication, not seeming to pick up any slang, dialect, or phrases a speaker may use from their native language. I have two solutions for this issue. The first is for pharmaceutical companies to allocate more of their funds to hire speakers of different languages to serve patients and provide them equitable care. The other solution would be to go more in depth with tweaking AI to perform on a level that picks up terms and words that a traditional “Google Translate” couldn’t. (Timnet Gebru).