

1 Informed Consent

Informed consent by definition should be informed. the participants should be provided with all the necessary information and explicit details on how their data will be used and stored. To the extend that the participants should be encouraged to ask question, enquire and ask for better clarification in case anything isn't clear. once the participant has full understanding on what exactly is being shared and how only then the participant can make an informed decision. Consent must be given voluntary it cant be subdued or coerced from the participant. an option should be available to opt in or out from the data collection process. the details on what is exactly is the participant sharing should be specific and written in a language the participant can understand and comprehend easily (Hempton & Bhatia 2020).

2 Utilitarian Argument

In the provided scenario. The medical practice is confronted with a problem that has been consistent that a number of patients have been sending complaints. The issue is some patients have notified the practice that doctors aren't spending enough time with patients. The owners of the medical practice have decided that using the data available to analyze if the data can reveal any pattern that can explain the reason for the issue. using the utilitarian lens as "good consequence = good action" (Driver 2014) the action in this scenario is analyzing patients data to identify the reason for the problem, assuming the analysis resulted in solution and the practice did manage to rectify the issue it is considered as good action that benefited the practice and future patients. in hindsight the notion of basing your action on whatever results in the maximum benefit for the largest amount of people seems an argument that no one would dispute at the first glance. Utilitarian ethics doesn't provide a concrete definition of what is considered good. Goodness is a very subjective term. take for example the use of enhanced interrogation techniques on prisoners. does torturing the prisoners for the sake of extracting information that could save innocent people's lives is good? is it ethical?. Following the Utilitarian argument in this hypothetical scenario. As long as the total lives saved vastly overcome total pain caused it is morally justified in-fact some researchers have argued that is morally required (O'Donohue, Snipes, Dalto, Soto, Maragakis & Im 2014). in both provided scenario and the hypothetical scenario have resulted in a good outcome for the patients and lives saved respectively. even though both scenario resulted in a net good outcome one had risks of leaking or breaking privacy of the patients and other caused pain and suffering. Which illustrates nuances of the nature of "good". Utilitarianism can also be applied to decide on viewing groups. the report produced in such scenario holds very sensitives information about the patients and the practice itself. of course the patients information can be anonymized as an effort to protect the patients privacy, but if the such report or data got into the hands of individuals that can benefit from such information

even anonymization can be circumvented. With the emergence of big data and the vast information available due to social media and the higher accessibility to scraping tools that can scrap, collect vast amount of data that can be used to de-anonymize the patients records. taking into consideration the risks associated working with big data and medical records. Under the Utilitarian approach, the report should be accessible to the individualize that can be reading and comprehending the findings of the report can reap the most benefits to the patients. In this scenario and individual that is capable to understand the complexities of medical practices and able to articulate distilled findings and recommendation that the practice owner can act upon.

3 Drug Company

Data has become significantly important in the last decade with the wide usage of the internet and greater accessibility in the world. With recent advancement in computer hardware scientists are able to leverage such vast amount of data for the purpose of research and advance the knowledge of artificial intelligence and big data in general. the big data sphere encapsulate almost all fields even the medical field with the uptake usage of electronics health records (EHR), with all that data comes the opportunity of leveraging data science and machine learning to discover new insights that can benefit patients in discovering new drugs (Popova, Isayev & Tropsha 2018), re purposing current drugs for other diseases (Feinberg, Sur, Wu, Husic, Mai, Li, Sun, Yang, Ramsundar & Pande 2018) , using medical imaging to conduct research on new ways to fights viruses (Yao, Zhang, Zhang, Duan, Xie, Pan, Peng, Huang, Zhang, Xu, Xu, Zhou & Wang 2020). There is no doubt that the intersection of data science and medical fields would expand what scientist and medical professionals can do with data. in the provided scenario, helping future patients and trying to develop new drugs to combat diseases in a noble cause that a mass can agree on but since the report consist of relatively large data size and contains sensitive information a risk vs rewards thought is needed. A company is definitely business that is looking to produce profits and help it's bottom line. if the company used the data to produce a product will that product be at a reasonable price that public can buy it?. there are examples of public data have been gathered for the purpose of using big data technologies to help the public good (Harris & Wyndham 2015) (Parker & Bull 2015). if that model cab be replicated to help maximize the public benefit and at the same not sacrificing the privacy rights of the patients. in that instance i would agree on sharing the data to the drug company. but if the data will be exploited and used for the purposes of maximizing the financial benefit without any consideration of the public good in that case the answer is No.

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