QUICKSCAN - CANVAS
surgery complication prediction model

NAME: surgery complication prediction model
DATE: September 5, 2024 2:59 PM
DESCRIPTION OF TECHNOLOGY
model to predict risk of complications for surgery based on patients frailty and comorbidities

HUMAN VALUES
the aim is to help doctors visualize the risk to their patients to better comfort them and make them aware about the procedure.

TRANSPARENCY
their will be a disclaimer containing some explenation about the usage of the model.

IMPACT ON SOCIETY
doctors and surgeons can use the technology to inform the patient in a more timely manner of the risk of certain surgerie. it can also help in case the doctor forgets to mention some risks.

STAKEHOLDERS
- Surgeons
- Doctors
- Medical staff
- Medical students

SUSTAINABILITY
it isn't taken into account as this is a tool which indirectly can have impact on the health of patients.

HATEFUL AND CRIMINAL ACTORS
It is unlikely that a model designed to predict the risk of complications for surgeries based on patient frailty and comorbidities would be used for criminal activity. However, if the model's results were manipulated or altered in a way that intentionally misrepresents a patient's risk of complications, it could be used to justify unnecessary medical procedures or to discriminate against certain groups of patients.

DATA
i understand the shorcomings and pitfalls, that's why the aim of this model is not to replace doctors insight but to be a tool to aid them in making their decisions.

FUTURE
these are some of the possibilities: greater awareness and concern about healthcare risks, changes in medical decision-making,shifts in healthcare policies and practices, changes in healthcare habits and norms, improved healthcare outcomes

PRIVACY
yes, the model will make use of personal data to be able to predict the possible complications but this data will not have names attached or other information so it can not be traced back to the person.

INCLUSIVITY
their will probably be a bias but i don't think i will be able to identify it.

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HUMAN VALUES

How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?…

TRANSPARENCY

Is it explained to the users/stakeholders how the technology works and how the business model works?

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their…

IMPACT ON SOCIETY

What is exactly the problem? Is it really a problem? Are you sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine…

STAKEHOLDERS

Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by…

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.
…

SUSTAINABILITY

In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?

HATEFUL AND CRIMINAL ACTORS

In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/ identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder…

DATA

Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into…

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts;
- Data collections are often biased;…

FUTURE

What could possibly happen with this technology in the future?

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?

PRIVACY

Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like…

INCLUSIVITY

Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases.…

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