

#### AI & RESEARCH: DATA PRIVACY

#### **Topics:**

- What is AI?
- Privacy considerations for AI
- Mitigating bias in AI algorithms
- •Keeping data secure & confidential when using AI

## **Artificial Intelligence**

"Artificial Intelligence (AI) leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind."

- IBM

### Data protection is crucial when considering AI.

Here are a few key points to keep in mind when deciding to use or build an AI platform.

- Be transparent how data will be used and processed and include this information in your project
- Only use the minimum necessary data to get the job done
- Review the site's terms of use and terms and conditions
- Allow participants to have a say as to how their data will be collected & used
- Minimize the collection and processing of personal data/PHI

#### Eliminate "preference bias."

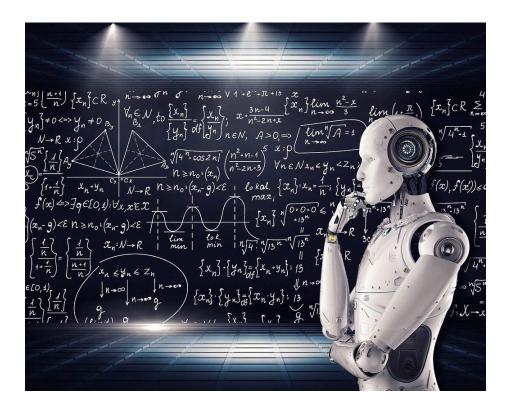
PLOGS Digital Health suggest these steps to mitigate bias when utilizing AI algorithms:

- Correct framing of the problem
- Data diversification & representation
- Identifying sources of the bias
- Managing the data in pre-processing
- Eliminating bias during model development and validation

Remember, results may not always be accurate, evaluate it for accuracy Test the system to assure biases have been mitigated

# **Safeguarding Data:**

- Obtain informed consent from participants
- Utilize appropriate data collection methods
- Securely store data
- Use strong encryption methods
- Control and limit who has access
- Ethically use data and dispose of data safely



References:

PLOGS Digital Health | https://doi.org/10.1371/journal.pdig.0000278 June 22, 2023