

Electronic Data Security

Data management of human subjects' research data includes: data collection, data entry, and database repository oversight (controlling access, tracking use of analytic datasets). When reviewing electronic data collection, there are 4 important areas to examine:



Identifiers

1

- What type of identifying information will be collected?



Technologies

2

- What types of technologies will be used in the research study?



Data

3

- Once data is collected, how will it be transmitted, processed, and stored?



Security

4

- During data collection, how will it be transmitted, processed, and stored?

1. Identifiers

Anonymous data – at no time will any identifiers be collected including IP addresses?

If these identifiers are being collected, a data security review is recommended:

- Name
- Electronic mail address
- Social security number
- Telephone number
- Fax number
- Internet protocol (IP) address
- Device identifiers/serial numbers
- Biometric identifiers
- Images (face)
- Health plan beneficiary numbers
- Account numbers
- Certificate/license numbers
- Vehicle identifiers and serial numbers
- Medical record number

2. Technologies

What types of technologies will be used in the research study?

Cellphone app, wearable device, text messaging, web-site, web-survey, electronic recording, and or video?

- Who developed the platform?
- How will it be accessed?
- How will the data be stored?
- How is the data coded?
- Where is the site/data hosted?
- Security features of the platform? (ex: password protected, encrypted during transmission)
- Will GPS data be collected?
- Can users turn GPS off?
- Is the communication one-way or two-way?

3. Data

Once data is collected, how will it be transmitted, processed, and stored?

- Who owns the server? Server operating system?
- Will cloud file storage be used?
- Will data live on a workstation? Laptop?
- Where will the data be housed?
- Will the data be encrypted?
- What are the data backup protocols?
- Anti-virus and Malware protection and protocol?
- Will any third party providers have access to the data?

4. Security

During data collection, how will it be transmitted, processed, and stored?

- Who will have access to the data?
- How will data access be managed?
- Who is responsible for maintaining the security of the data?
- What happens to the data when the study is complete?
- Will any third party providers have access to the data? (Ex: App developers)

Adapted from University of Pittsburgh's Electronic Data Security Assessment Form

<http://www.hrpo.pitt.edu/sites/default/files/Guidance/Data%20SecurityAssessmentForm.pdf>