8.5.B. Describe how the data will be stored (e.g., computerized files, hard copy, videorecording, audio recording, personal electronic device, other). Please confirm that any digital data will be stored on an encrypted, password protected computer, storage device, or hospital network server.

The FoM REDCap servers are located at the UBC University Data Centre (UDC) and use SSD (Solid state drives) for storage. UDC is monitored 24/7 from the IT Operations Centre and IT staff & Researchers will have 24 hour access to their equipment. Access to the network/storage rooms will be limited to UBC IT authorized personnel. The data transmission from client computer to data servers is encrypted.

8.5.C. Describe the safeguards in place to protect the confidentiality and security of the data

FoM REDCap is a data management tool which uses a web server that employs Secure Socket Layer (SSL) technology for the secure transfer of data between a client computer and the server. The application and the database are housed on separate virtual networks providing enhanced security. The IT network is protected and governed by security mechanisms defined in the UBC Research IT security policies.

The FoM REDCap system itself has a built-in data integrity protection system whereby changes that need to be made to an instrument that is already in use are restricted, controlled and tracked. The Super Admin receives the request and can then verify and approve the proposed changes. An audit trail is attached to this feature and retains old versions of all instruments.

The collected data can only be viewed by granted personnel with specific rights.

It is sometimes necessary to store personal identifying information (PII) in FoM REDCap. For example, email addresses are necessary to send surveys to participants. To secure confidentiality of email addresses and other PII, these fields are flagged as "identifiers" in FoM REDCap. Access to review or export PII is restricted per user rights and privileges assigned by the PI or project administrator.

Besides the data collected within the instruments or surveys themselves, FoM REDCap does not collect the IP addresses of participants.