Standard Operating Procedure:
REDCap Mobile App & API

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Document History

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1. PURPOSE

1.1. To define the procedure used for requesting and accessing Health Research BC REDCap Application Programming Interface (API).

1.2. To define the procedure used for requesting and making use of the REDCap Mobile App through the Health Research BC REDCap Data Management (DM) team.

2. SCOPE

2.1. This procedure applies to Health Research BC DM team members, Principal Investigators (PI), and Project Administrators (PA) involved in the request for support services and the usage of REDCap API and the REDCap Mobile App.

3. RESPONSIBILITIES

3.1. REDCap API
  a) Health Research BC DM team is responsible for:
       i. Reviewing API token requests
       ii. Creating and releasing API tokens
       iii. Providing necessary user manuals and training
  b) The research team is responsible for requesting and maintaining their individual API tokens, and for adhering to Health Research BC DM policies and recommendations as they relate to API usage.

3.2. REDCap Mobile App
  a) The PI/PA is responsible for the initial request and for adhering to Health Research BC DM policies and recommendations as they relate to API usage and the REDCap Mobile App.
  b) The DM team is responsible for the approval of the REDCap Mobile App request and providing any ongoing training and support.
  c) The PI/PA is responsible for acquiring the device(s) and for adhering to the established policies regarding device maintenance and security.
  d) The DM Team will respond within 2 business days to REDCap support requests sent to redcap@healthresearchbc.ca. Response time may vary depending on the request.

4. RELATED SOPS/DOCUMENTS

4.1. Health Research BC REDCap API Security – Best Practices and User Manual
4.2. REDCap Mobile App Request form
4.3. REDCap Mobile App Best Practice Guidelines
4.4. Health Research BC REDCap Mobile App Manual

5. DEFINITIONS

5.1. **Principal Investigator (PI):** Primary individual in charge of and responsible for the proper conduct of a research project.

5.2. **Project Administrator (PA)**: Person responsible for the development of REDCap data instruments and the overall management of the project data.

5.3. **Research team**: Research assistants/nurses, data entry personnel and other personnel involved in the clinical research study and granted access to REDCap projects. The Research team members report to the PI but are generally supervised by the PA.

5.4. **Health Research BC Data Management (DM) team**: team that is responsible for managing projects in REDCap and assisting research teams in conducting research studies.

5.5. **Population Data BC:** Population Data BC (PopData) is a multi-university, data and education resource facilitating interdisciplinary research on the determinants of human health, well-being and development. The Health Research BC REDCap database server is located here.

5.6. **REDCap Project:** A set of data entry forms, surveys, schedules and other data management tools pertaining to a specific study or research project.

5.7. **Project Life Cycle Tool:** An active, internal project used by the Health Research BC DM team to track the lifecycle of projects and to assist in REDCap data management.

5.8. **REDCap Mobile App:** Data collection tool for mobile devices that allows REDCap users to collect data without internet and sync the data back to their REDCap project on the Health Research BC/Population Data BC server once internet is available.

5.9. **REDCap API (Application Programming Interface):** Interface that allows external applications to connect to REDCap remotely, used for programmatically retrieving or modifying data or settings within REDCap, such as performing automated data imports/exports to/from a specified REDCap project.

6. PROCEDURE

6.1. REDCap API Usage Request

a) PI/PA requests an API token on a project by clicking on API on the left navigation panel (Applications Menu), then clicking the "Request Token" button. The request goes to redcap@healthresearchbc.ca and the DM team reviews and may email the requester for additional details.

    i. The request must come from an authorized individual and must be approved by the PI/PA. The initial request must also provide a brief summary of the use case and objective.

b) The API request is conditionally approved, given the requester's application is approved by the DM team after development (6.2.c).

6.2. REDCap API-Enabled Project Development

a) The DM team sends the requester the 'API Security – Best Practices and User Manual' document.

b) The DM team creates a copy project in Health Research BC REDCap Development server (DEV) and the requester's REDCap user account is added to the DEV project. The user logs

into DEV REDCap with their PopulationData BC login credentials. The user then requests a DEV API token, which is approved by the DM team.

c) The requester sets up their application in DEV using the approved API token and demonstrates the finished application to the DM team (programmer) for final approval.

6.3. REDCap API Approval

a) Once testing is complete and the application is fully approved by the DM team (programmer), the research team can move forward in their project.

b) Any changes to token use or functionality must be reported and preapproved by the DM team.

6.4. REDCap Mobile App

a) PI/PA requests the REDCap Mobile App on an active REDCap project by emailing redcap@healthresearchbc.ca.

b) The DM team sends an invite to fill out the REDCap Mobile App Request form through the Project Life Cycle. The form includes questions about the REDCap project and a Security and Privacy Agreement section.

c) The research team completes and submits.

d) The DM team approves the Mobile App Request. The DM team responds via redcap@healthresearchbc.ca to the requester and attaches the Mobile App Manual and instructions on how to proceed.

e) The PI/PA grants Mobile App User rights in the REDCap project to users who will be collecting data through the Mobile App.

f) Individual users with Mobile App rights can request an API token through the "REDCap Mobile App" section.

g) Once the individual API token is created by the Health Research BC DM team, the user is notified by email.

h) The PI/PA downloads the REDCap Mobile App to the device(s) and creates an Admin account to create and manage the Mobile App user accounts. See the 'REDCap Mobile App Manual' for more information on how to set up a project in the Mobile App.

i) Users with an API token download the project to the app under their Mobile App username and can begin collecting data. For more information, refer to the 'REDCap Mobile App Manual'.

j) For more information on how best to manage API tokens and other security concerns please refer to the 'REDCap Mobile App Best Practice Guidelines'.

7. **REFERENCES**

- N/A