



DFM Research Knowledge and Skill Builder
October 22 2019

Presented by Steve Dragos & Ric Angeles

Learning Objectives

1. Understand how REDCap can be used for building and managing online surveys and databases
2. Identify some of the basic functions of REDCap via a demonstration of the software
3. Recognize where to find REDCap information and resources online and at DFM

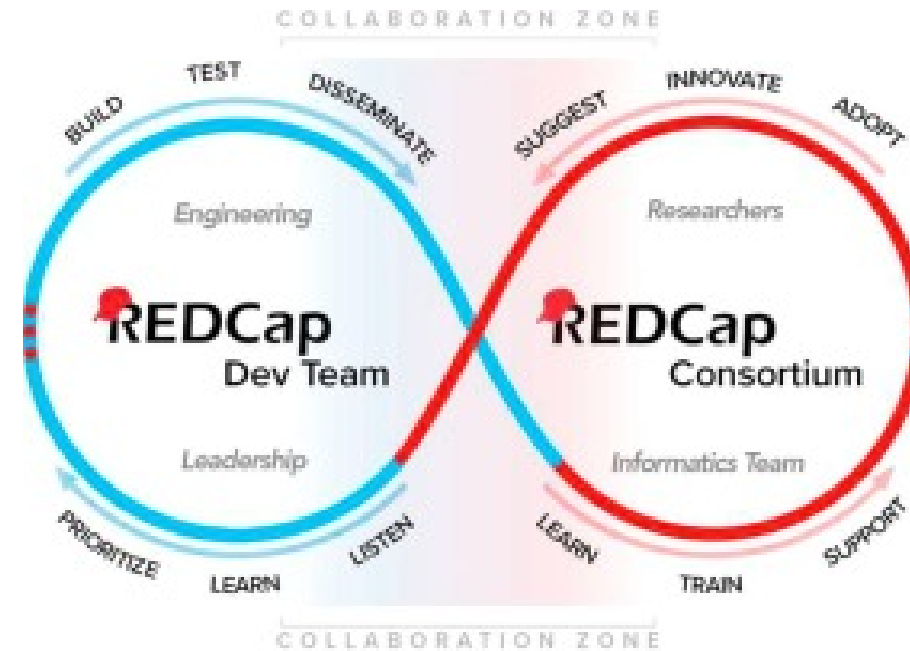
What is REDCap?

Research Electronic Data Capture (REDCap)

- Secure, web-based application for building and managing online databases and surveys
- Online and offline data collection e-forms
- Built-in ability to export data downloads to Excel, SPSS, SAS
- Advanced features:
 - survey development
 - longitudinal data collection
 - ad-hoc reporting tools (reports and stats)
 - mobile access (online and offline)

REDCap Consortium

<https://projectredcap.org/>



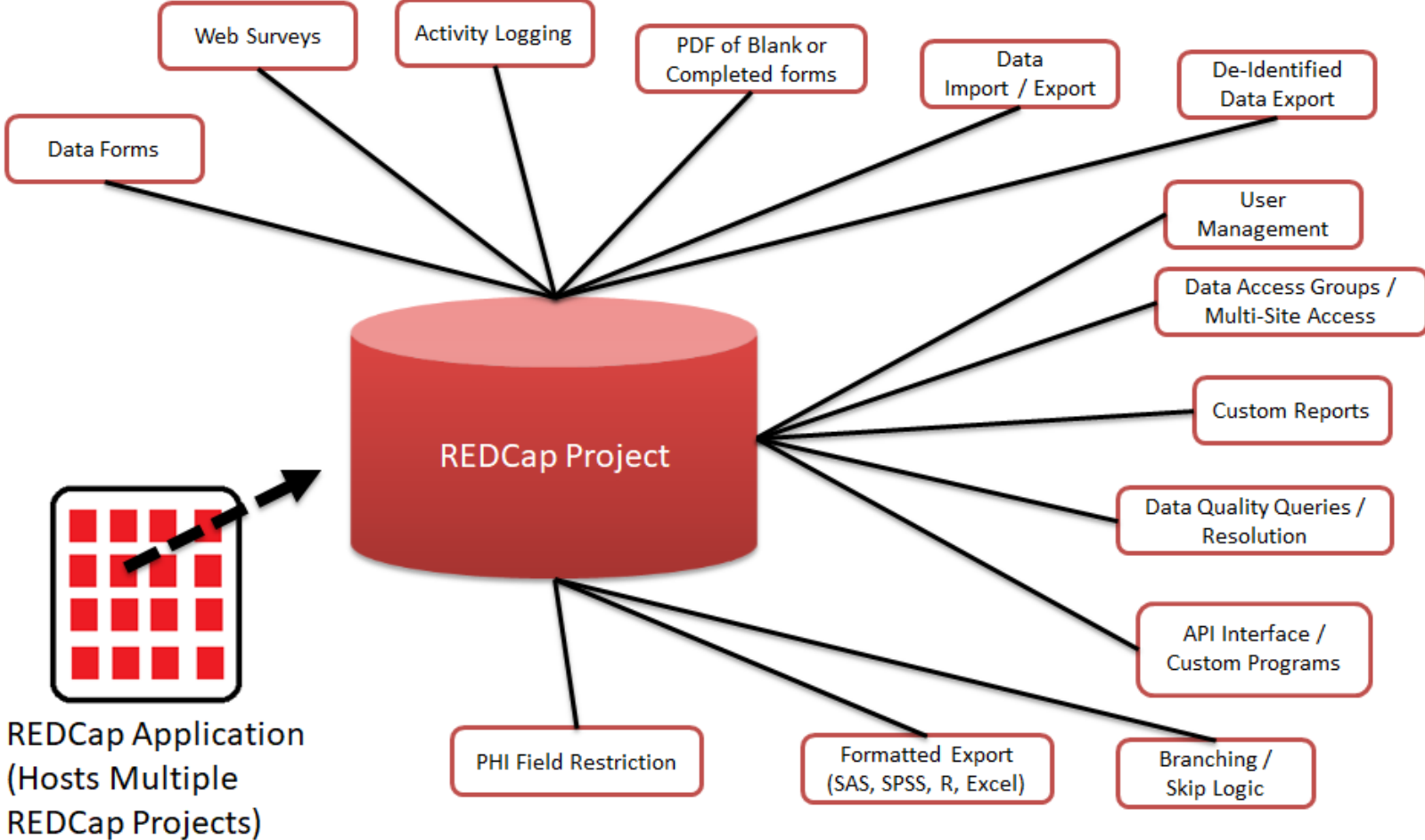
- McMaster and DFM IT licensed members of the consortium
- 2400 institutional partners / 115 countries / 590,000 total end-users / 450,000 ongoing research studies

REDCap at DFM

Scope of Project	Instance	Cost
REDCap test site (pre-project)	- sandbox to learn about and test the program	\$0
Small research project (1 – 10 short surveys)	- REDCap dfmgp.mcmaster.ca instance is shared with DFM Research staff/faculty - project will be part of the above domain name	\$0
Large research project or research program with multiple sub- projects	- separate version of REDCap, hosted in dedicated server environment - own domain name - for use by external users to share copies of the instance and to share data - no start and stop fees - data should be exported for analysis once data collection phase is complete	\$100/month

Overview of Specifications and Capabilities

Online and Offline
(mobile app)
data capture system



REDCap - Some (of the many) Features

- Online-offline capability
- All the usual database bling (different data types, calculated fields, skip patterns, VAS, data upload, inline/link for video/documents, etc.)
- Ready built questionnaires from the REDCap library: easy to import/export questionnaires
- Calendar scheduling
- Configurable user permission
- Data quality system
- Data access groups
- Detailed logging routing for monitoring

Use in DFM Research

- CHAP-Philippines
 - Mobile App collected by volunteers
 - Organized by villages under 1 municipality database
- CHAP
 - Online version collected by volunteers and supervised by a Research nurse
 - Organized by buildings with different user rights
- CP@home
 - Mixed of Mobile App and online versions
 - Organized by paramedic services
- MyCP
 - Using survey version as a mobile app
- Health TAPESTRY
 - Chart audits done by Research Assistants
- TAPER
 - Online version collecting data from telephone interviews
 - Offline data collection using the Mobile App

Using REDCap - Demo

- User interface orientation
- Project creation
- Building instruments
 - Data types, fields, logic
 - REDCap library
- Data entry
- Reports
- Data exporting

REDCap Resources



- Web site: <https://projectredcap.org/>
- Instructional videos: <https://projectredcap.org/resources/videos/>
- University of California San Francisco REDCap Knowledge Bank or FAQ: <https://wiki.library.ucsf.edu/display/RKB/REDCap+Frequently+Asked+Questions>
- Brief Intro to REDCap Slide Deck. Paul Harris, Vanderbilt CTSA <https://studylib.net/doc/5546088/brief-introduction-to-redcap>
- Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., ... & Duda, S. N. (2019). The REDCap consortium: Building an international community of software platform partners. *Journal of biomedical informatics*, 95, 103208.
- DFM REDCap Project Creation SOP: dfmresearch>Systems and Processes>REDCap

Questions?

And a question for the audience:

What would you like to learn more about? We are holding Part II of the REDCap skill builder on November 26.



Family Medicine

Department of Family Medicine
Michael G. DeGroote School of Medicine
Faculty of Health Sciences

fammedmcmaster.ca
[@McMasterFamMed](https://twitter.com/McMasterFamMed)