u^b REDCap: a secure survey tool @ Uni Bern



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u^b Centralized REDCap at UniBEAim and Scope

Aim is to provide REDCap for free to all researchers and all faculties of the Uni Bern & Insel Hospital, not only for clinical research

- Promote community building
- Reduce research done on Excel, paper, survey monkey, etc.
- Reduce number of existing REDCap installations \rightarrow become centralized
- Standardized system documentation, security & validation
- Implemented and maintained by the IT-Department and Department of Clinical Research

u^b What is REDCap? And why use it?

Research Electronic Data Capture: a web-based (clinical) data management system Developed by Vanderbilt University, Nashville, the USA in 2004

Online tool to **support researchers** in:

- creating databases in a secure environment
- collecting data (e.g. in online surveys)
- monitoring research projects
- sharing data with project partners



http://project-redcap.org

u^b REDCap Functionalities

- Build your own research databases
 - Easy to learn, flexible set-up
 - Predefined data types and real-time validation
 - Data record overview
- Use online surveys
 - Integrated into database
 - Customized and/or automatic survey messages
 - Personal or anonymized set-up
- Define a project-specific visit schedule (several events)
- Create custom reporting and data checks
- Export data in common analysis format
 - CSV (Excel), STAT, SAS, SPSS, R, API

u^{\flat} REDCap Functionalities

Database and Surveys

Data Collection Instruments Form options: Survey options: 🗄 Survey Queue 👻 🎼 🎭 Auto Invitation options 👻 🎾 Survey Login PDF Snapshots + Create a new instrument from scratch 🥘 Form Display Logic 🝷 Survey Notifications Import a new instrument from the official <u>REDCap Instrument Library</u> PDF (all instruments) Lupload instrument ZIP file from another project/user or external libraries Descriptive Popups Enabled as Fields PDF Instrument actions Survey related options Instrument name survey **G** Participant Survey - Registration Choose action 👓 Survey settings + Automated Invitations 1 C. Participant Survey - EQ5D3L ۷ Choose action 🤝 Survey settings + Automated Invitations 0 Other data G. Enable 0 Choose action \bigtriangledown

Field Name: record_id	 This field will NOT be displayed on the survey page. You should NOT use identifiers (e.g., MRN, SSN) for the record ID field.
Record ID	
Validation type: None	
NOTE: The field above is the record ID field and thus canno	t be deleted or moved. It can only be edited.
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🤌 🕻 🕂 🕂 🧰 [] Field Name: test_date	
Test completion date	D-M-Y
Validation type: Date (D-M-Y)	
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Survey	○ Yes
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	Add Field Add Matrix of Fields

¢	DEPARTMENT OF CLINICAL RESEARCH		A A A
Participa	nt Survey - Lab		
Please complet	te the survey below.		
Thank you!			
Test completio	n date	D-M-Y	
Survey * must provide val	ue	○ Yes	
		O No	reset

u^b REDCap FunctionalitiesDatabase and Surveys

Identifying data (e.g. e-mail address) may only be collected with the permission of the cantonal EC !!

BUT

Survey function can also be used for anonymized data collection

Ċ	DEPARTMENT OF CLINICAL RESEARCH		A A A
Participa	nt Survey - Lab		
Please comple	te the survey below.		
Test completio	on date	D-M-Y	
Survey * must provide va	lue	○ Yes ○ No	reset

u^b REDCap FunctionalitiesData Record Overview

Record Status Dashboard

Red = Data entry incomplete

Yellow = Data entry complete, but form unverified (optional)

Green = Data entry complete, form checked (ready for locking)

Record ID	Personal Information Patient Information	Diagnosis and Comorbidities Patient Information	Annual Form 2015	Annual Form 2016
188-1 (Registry-specific patient ID AAR-A-001)	۲	۲		۲
189-1 (Registry-specific patient ID AAR-P-001)	۲	۲	۲	۲
189-2 (Registry-specific patient ID AAR-P-002)	۲	۲	۲	
189-3 (Registry-specific patient ID AAR-P-003)	۲	۲	۲	
189-4 (Registry-specific patient ID AAR-P-004)	۲	۲	۲	
189-5 (Registry-specific patient ID AAR-P-005)	۲	۲	۲	
189-6 (Registry-specific patient ID AAR-P-006)	۲	۲	۲	
189-7 (Registry-specific patient ID AAR-P-007)	۲	۲		
191-1 (Registry-specific patient ID)	۲	۲		
191-2 (Registry-specific patient ID BAS-P-001)	۲	۲	۲	۲
192-1 (Registry-specific patient ID BEL-P-001)	۲	۲	۲	۲
193-1 (Registry-specific patient ID BER-A-001)	۲	۲	۲	0

u^b REDCap Functionalities

many more...



u^b What to Consider?REDCap Project Lifecycle

- 1. Attend REDCap training sessions (2 hours)
- 2. Fill out <u>UniBE Contact Form</u> and get access
- 3. Write and submit Data Management Plan
- 4. Build & test the REDCap database
- 5. Start data collection & monitor data quality
- 6. Export data for analysis
- 7. Lock & archive database
- 8. Publish data



u^b Services and SupportData Steward Team at UniBE

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Support in all stages of the project lifecycle



Contact e-mail: researchdata@unibe.ch

u^b Services and Support Department of Clinical Research (DCR)

Basic "REDCap Light" package (free of charge):

- Access to REDCap
- Access to the <u>REDCap Community Forum</u> (incl. Manuals, FAQs, Templates and Discussion Forum)
- Monthly REDCap training courses
- IT infrastructure at Uni (license, server monitoring, backups, etc.)
- Validated & maintained system

Learn how to get started by clicking on this link: REDCap **Community Forum of the University of Bern launched** Contents: 1. News / Technical Information 2. Manual for REDCap Database Setup 2.1. Steps before Database Setup - 2.2. Implementing the study database - 2.3. Testing the study database - 2.4. Plan Data Entry Phase - 2.5. Plan Monitoring / Data Quality Process - 2.6. Deployment of the database - 2.7. User management - 2.8. Database in Production - 2.9. Project completion - 2.10 Additional help 3. FAQs 4. Templates - 4.1. Templates Data Management - 4.2. Templates Study Management 6. REDCap User Discussion Forum 6.1. Database Set-up 6.2. Productive Status/ Deployment - 6.3. Locking/ Archiving of the Database - 6.4. User Management

New to the REDCap Forum of the University of Bern?

Welcome

REDCap Community Forum of the University of Bern launched!

u^b Services and Support

Department of Clinical Research (DCR)

Additional "REDCap Light" Services (upon request for a fee):

Technical database review

- General setup of database
 (field validation, usage of required and identifying fields)
- Usage of conditional logic and missing data codes
- Visit plan structure

General support

- Database implementation (field types, show/hide logic, alerts)
- Settings & options for online surveys
- How to implement changes in a running study

Visit UniBE Website for more Information about REDCap and Services

u^b Services and Support REDCap Training Courses (DCR)

Thu, 20. MAR 2025 - German
Thu, 10. APR 2025 - English
Thu, 15. MAI 2025 - German
Thu, 19. JUN 2025 - English
Thu, 17. JUL 2025 - German
Thu, 21. AUG 2025 - English
Thu, 18. SEP 2025 - German
Thu, 16. OCT 2025 - English
Thu, 20. NOV 2025 - German
Thu, 11. DEC 2025 - English

Register here:

REDCap® Database Implementation - Department of Clinical Research (DCR), Continuing Education

u^b Take-Home Message

REDCap is applicable if you plan to:

- Set-up a database
- Conduct an online survey
- Collect data together with project partners
- Collect sensitive data

Advantages of using REDCap:

- Secure data collection, access and collaboration
- Easy export to statistical programs
- Basic package is free of charge
- In-house support with training courses



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