

Tutorial: CRF Design using REDCap Kirsten Roomp October 5th, 2018

- Go to: https://luxparktest.org/redcap/index.php
- Tasks performed using your project manager account (embo.userX)
- Tasks performed using your test user account (embo.usertestX)

1. Rename the existing default data collection instrument *"My First Instrument"* to *"Demographics"*.

Change the first field/variable's Field Label from *"Record ID"* to *"Subject ID"*. Change the Variable Name to be consistent with this change. Also, add a prefix to the Variable Name, which is to be consistently for all variables you will be creating in *"Demographics"* (e.g. *"dm_")*.

Add the following new fields/variables:

- Date of birth
- Sex
- Marital status
- Years of education completed
- Language(s) spoken
- Is the patient retired?
- Retired which year
- Participation in previous clinical studies?
- Describe previous clinical studies

Use as many different Field Types as possible and make *"Date of birth"* and *"Sex"* to be Required fields. Use constraints wherever possible.

2. In *"Demographics",* create branching logic so that *"Retired which year"* only becomes visible, when the retired status is *"yes".* Do the same for *"Describe previous clinical studies".*

3. In *"Demographics"*, create two new fields *"Diagnosis"* and *"Longest lifetime occupation"*. Find suitable ontologies for these fields and integrate them.

4. Create a new data collection instrument called *"Anthropometry"*. Choose an appropriate (different) prefix for this new data collection instrument.

Create fields/variables for

- Weight
- Height
- Blood pressure, systolic (3 measurements each)
- Blood pressure, diastolic (3 measurements each)
- Pulse (3 measurements each)



Make sure you add the unit of measurement to each as a Field Note. Use constraints wherever possible.

5. In *"Anthropometry",* create calculations for BMI, average blood pressure (systolic), average blood pressure (diastolic) and average pulse.

6. Convert the project to a longitudinal project.

7. Add three events, one occurring every 6 months. Call them "Visit 1", "Visit 2" and "Visit 3". Use an offset range of +/- 10 days.

8. Add the data collection instruments to the appropriate events.

9. Activate the Scheduling module.

10. Using the Scheduling module, create two new patients. Make sure the appointments fall on weekdays (not weekends).

11. Fill in the data for "Visit 1" for both new patients.

12. Create a report that only displays, for all visits

- Record ID
- BMI
- Average blood pressure, systolic
- Average blood pressure, diastolic
- Average pulse

13. Export all data in your project in CSV/Excel raw format and save it on your PC. Also, export it in CSV/Excel labelled format. Identify the differences between the two.

14. Export and save the Data Dictionary of your project. Examine its structure. You can also make changes to the data dictionary file, and reimport it to make changes to your project. Try this by adding to *"Demographics"* the variable *"Death?"* (yes/no) and *"Date of death"*, including appropriate branching logic. Reimporting the data dictionary and check that the changes have been made.

15. Add and save data to *"Death?"* for all patients, making sure it works as intended.

16. Move your project to production status, retaining the data that you entered.

17. Make a change to one of your variables, now that the project is in production mode. Note the added protection that this gives you.