

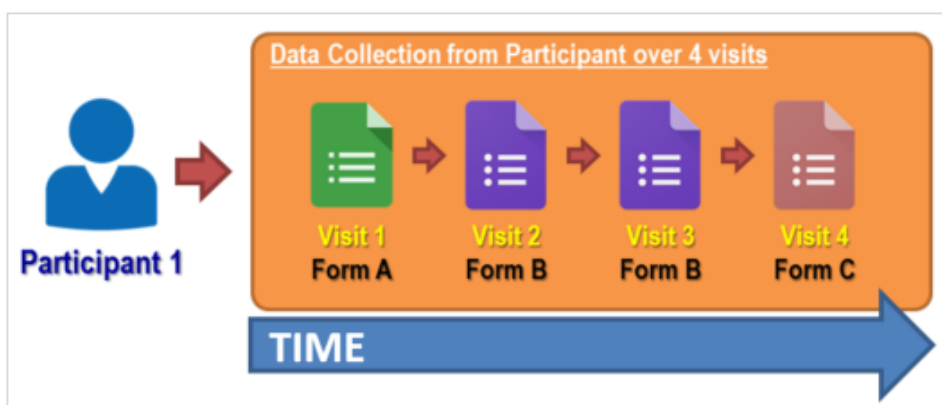
INTRODUCTION TO LONGITUDINAL PROJECTS

REDCap's Longitudinal data collection mode enables researchers to collect data via Forms/Instruments designated to pre-determined Events. This enables different Forms to be used for different Events, or the same Form can be used for multiple Events.

For example, a Demographics form may only need to be completed at the very first event, while a Lab Results form may be required at each event.

REDCap Projects with a longitudinal structure

- Users should remember that by default, all new, 'blank' REDCap Projects are created in the "Classic" data collection mode. (ie: REDCap creates each Records based on a Single, One-time visit by the Participant and completing all the Forms at that **one** time point or event.)
- However, Users can "switch" a Project in Classic mode to "Longitudinal" data collection mode.
- Projects in Longitudinal mode will track records over a series of pre-defined Participant Events or Visits. (ie: A Participant comes back for multiple follow-ups and records their physical parameters for each visit.)



- Once a Project is switched to longitudinal mode, users can define the Events to allow data collection forms to be used multiple times for any given database record.
- An Event can be a time-based Event in the course of your research, such as a Participant Visit, or the Event can be a Task to be performed.
- After the Events have been defined, you must designate your Forms for any or all events, thereby enabling the use of one Form for multiple Events in the same database record. The Project can also be configured to use different forms for different Events

Longitudinal-mode Projects with Multiple Arms

- In REDCap an "Arm" is a construct that allows Events to be divided into different Arms (or groups/populations).
- By default, in Longitudinal mode, the Project has pre-created **one Arm** and **one Event**.
- Additional Arms can be created where needed, and each Arm can have as many Events as required. And the data collection forms can then be linked multiple Events. Each Record ID can only "exist" one of the Arms.
- Thus in this way, Arms can be used to distinguish between different groups/populations of Participants, and to cater to different data collection needs of the different Arms.
- The following pictures below show a Project with **two Arms** (Inpatients, Outpatients).

- Each Arm has their own series of **Events** (3 Events for Inpatient arm, 4 Events for Outpatient arm) with each Event having their designated Forms.

Arm 1: INPATIENTS		Arm 2: OUTPATIENTS								
Record ID	Demographics				INPATIENT Forms			INPATIENT Discharge		
	Subject Info	Demographics	Comorbidity	Dengue Status	Inpatient: Admission	Inpatient: Signs And Symptoms	Inpatient: Laboratory	Inpatient: Signs And Symptoms	Inpatient: Laboratory	Inpatient: Discharge Summary
1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Event names

Instrument / Form names


Arm 1: INPATIENTS		Arm 2: OUTPATIENTS											
Record ID	Demographics				OUTPATIENT Follow Up Visit 1			OUTPATIENT Follow Up Visit 2			OUTPATIENT Discharged		
	Subject Info	Demographics	Comorbidity	Dengue Status	Outpatient: Signs And Symptoms	Outpatient: Laboratory	Outpatient: Follow-up	Outpatient: Signs And Symptoms	Outpatient: Laboratory	Outpatient: Follow-up	Outpatient: Signs And Symptoms	Outpatient: Laboratory	Outpatient: Discharged
3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How is Longitudinal Data stored?

- In the default, “Classic” mode of data collection, each project record is stored independently as a separate row of data, which can be seen when exported.
- However, for Longitudinal-mode projects, each row of data actually represents that particular time-point (or Event) per database record.
- I.e: If four Events are defined for the project, one record will have four separate rows of data when exported. The data export will include a column "redcap_event_name" indicating the unique event name for each row.

How to switch a Project to Longitudinal mode?

- Project Setup, enable “Use longitudinal data collection with defined events” option.



Not started


Main project settings

Use surveys in this project? ?

[VIDEO: How to create and manage a survey](#)

Use longitudinal data collection with defined events? ?

- A new section “Define your events and designate instruments for them” will appear under the Project Setup page. There are two settings/buttons in this section.



In progress

Define your events and designate instruments for them

Create events for re-using data collection instruments and/or set up scheduling.

Go to or

- **“Defined My Event”**: Used for creating the Events and Arms as needed.
- **“Designate Instruments for My Events”**: You can use this to designate Forms to the created Events and create linkages between Events and data entry forms. Note that each Arm has its own tab to manage its set of Events and Forms. For data collection purposes, you will additionally need to designate the data entry forms that you wish to utilize for any or all events, thus allowing you to use a form for multiple events for the same database record.
- **BOTH OF THESE SETTINGS** must be properly configured before the Project can be correctly used in Longitudinal mode.