

How to setup a longitudinal study in FormShare *4 steps and troubleshooting*


FormShare provides advanced data management tools for longitudinal studies.

The following steps will show you how to setup a longitudinal study in FormShare

Step 1 Create a project with a case/longitudinal workflow


In FormShare create a new project and indicate that it uses a case/longitudinal workflow.

Information for the new project

Code: 
The code must be unique and cannot be changed afterwards

Name:

Use a case/longitudinal workflow: ☒ **Check this option**
This means that the forms in this project and their submissions will be related to cases. For example longitudinal forms and data regarding households as cases.

Color: 

Step 2 Design a case creator form using Excel and upload it into the project


A case creator form allows you to create cases. In a ODK XLSX Form have the following variables:

- A variable that identify each case (e.g., case_id). Each case ID MUST BE UNIQUE across the whole study.
- A variable that can be used to label each case (e.g., case_name).

type	name	label
text	case_id	Unique ID of each case
text	case_name	Label of each case
text	other_variable	Another variable in your form

- Upload your form into FormShare using the “Upload Form” button and indicate the variables to identify and label each case.

Survey file (xls / xlsx)



In this ODK Form that you are uploading into FormShare, which variable will be used to identify each case?

Each case must be UNIQUE. You need to select a variable from your ODK Form whose values will be UNIQUE across all the cases that you expect to have. If you need to join two or more variables to become UNIQUE, then use an ODK Calculate to merge them into one variable. This variable will become the Primary Key of your ODK Form and CANNOT BE CHANGED afterward.

In this ODK Form that you are uploading into FormShare, which variable will be used to label each case?

Each case needs to have a label. You need to select a variable from your ODK Form to label each case. Follow-up forms will use this variable to search and select each case. If you need to join two or more variables to create a label, then use an ODK Calculate to merge them into one variable.

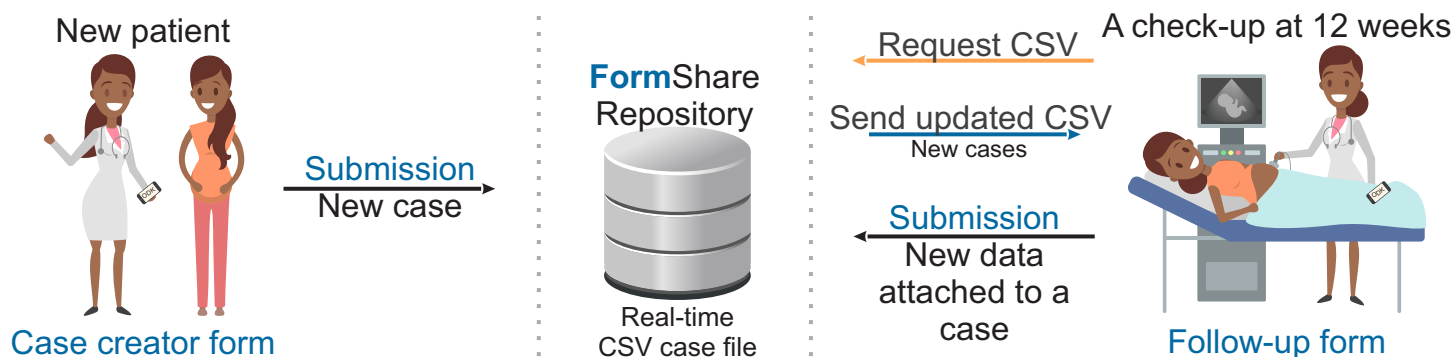
- Test your case creator form.
- Create a repository for your case creator form. **Note: You cannot continue this guide without a repository.**

Create the real-time CSV case file

This file allows ODK forms to use the data of cases

In a longitudinal study, case creator forms create cases. For example, if your cases are about pregnant women then the case creator form collects information for each woman joining the study.

On the other hand, follow-up forms attach information to cases at different points in time. For example, a follow-up form can add information to women at each trimester to monitor the progress of their pregnancies. Follow-up forms are independent ODK Forms that you upload into FormShare. Follow-up forms need to search and select a case to then attach information to it. For this to happen follow-up forms need to use a CSV file that updates each time a case arrives in FormShare. The image below shows how this works.



- To create or adjust the real-time CSV case file, go to the “Project details” page and click on the “Update/edit the real-time CSV case file” button.
- You can add any information in the case creator form to the CSV file.

Design and upload a follow-up form

Follow-up forms attach data to a case

Follow-up forms allow you to attach information to cases at any point in time. In an ODK XLSX Form have the following variables:

- A variable for searching and selecting cases. This variable could be:
 - A “select_one_from_file” using the real-time CSV case file or,
 - A “barcode” that would read the Case ID from a QR or Bar code.
- A variable for storing the date of the follow-up. This could be “date”, “datetime”, “start”, or “end”.
- A “calculate” variable joining variables 1 and 2 using a concat() function as calculation

type	name	label	calculation
start	survey_date		
select_one_from_file real_time_csv.csv	case_id	Search and select a case	
calculate	survey_id		concat(\${case_id},'_',format-date-time(\${survey_date}, '%Y-%m-%d %H:%M:%S'))
text	other_variable	Another variable in your form	

- Upload your form into FormShare using the “Upload Form” button and indicate the three variables from above.

Survey file (xls / xlsx)

follow_up_form.xlsx

Type of case form

☒ Simple follow-up ☐ Follow-up and deactivate ☐ Follow-up and activate

In this ODK Form that you are uploading into FormShare, which variable will be used to search and select a case?

case_id

This variable MUST BE either a "select_one_from_file" (The file MUST BE CSV) or a "barcode".
Download an example the CSV file [here](#)

In this ODK Form that you are uploading into FormShare, which variable will be used to record the date of a new data point attached to a case?

survey_date

Follow-up forms attach data to a case. Each case can have different data at different points in time. Each data point must have a date. This variable MUST BE either "date" or "datetime".

In this ODK Form that you are uploading into FormShare, which variable will be used to control duplicate data?

survey_id

Follow-up forms attach information to a case at different points in time. Therefore, the ID of the case + the date/datetime should be UNIQUE across time. You just indicated above: a) The variable used to search and select a case and b) The variable to record the date. In your ODK form join these two variables into a "calculate" variable and paste its name here. This variable will become the Primary Key of your ODK Form and CANNOT BE CHANGED afterwards.