

Learner's Guide to the Offline Analytics

What is this guide?

This guide contains all exercises and detailed steps to perform them related to the review of **Offline Analytics** for the Android Level 1 academy. Please perform each of the exercises when prompted to by your instructors

Learning objectives for this session




The overall objective of this session is to demonstrate how to use


1. Describe how analytics work in the Android app.
2. Demonstrate how to configure and display analytics in the Android app.


Exercise 1 - Explore the automatically generated TEI analytics



In this exercise you will know how the automatically generated TEI analytics work and the information they display.



1. Open the Android app using your user and go to the Demo Immunization (ie. **not** your program)
2. Search an existing Child whose Child Number is 9859.
3. Then, open the Analytics tab for this Child.

 Edit child





Local ID: -
Child Number: 9859
First Name: Raphaelle
Last name: Toy
Date first seen: 01/01/2023
Owned by: 0001 CH Mahosot
 Show more

**Birth Details**

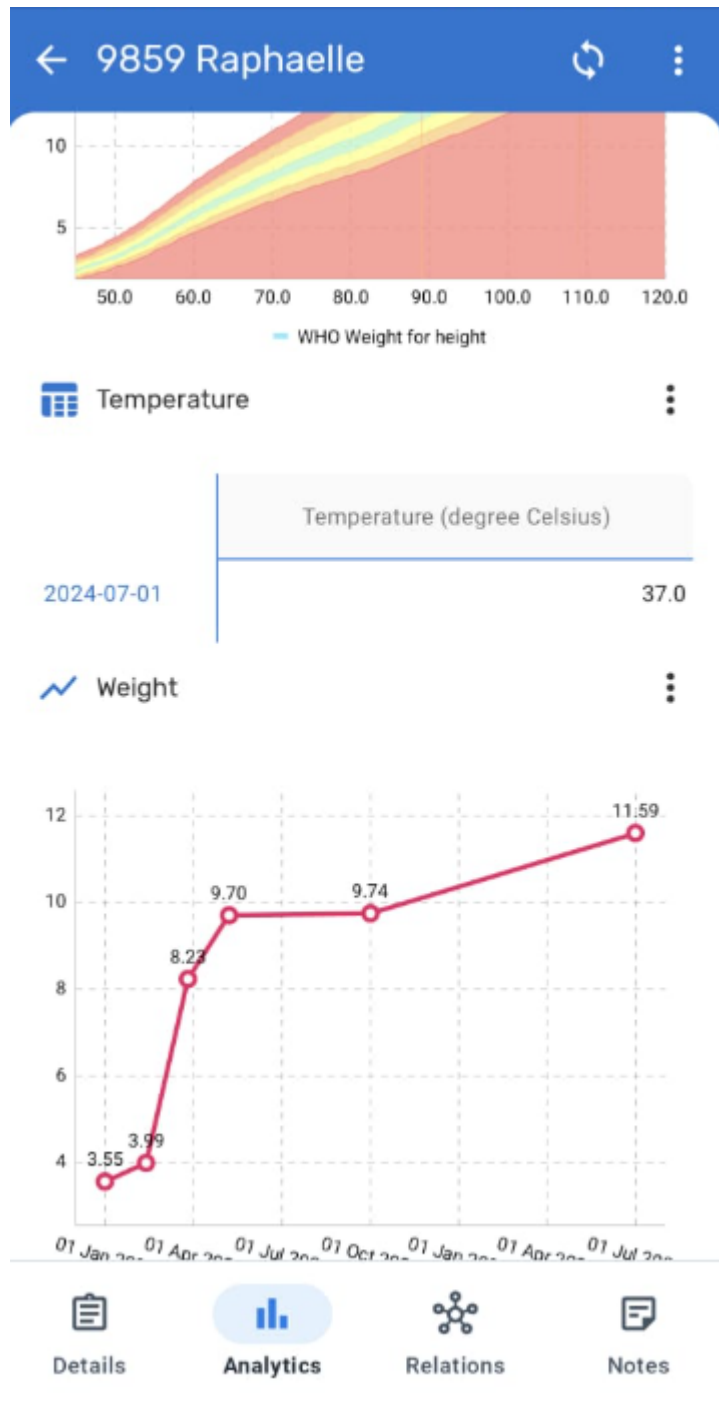
01/01/2023
Registered in: 0001 CH Mahosot
 2 years overdue


**Immunization**

01/07/2024

 Details Analytics Relations Notes

4. Explore the automatically generated visualizations.



STOP - End Exercise 1

Exercise 2 - Configure a chart to show the evolution of weight values

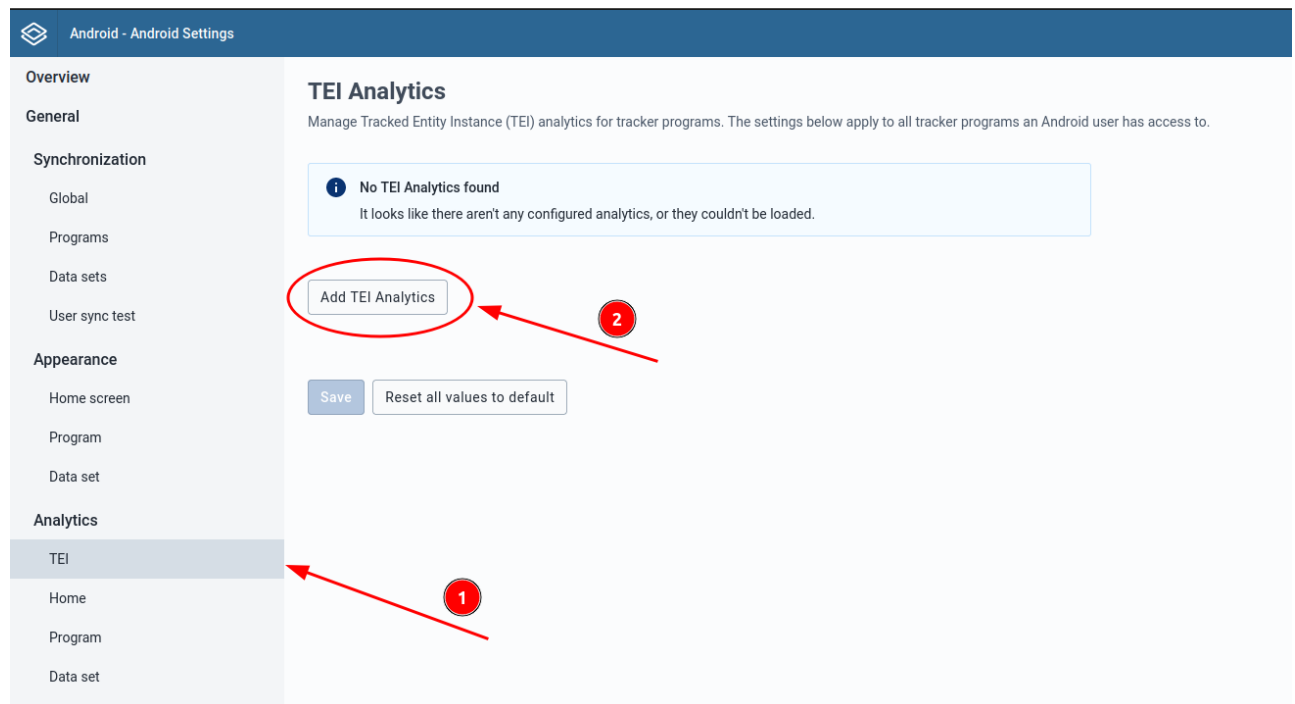
This exercise must be performed in groups. You can use the ADMIN account for the system to perform these exercises

Username : android.admin

Password : District1#

In this exercise you will create a custom TEI analytic table to show the evolution of a particular data element (weight). This exercise requires using the Android Settings Web App, please remember to take turns to modify it.

1. Open the Android Settings Web App.
2. Navigate to Analytics > TEI and click on "Add TEI Analytics".



3. Fill out the form with the information for the TEI analytics:
 - Program: the program assigned to your user.
 - Program stage: the "Immunization" program stage (the only one in the list as it only shows repeatable stages).
 - Analytics chart title: choose a title for your table.
 - Visualization Type: Line chart.
 - Period type: daily.
 - Element type: data element.
 - Element: Temperature.
4. Click on "Add TEI analytics".

Add TEI Analytics

Program

Immunization

Program Stage

Immunization

Title and name

Analytics chart title *

Weight

Short name

Weight

Choose visualization type *

☐ Bar chart

☒ Line chart

☐ Pivot table

☐ Single value

☐ WHO nutrition

Choose a period type *

Monthly

Visualization elements

Choose element type

Data Element

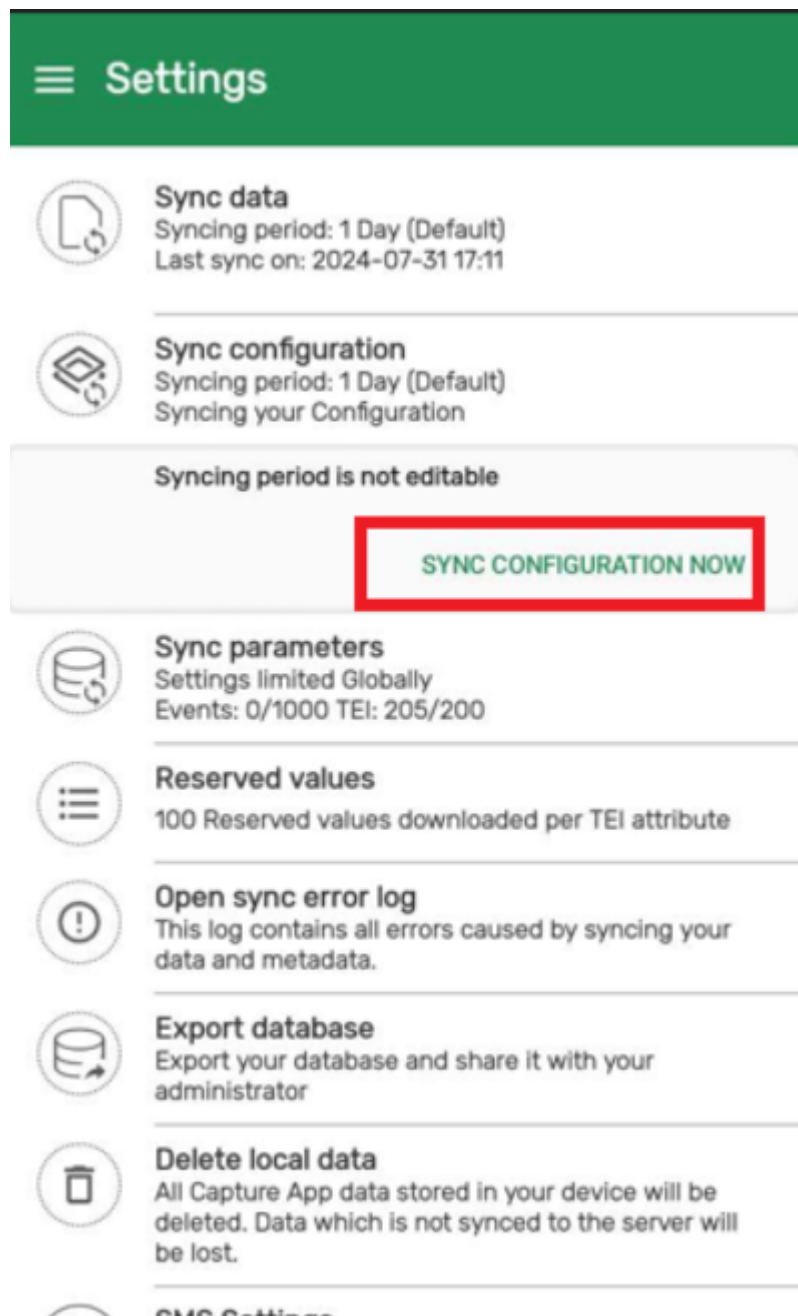
Choose element

Weight (in kg)

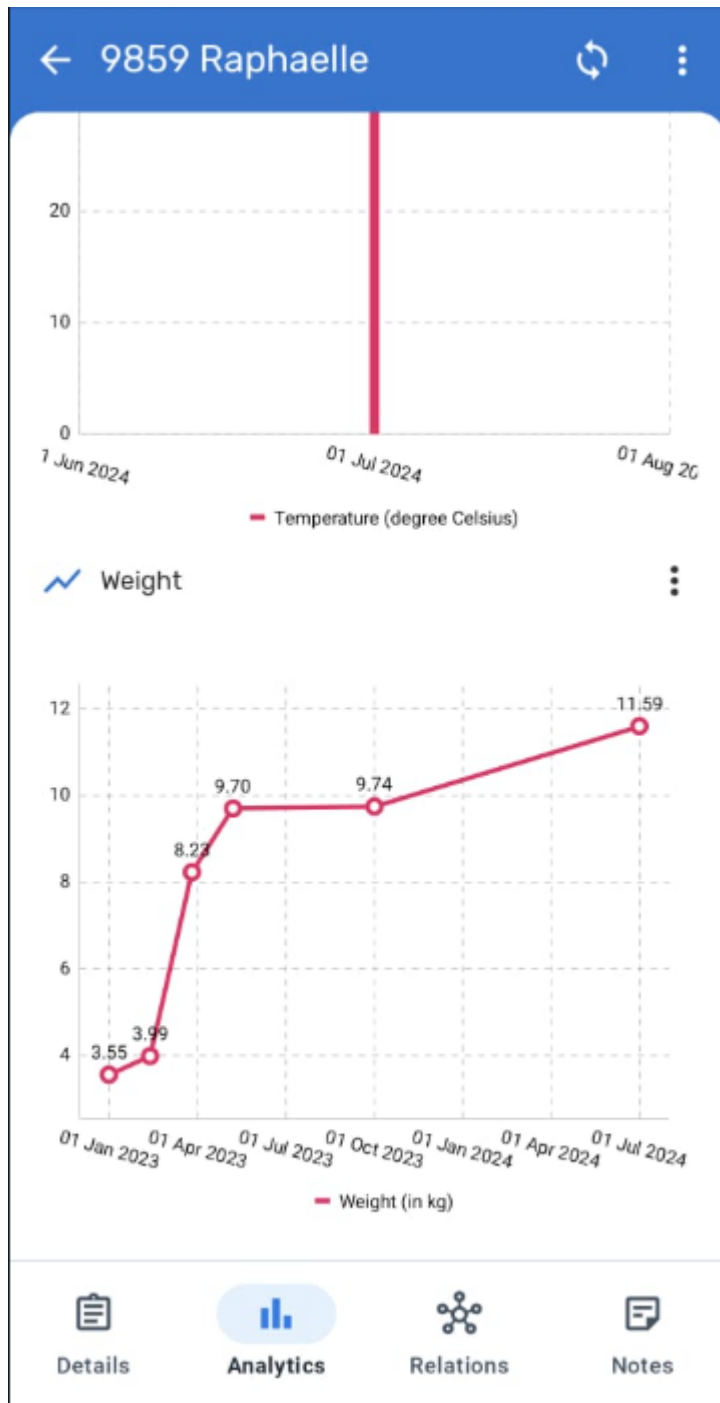
Cancel

Add TEI Analytics

5. Click on "Save" (**it is important to Save your work**).
6. In your Android app, go to Settings and Sync configuration.



- Once it is finished, register a new TEI. Add at least 2 immunization events and fill in the weight and temperature fields. From here, navigate to the analytics tab to see the temperature and weight visualizations being made.



STOP - End Exercise 2

Exercise 3 - Configure a WHO nutrition chart

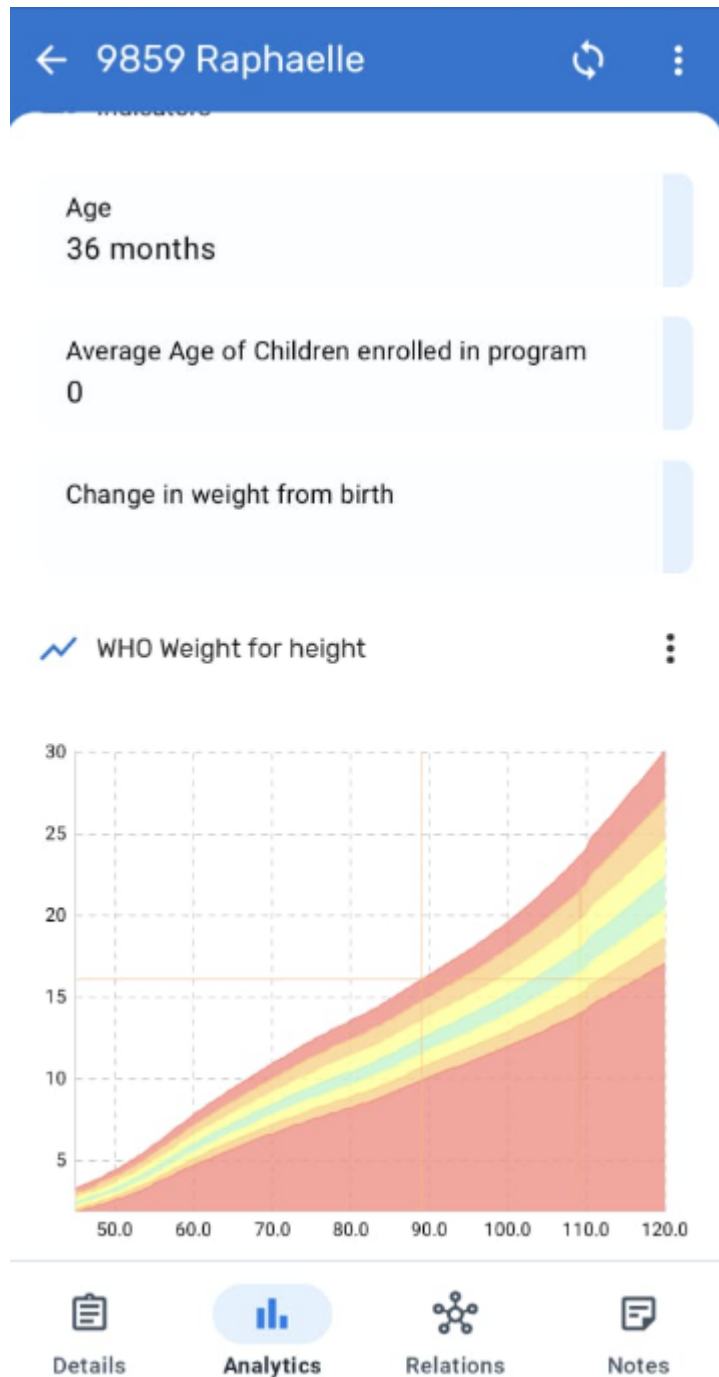
This exercise must be performed in groups. You can use the ADMIN account for the system to perform these exercises

Username : android.admin

Password : District1#

In this exercise you will create a chart with the WHO nutrition background. This chart requires some configuration to make the relation between your existing data elements and the information expected by the WHO nutrition chart. Remember to take turns to use the Android Settings Web App.

1. Open the Android Settings Web App.
2. Navigate to Analytics > TEI and click on "Add TEI Analytics".
3. Fill out the form with the information for the TEI analytics:
 - Program: the program assigned to your user.
 - Program stage: the "Immunization" program stage (the only one in the list as it only shows repeatable stages).
 - Analytics chart title: choose a title for your table.
 - Visualization Type: WHO nutrition
 - WHO visualization type: Weight for Height
 - **Important:** there is a bug that makes the chart title to be erased after clicking on "WHO nutrition". Make sure the title is not left blank.
 - Gender attribute: Sex
 - Female title: F
 - Male title: M
 - Horizontal (x) axis: DataElement - NUTR - Height/Length (cm)
 - Horizontal (y) axis: DataElement - Weight (in kg)
4. Click on "Add TEI analytics".
5. Click on "Save" (**it is important to Save your work**).
6. In your Android app, go to Settings and Sync configuration.
7. Once it is finished, go to an existing TEI in your program and explore the TEI analytics.

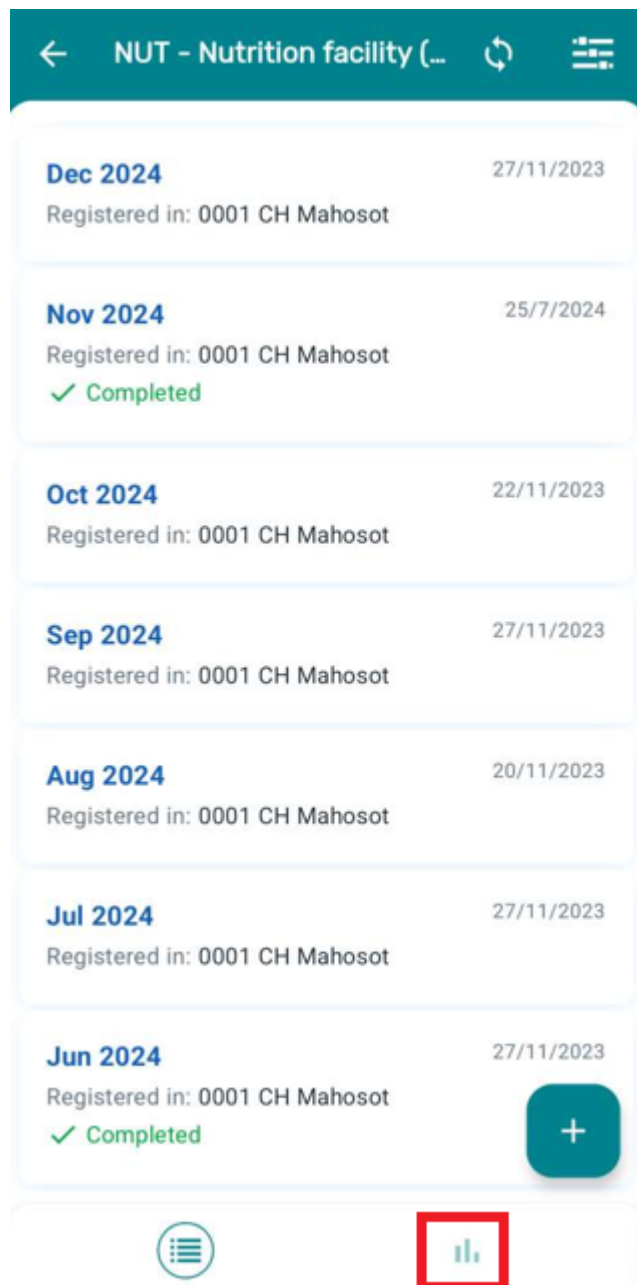


STOP - End Exercise 3

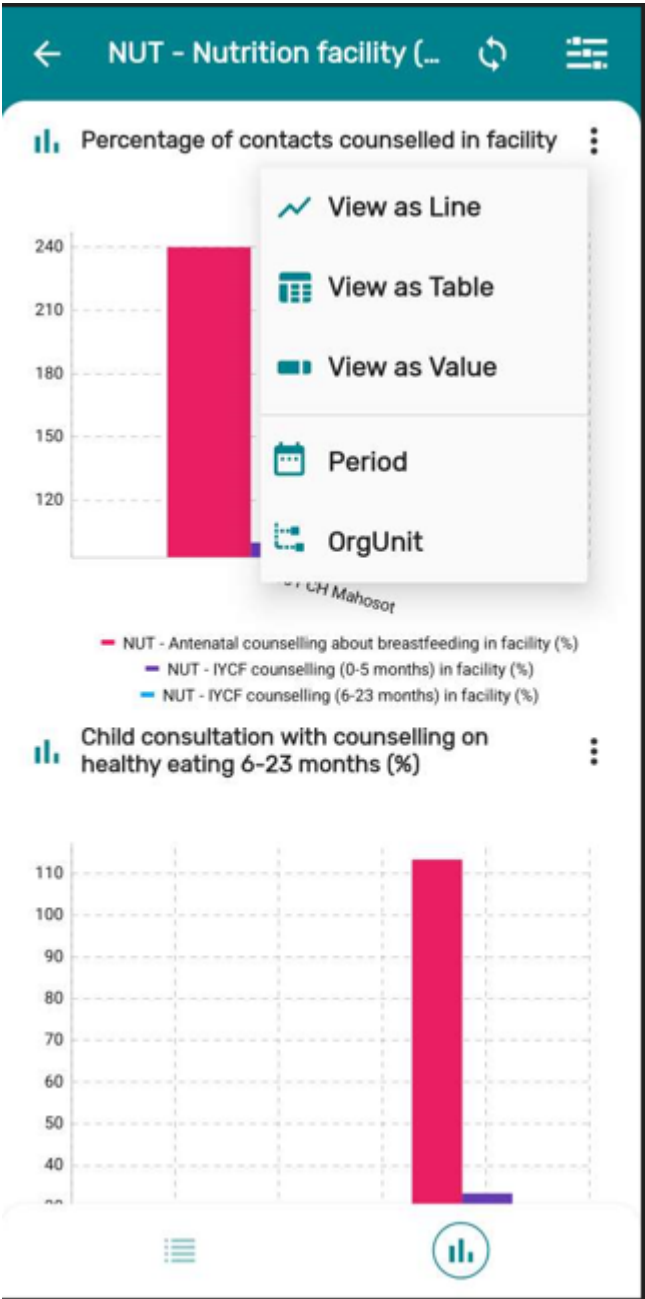
Exercise 4 - Explore dataset visualizations

In this exercise you will explore the visualizations assigned to the datasets and the information they display.

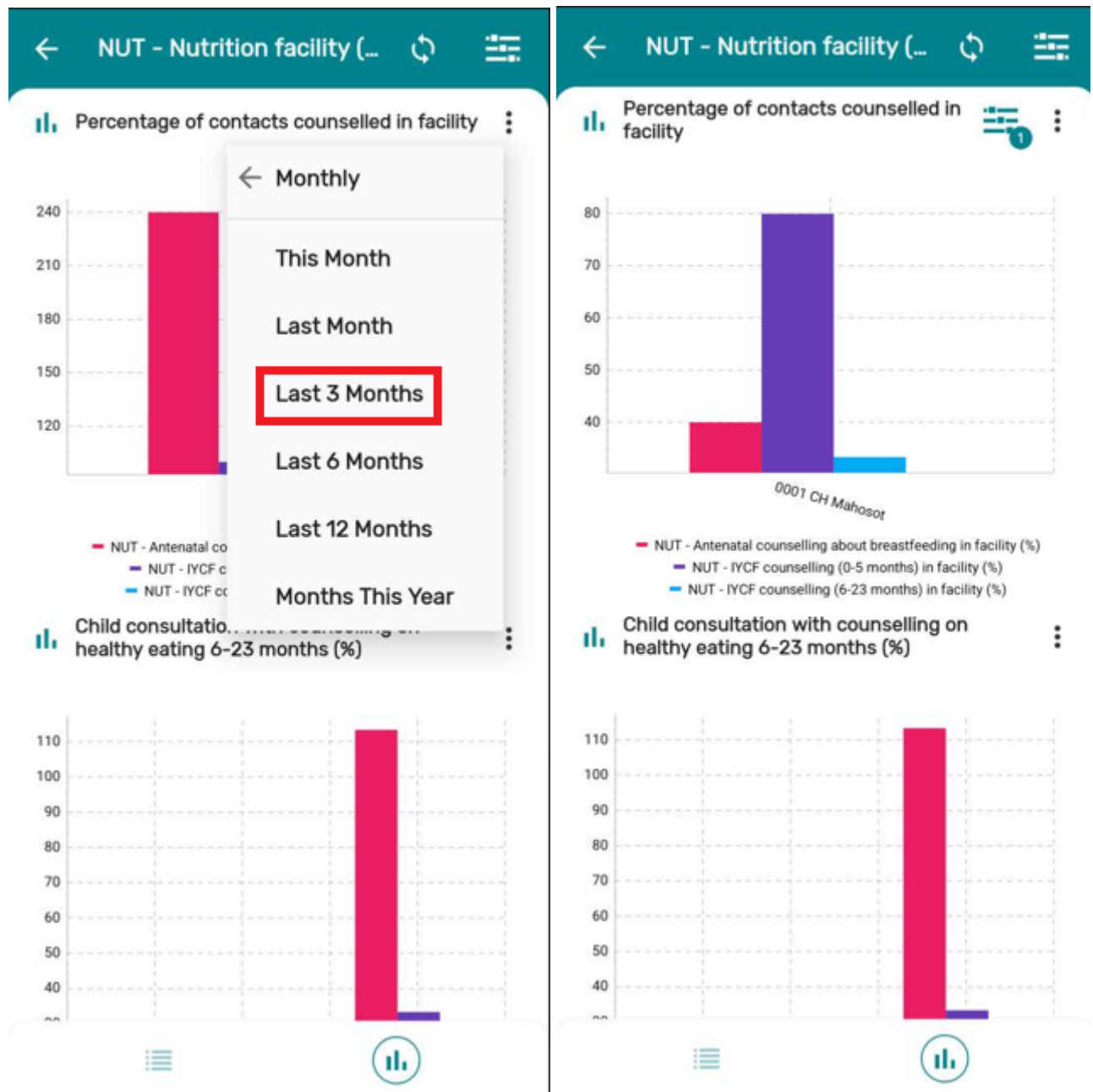
1. **Open the Android app using android user for datasets** and go to the Data Set "NUT - Nutrition facility (monthly)".
2. Click on the analytics tab at the bottom menu.



3. Explore the analytics charts displayed.
4. Change the chart type by clicking on the three dots in the top-right corner. For example, change the chart type to table.



5. Modify the period to filter the data of the last 3 months. Check how the chart changes the values



STOP - End Exercise 4

Exercise 5 - Assign a DataSet visualization

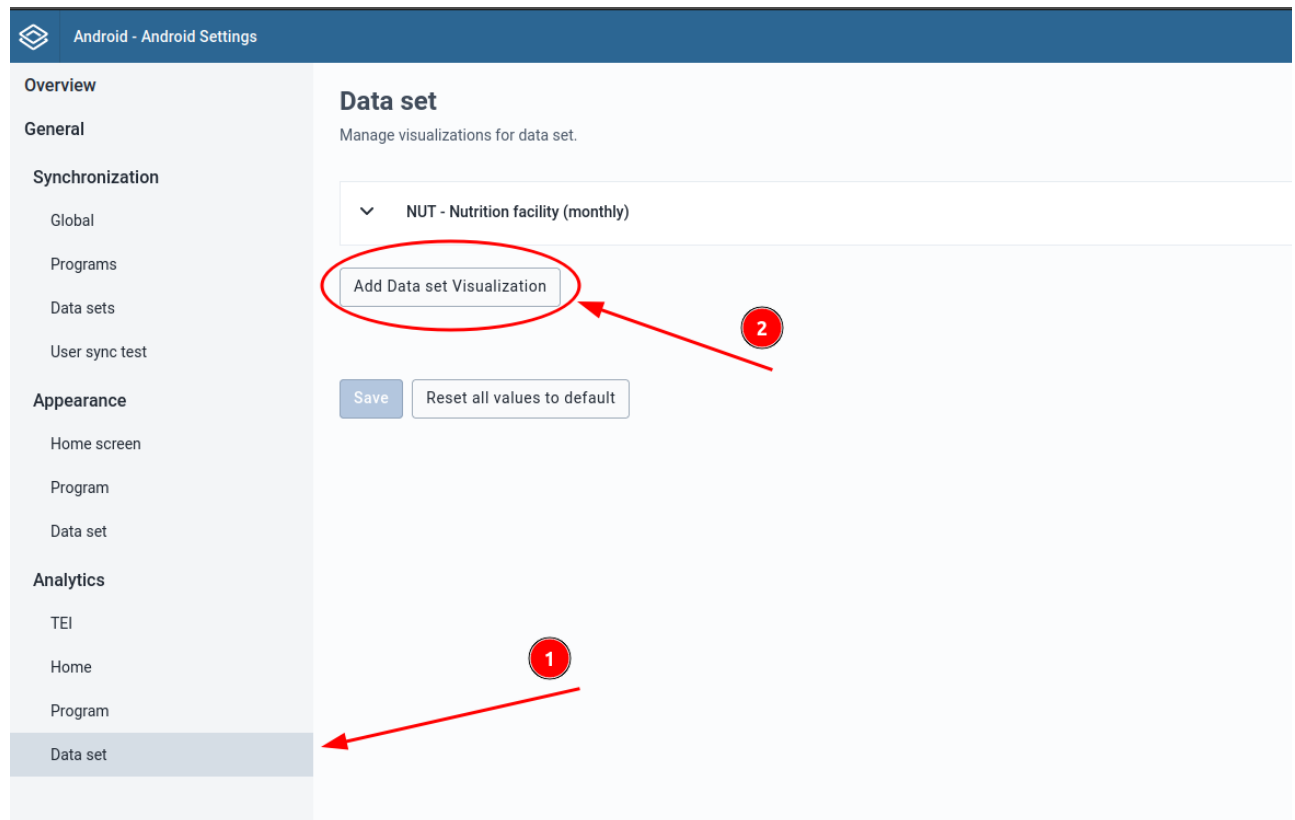
This exercise must be performed in groups. You can use the ADMIN account for the system to perform these exercises

Username : android.admin

Password : District1#

In this exercise you will assign an existing visualization to the DataSet analytics. **Important:** this exercise must be done once per instance, which means all of you in the same table must cooperate and do the exercise together only once.

1. Open the Android Settings Web App.
2. Navigate to Analytics > Data set and click on "Add Data set visualization".



3. Fill out the form with the information for the new data set visualization:

- Dataset: NUT - Nutrition facility (monthly)
- Visualization item: ANC Contact in facility
- Use a visualization group
- Create a new visualization group: ANC Contact

Add Data set visualization

Dataset

NUT - Nutrition facility (monthly) ▼

Visualization item

ANC Contact in facility

Clear

Visualization title

This will override the visualization title when shown in the app

☒ Use a group visualization

☒ Create a new group

ANC Contact

☐ Select a created group visualization

Visualization user test

Search by user

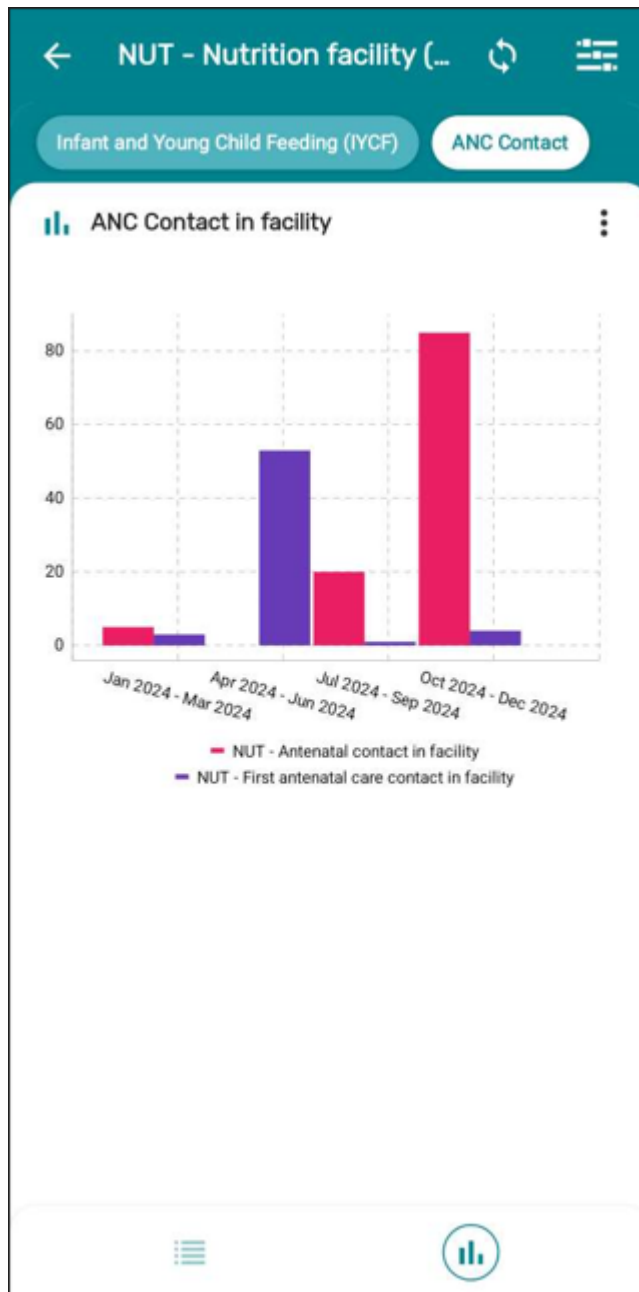
Clear

Run test

Cancel

Add Data set Visualization

- Click on "Add Data set visualization".
- Click on "Save" (**it is important to Save your work**).
- In your Android app, go to Settings and Sync configuration.
- Once it is finished, go to "NUT - Nutrition facility (monthly)" and check the newly added chart.



STOP - End Exercise 5

(Optional) Exercise 6 - Create a visualization and assign it to Home

This exercise must be performed in groups. You can use the ADMIN account for the system to perform these exercises

Username : android.admin

Password : District1#

In this exercise you will create a new visualization and assign it to your offline analytics.

1. Go to Data Visualizer app and create a new Visualization with the following parameters:

- Data Element: NUT - Antenatal contact in facility
- Organisation Unit: User organisation unit
- Period: last 12 months

- 2. Save the visualization including your user name so it can be easily identified, something such as "[User XX] ANC Contacts in facility".

×

Save visualization as

Name

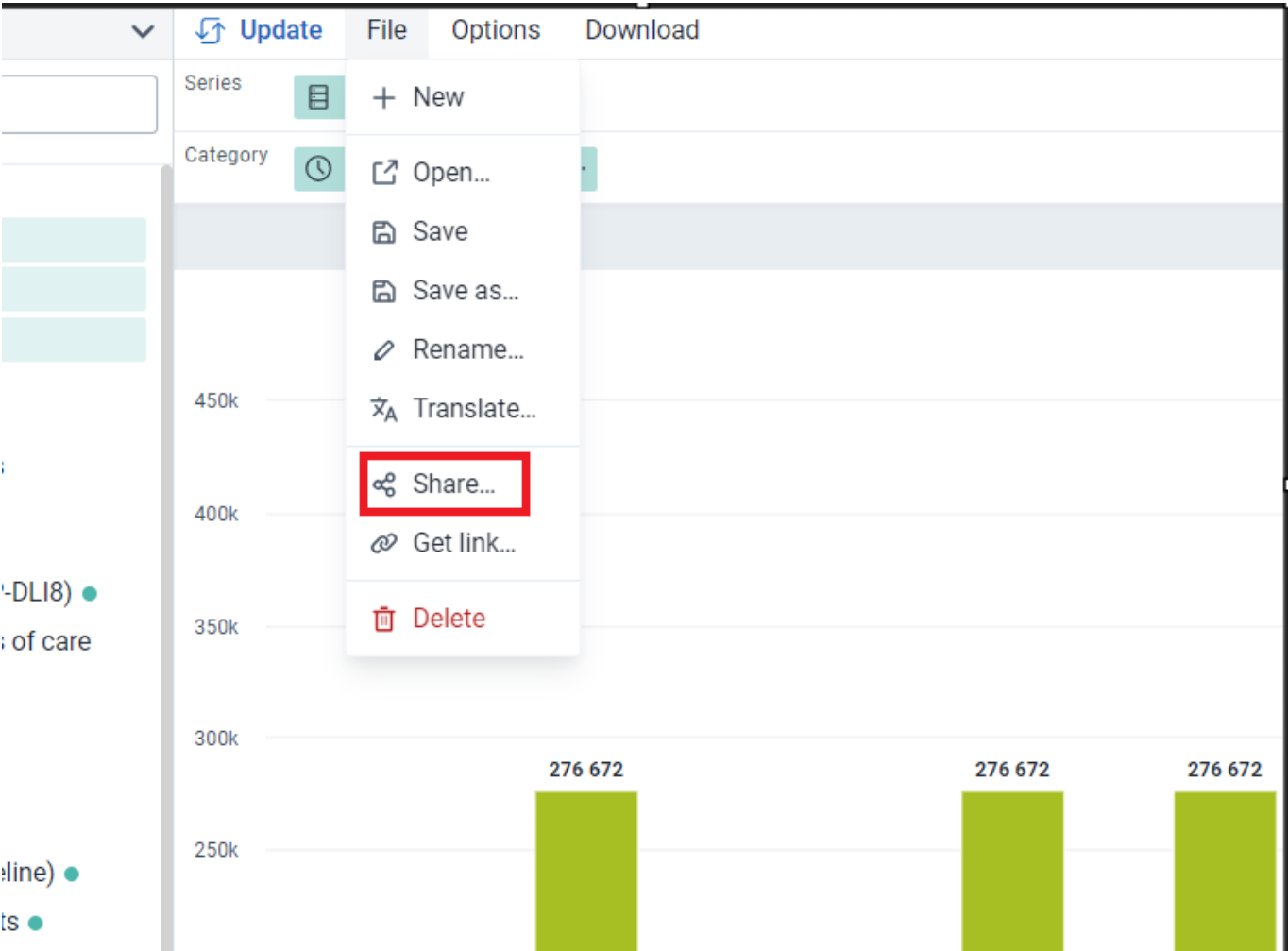
KT_ANC Contacts in facility

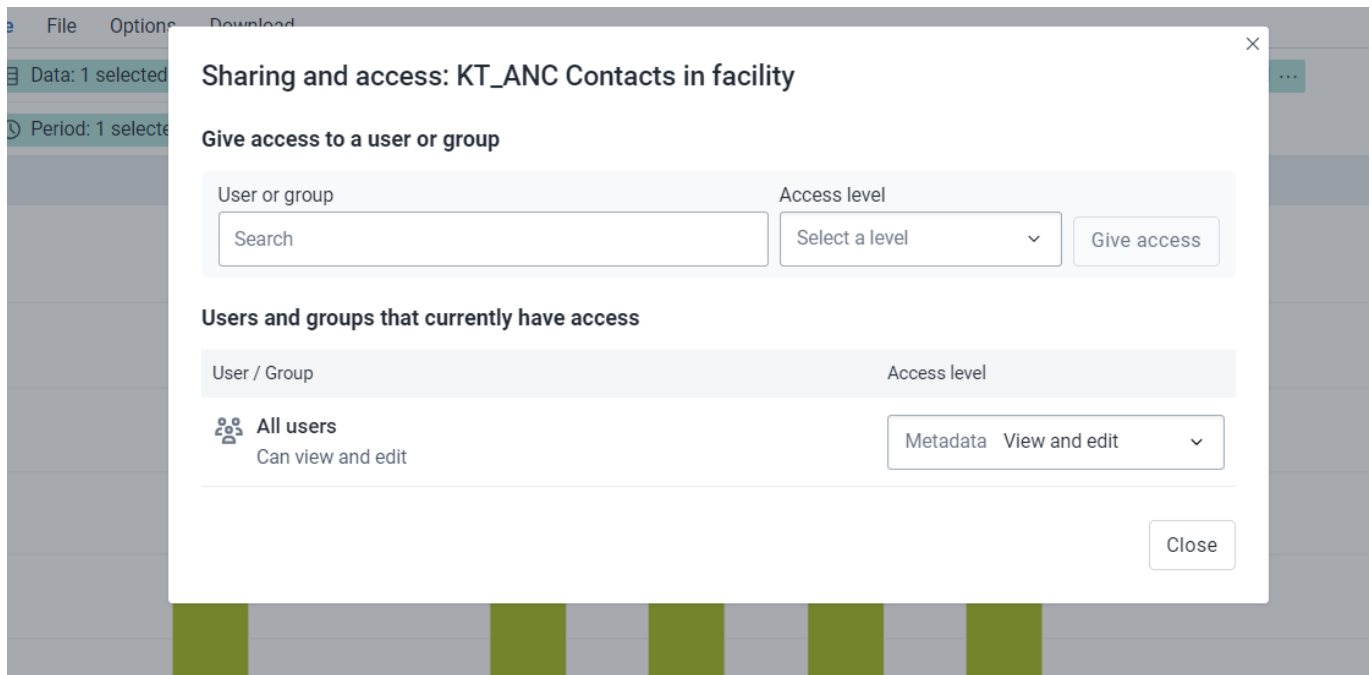
Description

Cancel

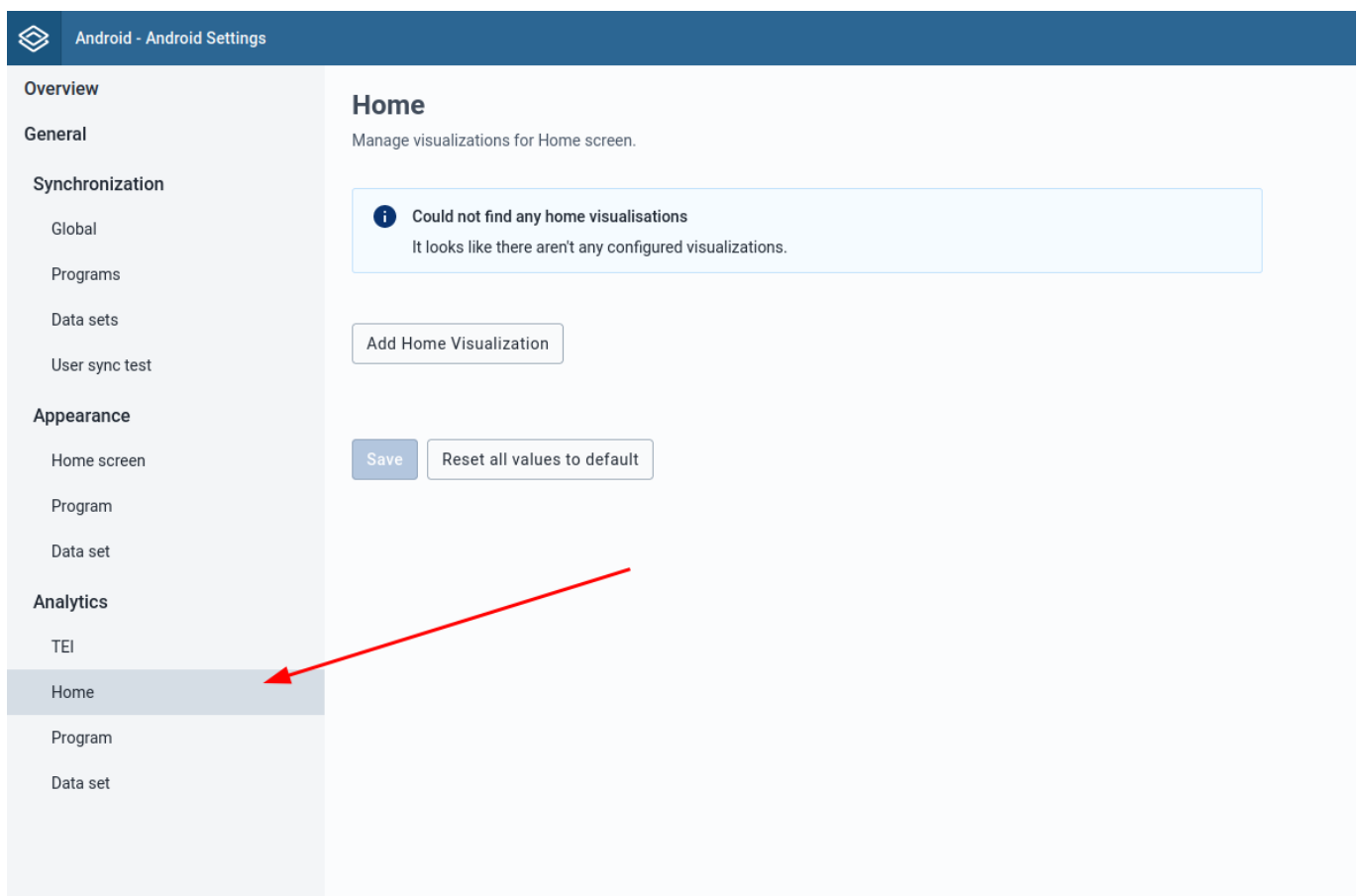
Save

- 3. Change the sharing settings of the visualization to Public.





4. Go the Android Settings Web App and click on Analytics > Home. Then, click on "Add Home Visualization".

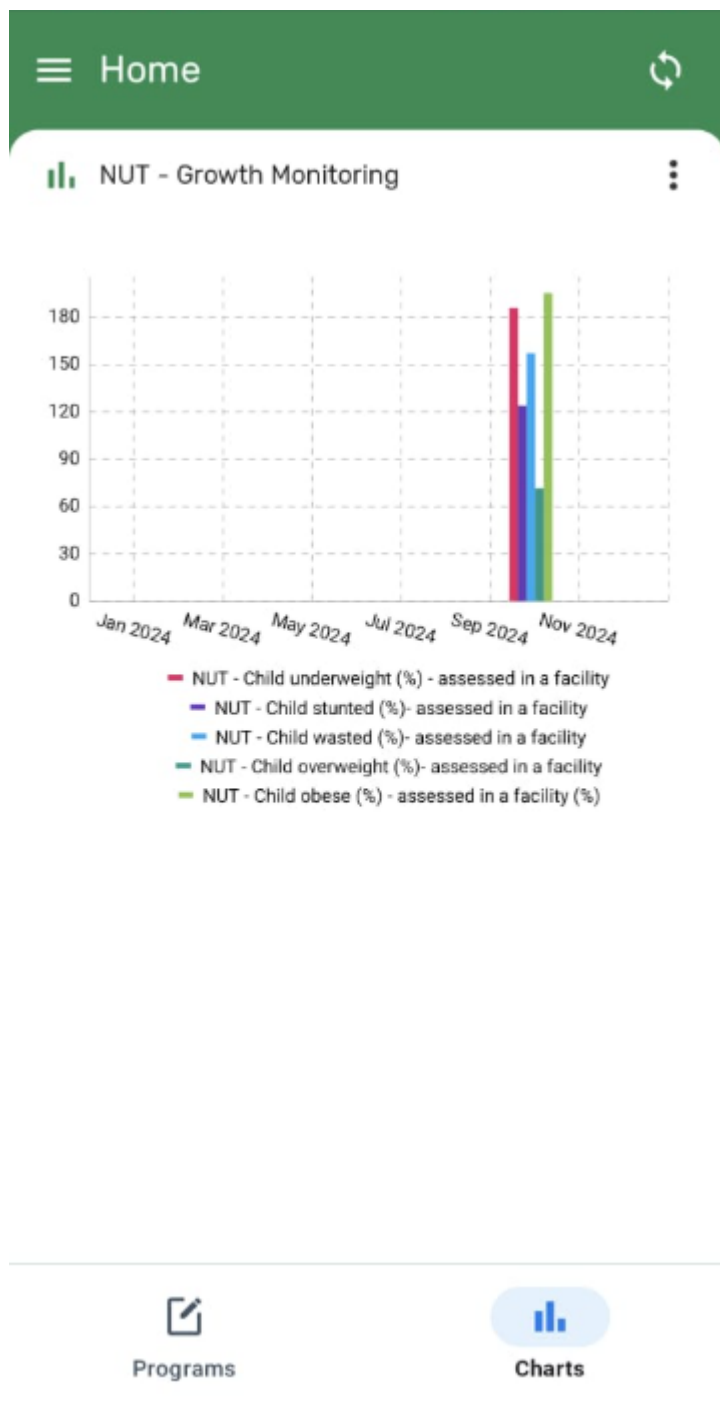


5. From here, the process is very similar to adding a DataSet analytics. Select your recently created visualization and add it to the home. **Important:** take turns to do these changes in the Android Settings Web app.

Login in to the android app using your user for datasets

6. Go to your Android App and synchronize your configuration.

7. In the home screen, verify that the Analytics tab is displayed. If you cannot see the Analytics tab after sync, try closing the app and opening it again. It might happen that the home screen doesn't refresh immediately.



STOP - End Exercise 6