

*FHI 360 Standard HIV  
Tracker Metadata Package  
Complete Manual*

*MAY 2021*

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# Welcome to FHI 360 HIV tracker

*The new home of data entry and analysis for the FHI 360 HIV tracker programs. Using this system you can enter data for any of the programs that compose the FHI 360 HIV metadata package, such as the HIV Hot Spot Tracker, Index Testing Tool, Peer Workers Registry and HIV Program Tracker , as well as analyse data you have entered using tables, charts and maps.*

*FHI 360 HIV tracker is run using DHIS2, an open source health information software package. DHIS2 is the world's largest web-based health management information system platform, in use by [72 low and middle-income countries](#). You can find more general information on [here](#).*

## Manual introduction

*This manual contains everything you should need to be able to use the FHI 360 HIV tracker programs; from logging in to the first time, entering data in all of the tools, viewing charts and tables, all the way to designing and sharing your own charts and maps.*

*The system uses a lot of technical terms and acronyms, so the first section goes over some of the most common ones you may find throughout the guide.*

*The second section is the main part of the guide and gives detailed information on each of the tools, as well as certain types of data entry and analysis of data, these guides are a mix of text and videos. There is also a system configuration section but this is only relevant to Secretariat users.*

*Then there is a list of the core graphs in the system followed by an FAQ.*

# Contents

[Welcome to FHI 360 HIV tracker](#)

[Acronyms and technical terms](#)

## [1. Configuration](#)

### [1.1 Users](#)

[1.1.1 User roles](#)

[1.1.2 Create and update users](#)

### [1.2 Option sets](#)

[1.2.1 Update an option set](#)

### [1.3 Data Elements](#)

[1.3.1 Creating a new data element](#)

[1.3.2 Adding data element to HIV program tracker](#)

[1.3.3 Update existing data elements](#)

### [1.5 Tracked entity attributes](#)

[1.5.1 Create and update tracked entity attributes](#)

[1.5.2 Add the TEA to the HIV program tracker](#)

### [1.6 Program rules](#)

[1.6.1 Create program rule variables](#)

[1.6.2 Create program rules](#)

[1.6.3 Program rule details](#)

### [1.7 Program indicators](#)

[1.7.1 Create a Program Indicator](#)

## [2. Data](#)

### [2.1 HIV Program Tracker](#)

#### [2.1.1 HIV Program Tracker Enrollment](#)

[2.1.1.a Create a new HIV Program record](#)

[2.1.1.b Find an existing HIV Program Record](#)

#### [2.1.3 Edit an existing HIV Program Tracker record](#)

#### [2.1.4 Create a new event for an existing HIV Program record](#)

#### [2.1.5 Update an existing event for a given HIV Program record](#)

### [2.2 Add Relationships](#)

[2.2.1 Add relationship for a HIV Program Tracker event \(Peer worker to client\)](#)

[2.2.3 Add relationship to Index testing \(Index client to contacts\)](#)

## [2.3 HIV Hot Spot Tracker](#)

[2.3.1 Create a new Hot Spot](#)

[2.3.2 Search for a Hot Spot](#)

[2.3.3 Update a Hot Spot event](#)

## [2.4 Peer Workers Registry](#)

[2.4.1 Create or update a Peer Worker](#)

[2.4.2 Search for a Peer worker](#)

[2.4.3 Create or update a PW event](#)

## [2.5 Index Testing Tool](#)

[2.5.1 Create an IT contact](#)

[2.5.2 Search for an contact of an index client](#)

[2.5.3 Create / Update an ITT event](#)

## [2.6 Remove data - Delete an event](#)

## [3. Analysis](#)

[A note on sharing when creating new graphs/tables](#)

### [3.1 Dashboards](#)

[3.1.1 Create new dashboards](#)

[3.1.2 Sharing settings on the dashboard](#)

[3.1.3 Filter a dashboard](#)

[3.1.4 Creating Interpretations](#)

### [3.2 Event reports](#)

[3.2.1 Introduction to event reports](#)

[Types of analysis](#)

[3.2.2 Pivot table style event reports - Viewing data in event report](#)

[3.2.3 Save a report](#)

[3.2.4 Share a report](#)

### [3.6 Data visualizer](#)

[3.6.1 Introduction to data visualizer](#)

### [3.7 Maps](#)

[3.7.1 Introduction to maps](#)

# Acronyms and technical terms

<i>Acronym / Abbreviation</i>	<i>Meaning</i>	<i>Description</i>
<i>DHIS2 specific</i>		
<i>DHIS2</i>	<i>District Health Information System 2</i>	<i>The software which is used to implement the entire FHI 360 system found on <a href="https://FHI360labs.baosystems.com">https://FHI 360labs.baosystems.com</a></i>
<i>DE</i>	<i>Data element</i>	<i>Represents a field where you can enter data in the Annual survey or other data entry tools (except the contact management tool) and then view in analytics.</i>
<i>TEA</i>	<i>Tracked entity attribute</i>	<i>Represents a field where you can enter data in the contact management tool and then view in analytics</i>
<i>OU / Org unit</i>	<i>Organisation unit</i>	<i>Represents a geographical or functional part of the FHI in DHIS2, for example a country, continent or FHI Secretariat as a whole.</i>
<i>Analytics</i>	<i>Analytics</i>	<i>This is used when talking about analysis done on data entered into DHIS2, for example tables, charts and maps.</i>
<i>PI</i>	<i>Program indicator</i>	<i>This is a premade calculation defined in DHIS2 based on the raw values entered by the users in data elements. For</i>

		<i>example a count of the number of annual surveys which currently have funding.</i>
<i>Indicator</i>	<i>Indicator</i>	<i>This is a premade calculation defined in DHIS2 which can use data element and program indicator values. (all % values in analytics are indicators)</i>
<i>PR</i>	<i>Program rule</i>	<i>A type of metadata in DHIS2 used to create dynamic behaviour in the data entry forms (for example hiding fields unless a certain condition is met)</i>
<i>PRV</i>	<i>Program rule variable</i>	<i>The metadata referenced in a program rule to get values from all the different data entry tool, including contact management</i>
<i>TEI</i>	<i>Tracked entity instance</i>	<i>How a Peer worker / individual or other contact is represented in DHIS2</i>
<i>TEI Dashboard</i>	<i>Tracked entity instance Dashboard</i>	<i>The central page for a contact, from here you can view existing forms, create new ones and update your contact information</i>
<i>Widget</i>	<i>Widget</i>	<i>A part of the TEI dashboard, for example the 'Tabular data entry' widget, which is used to enter and view form data</i>
<i>Tracker capture</i>	<i>Tracker capture</i>	<i>The application in DHIS2 where you can enter data</i>
<i>Visualization</i>	<i>Visualization</i>	<i>A pivot table, chart, map or other method used to display data in DHIS2</i>

<i>Dashboard</i>	<i>Dashboard</i>	<i>A place where different visualisations which are linked by a common theme can be placed and viewed together. For example the annual survey dashboard. A dashboard is the first thing you see each time you login.</i>
<i>Metadata</i>	<i>Metadata</i>	<i>Basically everything in DHIS2 which is not data entered by users, or values calculated from these. Some examples of metadata are: DEs, TEA, PIs, charts, forms and dashboards</i>
<i>Form name</i>	<i>Form name</i>	<i>The name of the DE or TEA as it appears in the data entry tools (rather than the name which is what is used in the maintenance app)</i>
<i>UID</i>	<i>Unique Identifier</i>	<i>This is a unique combination of letters and number which is used to uniquely define all metadata in DHIS2</i>
<i>FHI 360 Specific</i>		
<i>KP</i>	<i>Key Population</i>	
<i>HTS</i>	<i>HIV Testing Services</i>	
<i>VL</i>	<i>Viral Load</i>	
<i>MAT</i>	<i>Medication Assisted Therapy</i>	

<i>STI</i>	<i>Sexually Transmitted Infections</i>	
<i>TB</i>	<i>Tuberculosis</i>	
<i>PrEP</i>	<i>Pre-Exposure Prophylaxis</i>	
<i>TPT</i>	<i>Tuberculosis Preventive Therapy</i>	



# 1. Configuration

*This section is only relevant to backend users of the system who are managing system changes, including configuration updates. It relates to making updates to the system, from changing the name of a field, to providing new items for complex analysis in the data visualizer and other apps.*

*Sharing refers to which users have access to what in the system, for example HIV Program Tracker users should not have access to the Peer worker Program, and only admin users should be able to make changes to the metadata.*

## 1.1 Users

*Managing users and their permissions correctly is a key requirement to ensure data security in the system. For example if a user who is not supposed to gets given permission to view confidential information this would be a significant issue.*

*Thankfully the system is set up to make sharing the right things with the right users as simple as possible. More details on the different types of users and how they should be configured are in the sections below.*

### 1.1.1 User roles

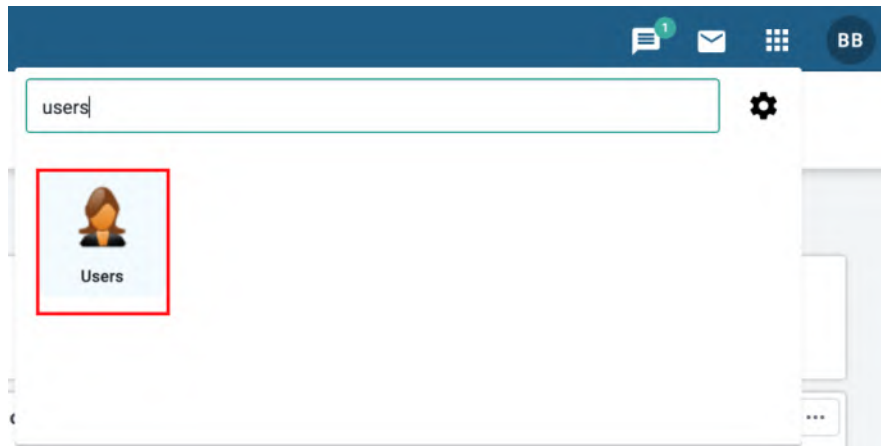
*Roles and authorities in DHIS2 can be considered functionally, i.e. in terms of what a user can do from a simple functional level in the system.*

*The table below describes the functional User Roles that can be created. These roles are separate from each other and can be used as standalone roles.*

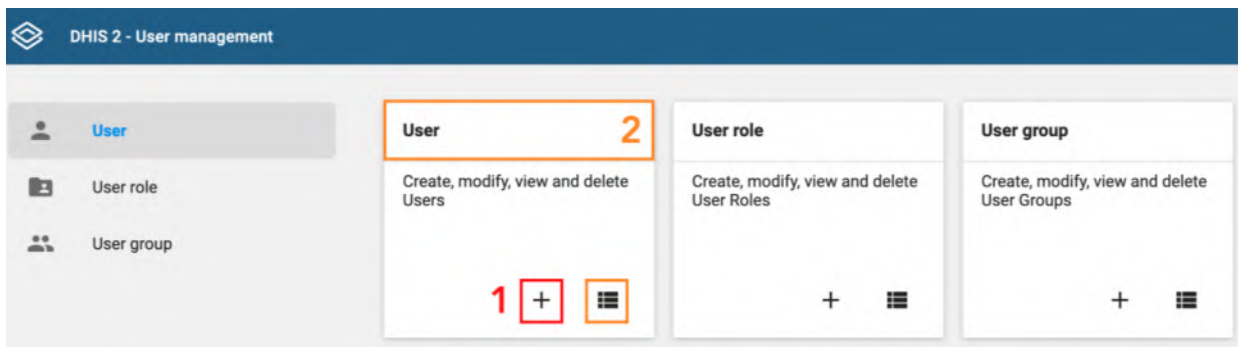
<i>User Role</i>	<i>Description</i>
<b>1. Dashboards:</b> Read and create private Dashboards	<i>Includes dashboard module only and ability to create private dashboards.</i>
<b>2. Analytics:</b> Read and create private analytic favourites	<i>Includes dashboard module, Pivot Table, Data Visualizer, Maps, Reports. Users with this access can create private charts, tables and map favourites, and share them with others.</i>
<b>3. Data Entry:</b> To enter and import data, but no specific data set access	<i>Include Add/Update and Delete of data values, as well as access to the Aggregate Data Entry app and Import/Export app for importing of data.</i>
<b>4. System Administrator:</b> Read and Create public objects	<i>Creation of public objects for projects including organization units, categories, data elements, organization unit and data element groups and group sets, validation rules.</i>
<b>5. Superuser</b>	<i>All non-server side roles within DHIS2. (I.e. universal permissions) - restricted to 2-3 users maximum.</i>

### 1.1.2 Create and update users

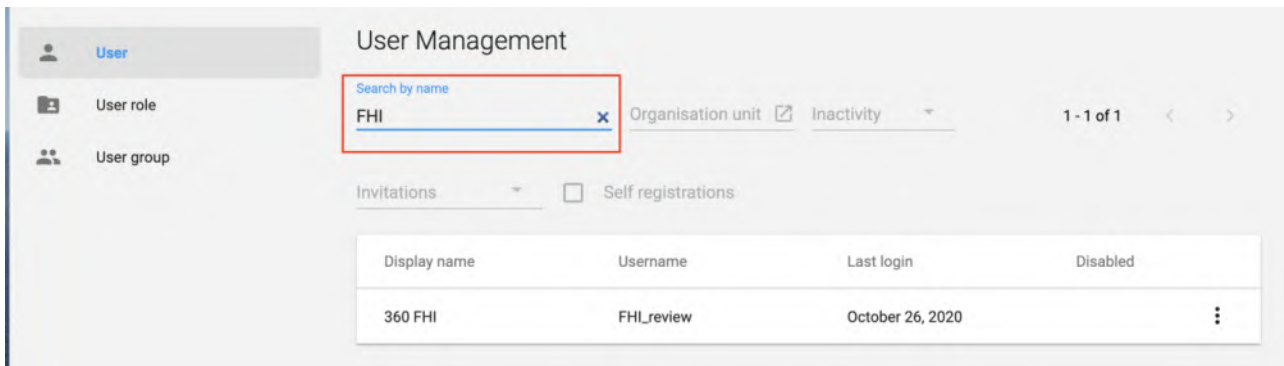
To create or update a user, first open the app menu and search for the users app.



To create a new user click the + icon, and to see a list of existing users click the list icon, or the text heading which says User.



If searching for an existing user, you can enter part of the name or username in the 'Search by name' field.



Once you have found the user you are looking for, click the row to open and edit the fields.

## User fields

**(New user only field) Create account or email invitation:** This determines if you can set the password of the user straight away in this form, or if you would like to email the user to set their own password.

**Username:** This is the name they will enter to login to the system

**Email:** This is how the user will be contacted if they need to reset their password

**First and last name:** This is the name that will be displayed within the system in most cases to identify the user, for example sharing or interpretations.

**Phone number, whatsapp ... Twitter:** Mostly unused by the system.

**Interface language:** This determines what language the user will see text in the system which does not relate to the program configuration. For example app names like the tracker capture app and field titles in the maintenance app. Some parts of DHIS2 remain untranslated still however.

### User roles

The available roles are custom made for the FHI 360 system and can be updated if needed as shown below:

Available roles

Selected roles \*

Filter

4. Project Configuration  
Superuser

2. Analytics  
3. Data Entry  
1. Dashboards User

### Data capture and maintenance organisation units:

Data capture and maintenance organisation units \*

Search

▸  Sun Civil Society Network

Selecting an organisation unit provides access to all units in the sub-hierarchy

Data output and analytic organisation units

Search

▸  Sun Civil Society Network

This determines what regions and countries the user can enter data for. There are specific choices for each type of user.

**Data output and analytic organisation units:** This determines what regions and countries the user can see data for. All users should always have the Public: Global selected here to make sure they can see all public data. Again reference the users mentioned above for examples of how these should be chosen depending on the type of user being created.

There are some other essential options under the more options button, so click this to view them.

### ▼ SHOW MORE OPTIONS

**Search organisation units:** This defines which organisation units the user can search for to find contacts within the tracker capture app. For a HIV Program Tracker country user to be able to collaborate on forms with external partners for their country, they need to be able to find the partners in the Non-FHI 360 countries organisation unit so they can open the form to work on it. For this reason, country and regional users will need access to the following:

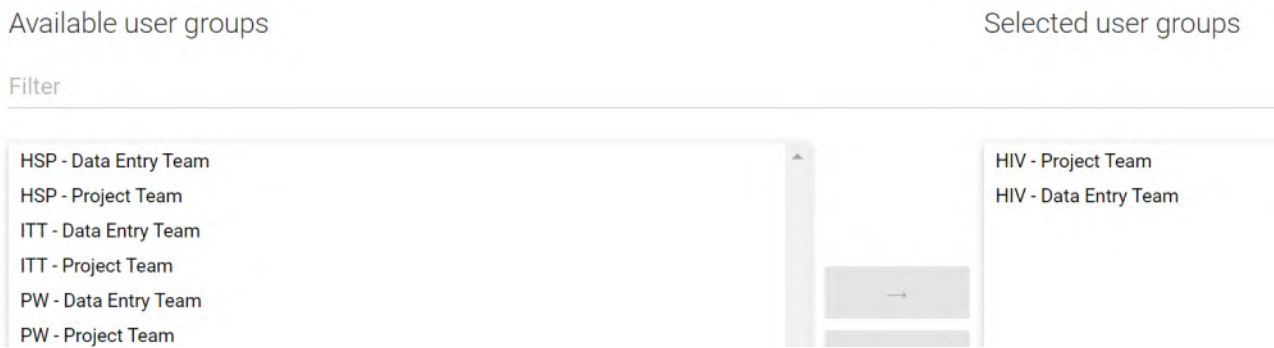


- The public and private versions of their country or region

- *The non-public, non-FHI 360 countries organisation unit*

*See the example on the right for the HIV Program Tracker country user for Dominican Republic.*

**User groups:** *These control what tools, visualisations and dashboards the user will have access to. As well as which countries and regions or programs the user can view data in for the data visualizer app.*

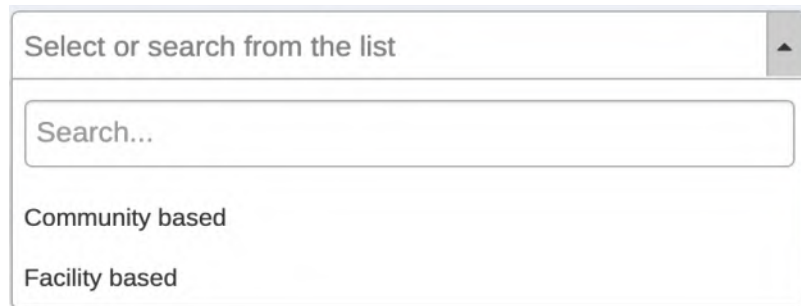


*The user groups mirror the user roles in terms of which should be selected for a given user, again see the existing users for examples. A key thing to note is the extra user group which relates to the users organisation unit access. As you can see here this HIV Program Tracker user is assigned to both the HIV Project Team user group and the HIV Data Entry team user group.*

*Any fields not mentioned in this guide can be left as the default values.*

## 1.2 Option sets

*Option sets allow drop down menus in the data entry forms in DHIS2, for example see the dropdown menu in the image below which allows the user to select their primary language from one of three options:*

A screenshot of a web-based dropdown menu. The top part of the menu is a light gray box with the text "Select or search from the list" and a small upward-pointing arrow on the right. Below this is a white search box with the placeholder text "Search...". Underneath the search box, two options are listed: "Community based" and "Facility based".

*The values for these options are defined in optionSets, which are assigned to the field. In the above example the option set 'Testing location' is assigned to the field 'Testing location'.*

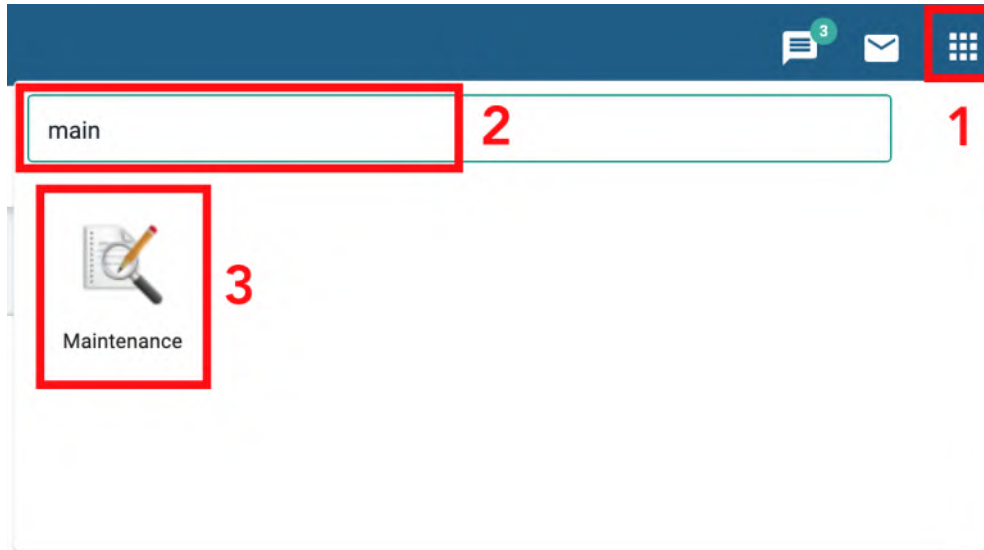
*If you see a drop down you would like to change in the system, you must first find the field which has that drop down assigned to it.*

*There are two types of fields in DHIS2 which may have option sets on. Fields in the contact management form (enrollment) are called tracked entity attributes and fields in all the other tools (program stages / events) are called data elements. This means we might have to look in two different places to find our option set.*

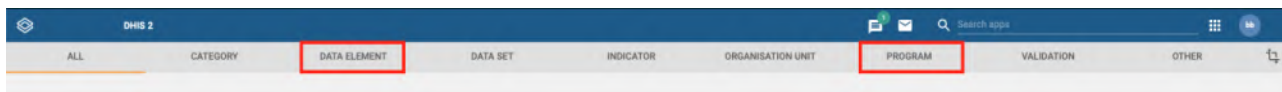


## 1.2.1 Update an option set

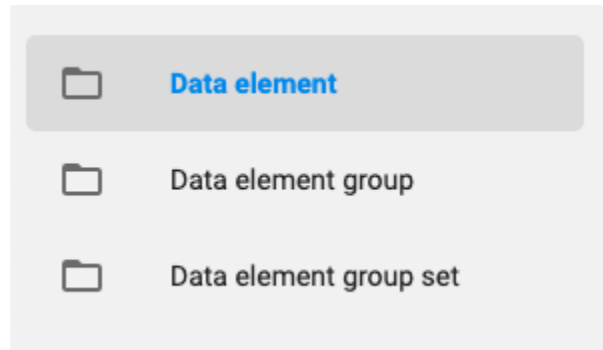
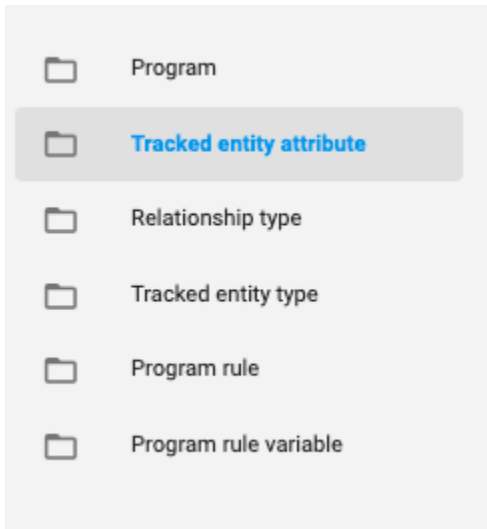
Navigate to the Maintenance app using the Search apps feature.



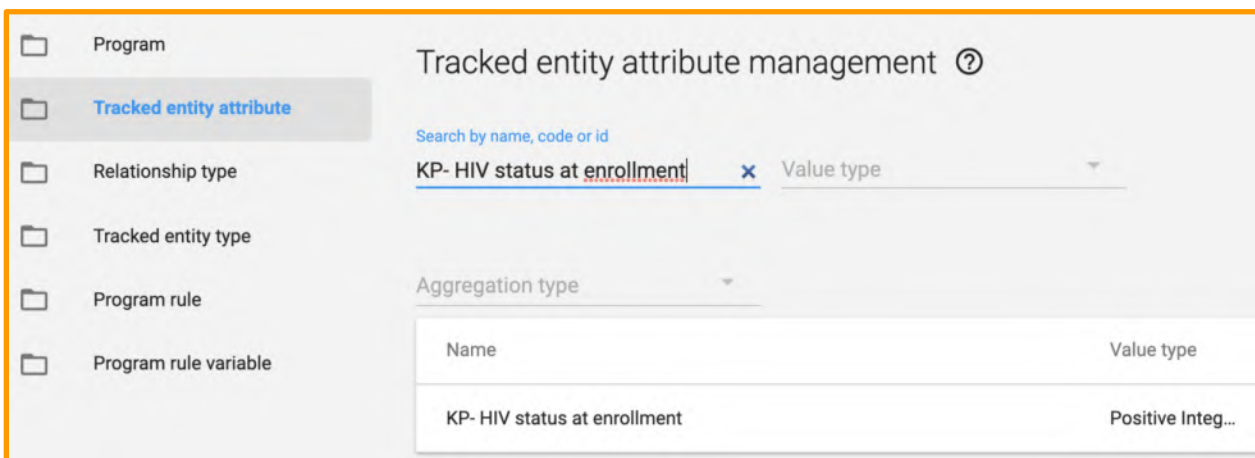
Select Program from the top header for drop down menus in contact management, or Data element for drop down menus in the other tools



Click the Tracked entity attribute button on the left side, or the Data element button.



*In either case you will now see a table showing a list of fields, you can use the 'Search by...' field to search for the field you are interested in by name, in this example we search for the tracked entity attribute **HIV - HIV status at enrollment**. Once located, click the row to view the field's information.*



*Next scroll down to the Option set line.*

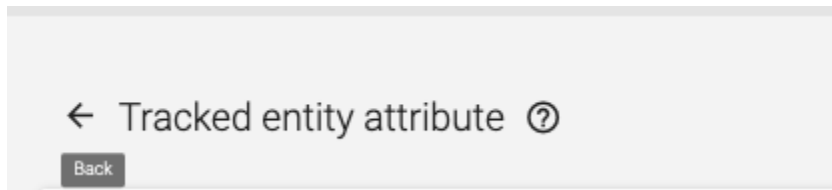
Name (*)	<b>KP- HIV status at enrollment</b>
Short name (*)	<b>KP- HIV status at enrollment</b>
Form name	<b>HIV status at enrollment</b>
Code	<b>kp_status_enrollment</b>
Description	
Field mask	
Option set	<b>HIV status</b>
Value type (*)	<b>Positive Integer</b>

*Copy the name of the Option set, "HIV status," so that you can paste it in the next few steps.*

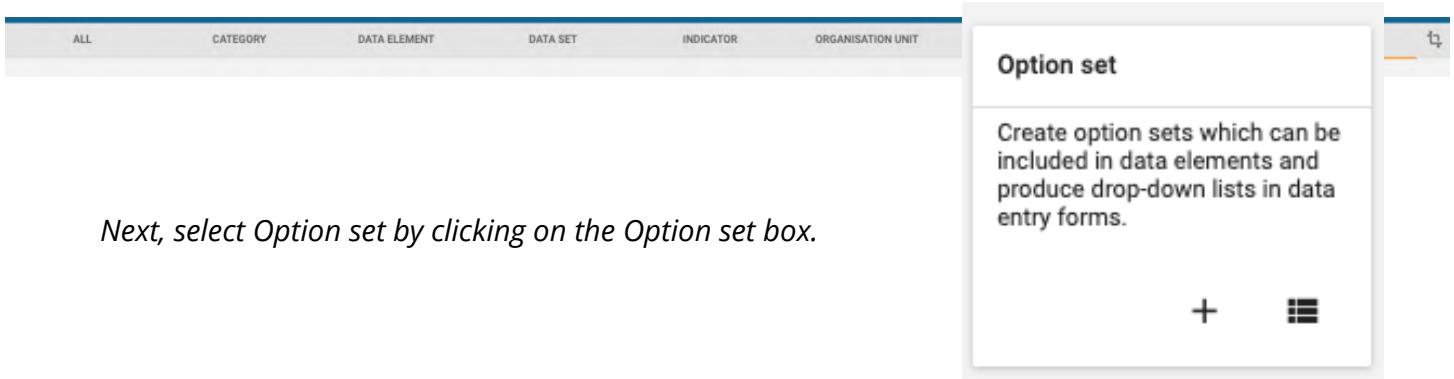
Option set

**HIV status**  

*Next, click on the back arrow at the top of the page.*



*Click on the header titled Other.*



*Next, select Option set by clicking on the Option set box.*

*In the Option set management page, paste the option set name you copied into the search bar.*

Option set management ⓘ

Search by name, code or id

HIV status × 1 - 2 of 2 < >

Name	Value type	Public access	Last updated	
HIV status	Positive Integ...	No public access	October 9, 2020	⋮
Knowledge of HIV status	Positive Integ...	No public access	October 9, 2020	⋮

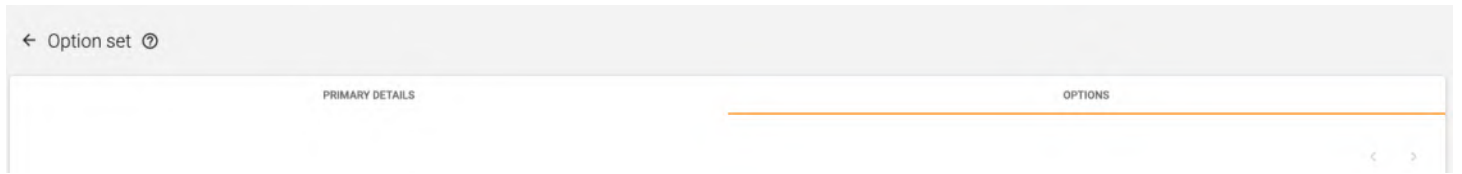
1 - 2 of 2 < >

*Then, select "HIV status" from the list of option sets.*

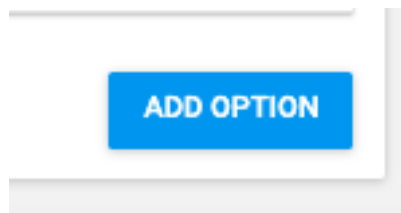
HIV status × 1 - 2 of 2 < >

Name	Value type	Public access	Last updated	
HIV status	Positive Integ...	No public access	October 9, 2020	⋮

*Select Options on the right.*



*Scroll down the page and select **Add Option**.*



*Enter the Name of the option and the Code. See example below.*

## Add option

Name (\*)

Declined/Not willing to disclose

Code (\*)

4

Color

SELECT COLOR

Icon

ADD ICON

SAVE

CANCEL

*Now select **Sort Manually**.*

SORT BY NAME

SORT BY CODE/VALUE

SORT MANUALLY

### Sorting

Positive (1)

Negative (2)

Unknown (3)

Declined/Not willing to disclose (4)

SAVE

CLOSE

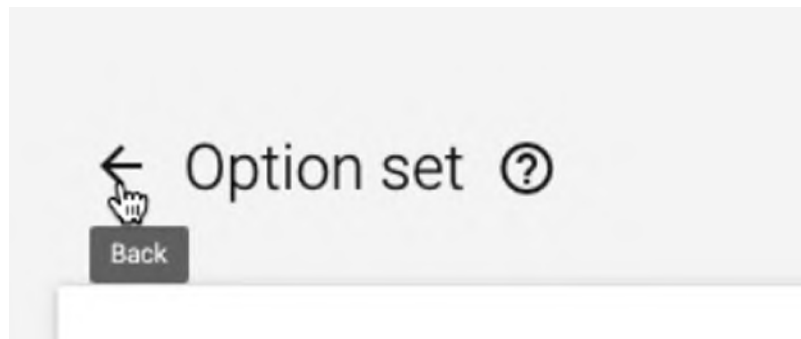
*You can adjust where the option set shows up in the list of options by selecting it and moving it to your preferred position in the list.*

*Then click **Save**.*





Afterwards, click on the back arrow.



The "HIV status" option set has now been edited with the option you added.

## 1.3 Data Elements

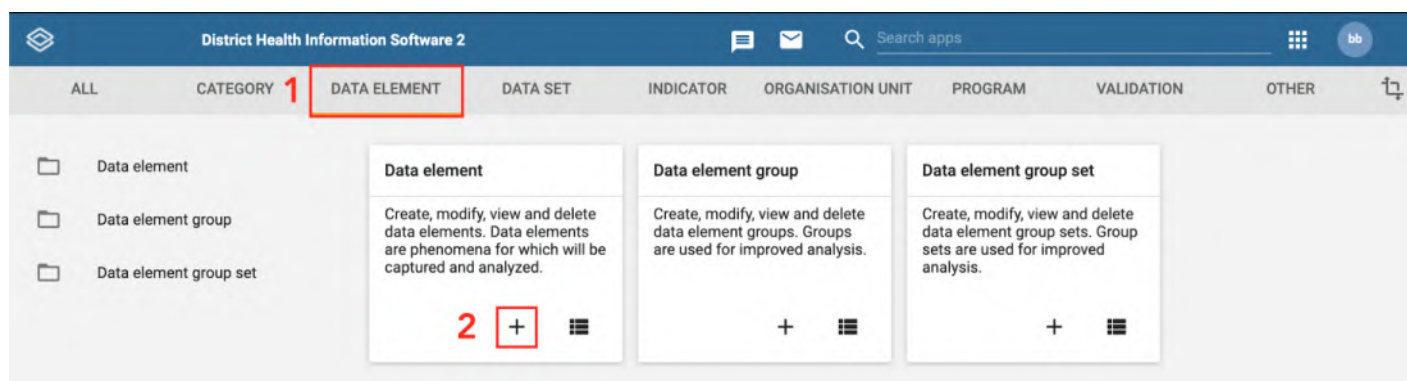
*Data elements define all the questions for the Annual survey, impact tracker, request tracker, technical assistance profile and private contact details tools (everything except the contact details (enrollment) form). They are probably the most important piece of configuration in the system. The FHI 360 program has around 349 data elements, any of which may need to be updated in the future and more will likely be added in the future, this part of the guide covers how to create or update data elements as well as how to add them to the program as this does not happen automatically.*

This guide will walk through the steps required to create a new data element and add it to the HIV tracker program so that it appears in the data entry forms. To add a field to the contact management form, see the 'Add a new mailing list option' guide for an example of updating the contact management tool.

### 1.3.1 Creating a new data element

To create a new data element, open the maintenance application.

Then click the data elements tab and click the **+** button to create a new data element.



Below are descriptions of the important fields to fill out when creating new data elements. Any other fields not mentioned can be safely ignored.

**Name:** This is how the data element will appear in the analytics and maintenance applications. A naming convention should always be used. 'Tool name abbreviation ' where Tool name abbreviation is replaced with the tool the data element is going to be used in. See below a table of the text used for each tool:

Tool name	Naming convention
-----------	-------------------

<i>HIV Program Tracker</i>	<i>HIV</i>
<i>HIV Hot Spot Tracker</i>	<i>HSP</i>
<i>Index Testing Tool</i>	<i>ITT</i>
<i>Peer Workers</i>	<i>PW</i>

The data element naming convention for the **HIV Program Tracker** and **Index testing Tool** is a bit different, because the tools have more than one program stage. 'Program abbreviation-Program Stage name abbreviation'.

See below the text used for each program stage.

#### *HIV Program Tracker*

<b><i>Program stage name</i></b>	<b><i>DE Naming convention</i></b>
<i>Outreach and Risk Assessment</i>	<i>HIV - RSK</i>
<i>HIV Testing Services</i>	<i>HIV - HTS</i>
<i>HIV Self-Testing</i>	<i>HIV - HST</i>
<i>Sexually Transmitted Infections</i>	<i>HIV - STI</i>
<i>Pre-Exposure Prophylaxis</i>	<i>HIV - PrEP</i>
<i>ART</i>	<i>HIV - ART</i>
<i>Medication-Assisted Therapy</i>	<i>HIV - MAT</i>

<i>Violence and Abuse Disclosure</i>	<i>HIV - GBV</i>
<i>Viral Load</i>	<i>HIV - VL</i>
<i>EPOA</i>	<i>HIV - EPOA</i>
<i>Cervical Cancer</i>	<i>HIV - CXCA</i>
<i>TB Screening</i>	<i>HIV - TB</i>

*Index Testing Tool*

<b><i>Program stage name</i></b>	<b><i>DE Naming convention</i></b>
<i>Contact Tracing and Outcome</i>	<i>ITT-CTO</i>

**Short name:** This is made with the naming convention 'Tool name abbreviation-Original name'. For example, if the name was HIV - GBV Counseling then the short name is HIV - GBV Counseling.

**Form name:** This is how the field will display in the data entry forms in the tracker capture app. So usually the naming convention is not included.

**Domain type:** Always select tracker here.

**Value type:** This determines how the field will display in the form and what type of values it can hold, below is an example of the different value types and what they look like in the form.

The image shows a configuration window titled "DE Types". It contains several rows, each representing a different data type and its corresponding input control:

- Yes Only:** A checkbox.
- Yes / no:** Radio buttons for "Yes" and "No".
- Integer:** A standard text input field.
- Percentage:** A standard text input field.
- Text:** A standard text input field.
- Long text:** A larger text input field with a scrollable area.
- Organisation unit:** A dropdown menu with the placeholder text "[Please select]".
- Image:** A section with a header "[Please select an image]", a dashed blue box containing the text "Drop image", and a file selection button with a download icon.

**Aggregation type:** This determines how values entered against this field are combined together (aggregated) in the analytics apps. For example if the field has a value of 2 in Region 1c and a value of 4 Region 2. What should the value be for all of the country? Typically for numerical values, sum is the right choice, however average may also be appropriate. Text values cannot be aggregated.

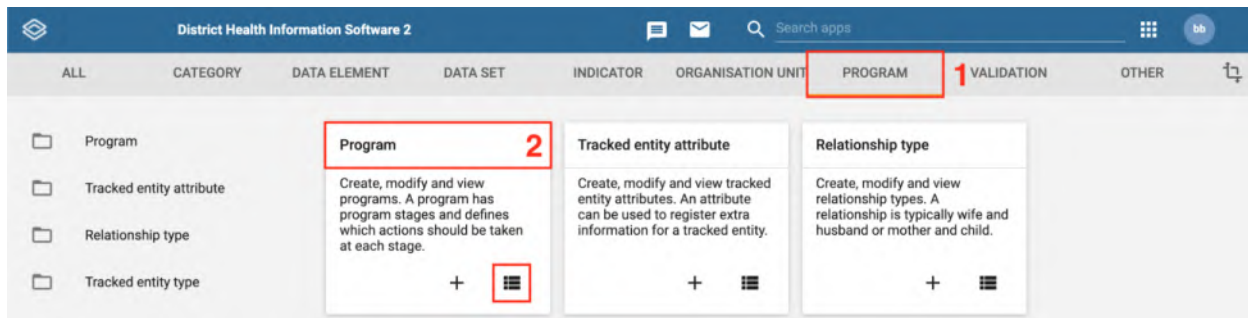
**Option set (optional):** This determines if the text field should have a dropdown list of options, rather than allowing the user to enter any value they wish. Option sets must first be made in the option sets part of the maintenance app before they can be added here.

Once these fields are complete, click the save button to create the data element.



### 1.3.2 Adding data element to HIV program tracker

Now the data element is created, we must add it to the program and put it in a specific place in the form for it to show up in the tracker capture app when entering data.



Program management ?

Search by name, code or id

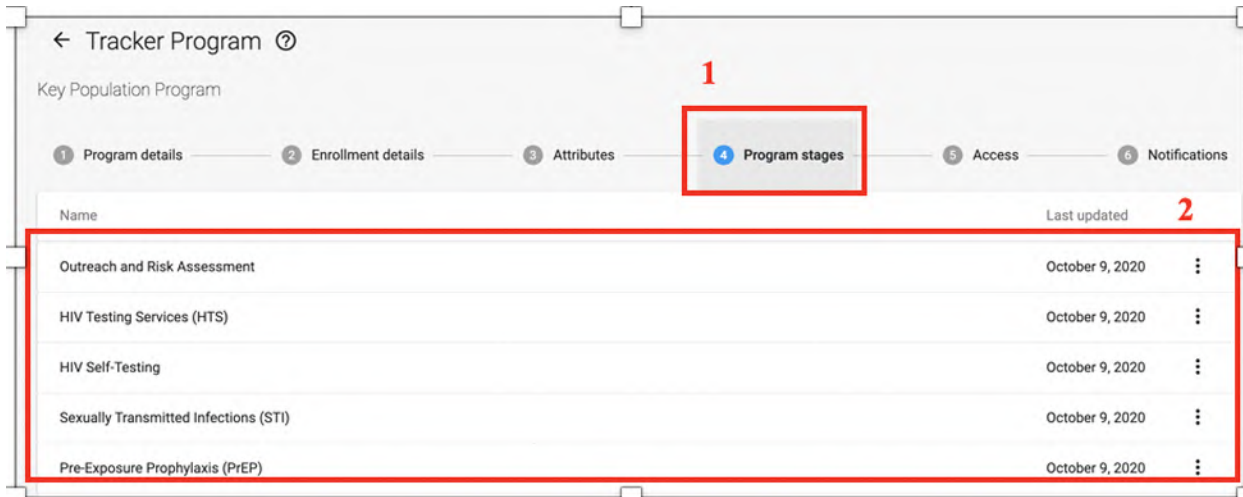
Program type ▼ 1 - 4 of 4 < >

Name	Program type	Id	Public access	Last updated	
HIV Hot Spot Tracker	Tracker Program	TljZtip00B2	No public access	October 16, 2020	
HIV Program Tracker	Tracker Program	xrwtYQH5ZLa	No public access	December 22, 20...	
Index Testing Tool	Tracker Program	yoyUtVn5Gop	No public access	November 5, 20...	
Peer Workers Registry	Tracker Program	VlhhDEete7p	No public access	November 24, 20...	

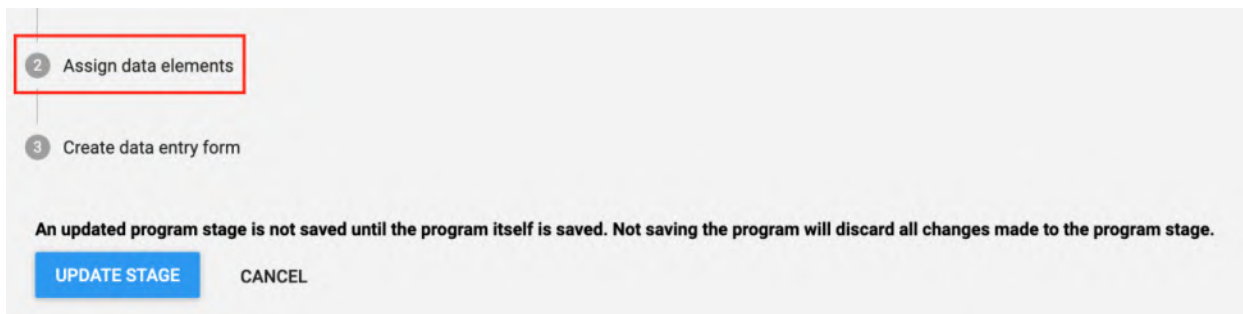
*First open the maintenance module, but this time select the program in the top menu and click the list icon of the program test to show the list of programs in the system.*

*Then click the row for the program you want to edit from the list of available programs.*

Next click the (4) Program stages tab and click the program stage you want to add the field to, in this example we will add to the request tracker tool.



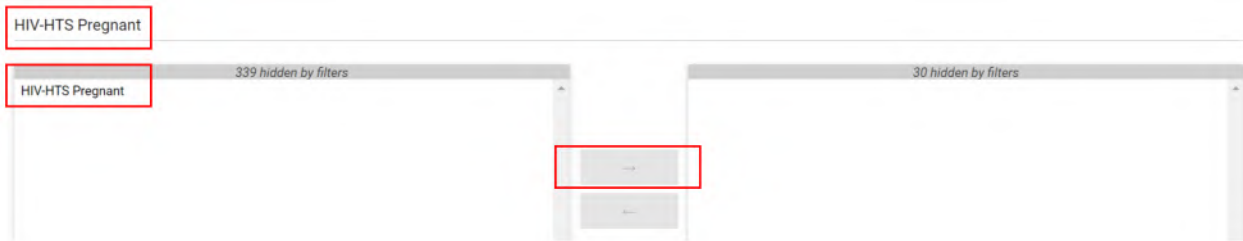
You will then see a page listing some important details about the program stage (tool). Scroll to the bottom until you see the 2 Assign data elements button on the left and click this.



Next you should see a two lists of data elements in boxes as shown below (the items in the list will may be different which is expected)

The list on the left is all the data elements in the system which are not assigned to the program stage / tool. The list on the right is all of data elements assigned to this program stage/ tool.

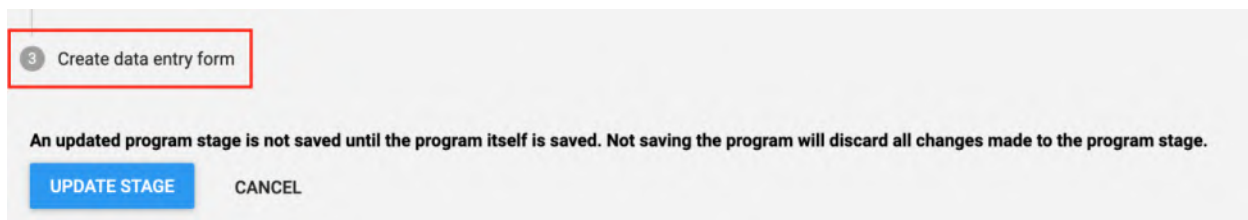
We want to select our new data element from the left and move it to the right to add it to the program.



*To do this, enter the name of the new data element in the 'Search available / selected items' field. Then add it to the right hand side by double clicking or clicking once and then clicking the right pointing orange arrow button.*

*The data element is now added to the program, but will not appear in the form until we specify where it should show up.*

*To do this scroll to the bottom of the page and click the create data entry form button to edit the data entry form for this program stage.*

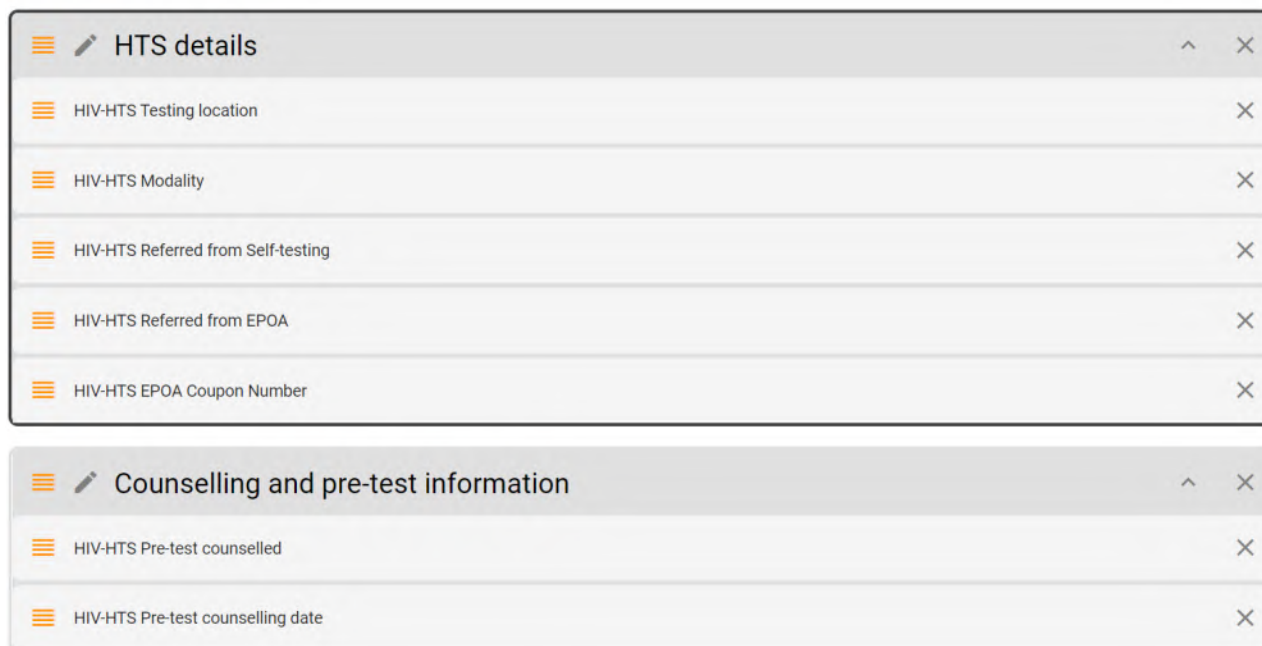


*Here you can now see the current data entry form for this tool.*



First decide which form section you would like to put the data element in, the form sections are defined by the large text and darker grey box, for example in the request tracker Guidance note is the first section and Section 1. Basic details is the second section.

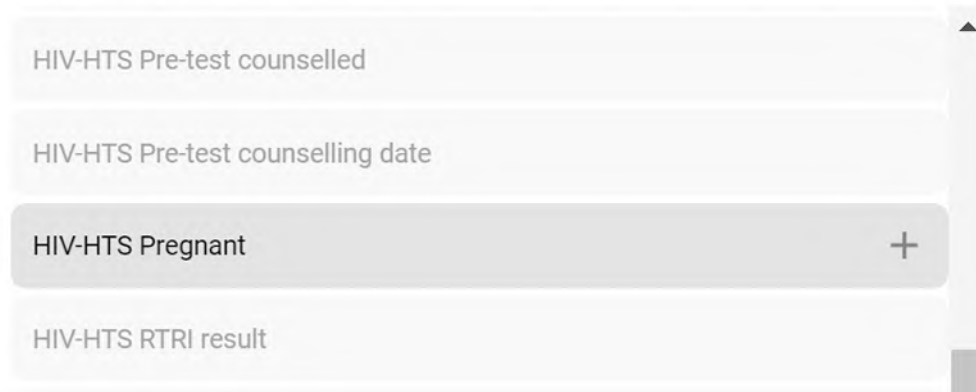
Once you have chosen a section, click to select it, the section should then be highlighted with a thick black outline as 'Section 1. Basic details' is in the image below.



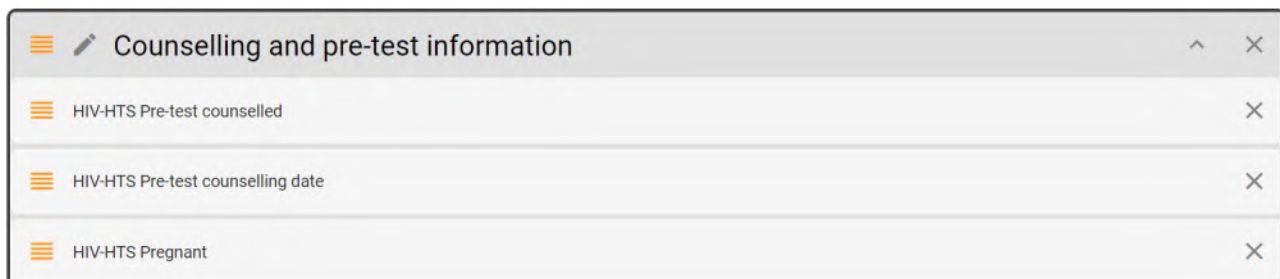
Then use the available data elements menu on the right hand side to find your new data element. Data elements are displayed in alphabetical order and ones already added to the form are light grey, whereas data elements not yet added to the form are darker grey. For example see the image below.

To add the data element to the end of the selected section, simply click it.

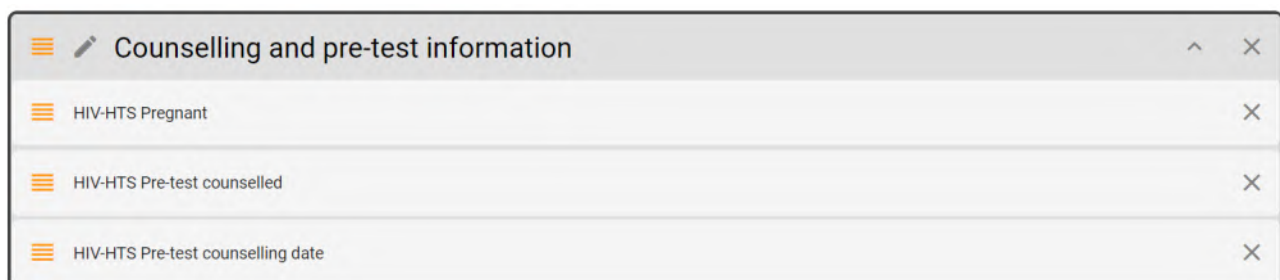
### Available data elements:



*You will now see that the data element appears at the bottom of the selected form section.*



*To move where the data element appears in the section, click and drag on the orange line icons next to the field you wish to move and release to drop it into its new position.*



UPDATE STAGE

Now the data element has been added to the program and the data entry form the process is complete.

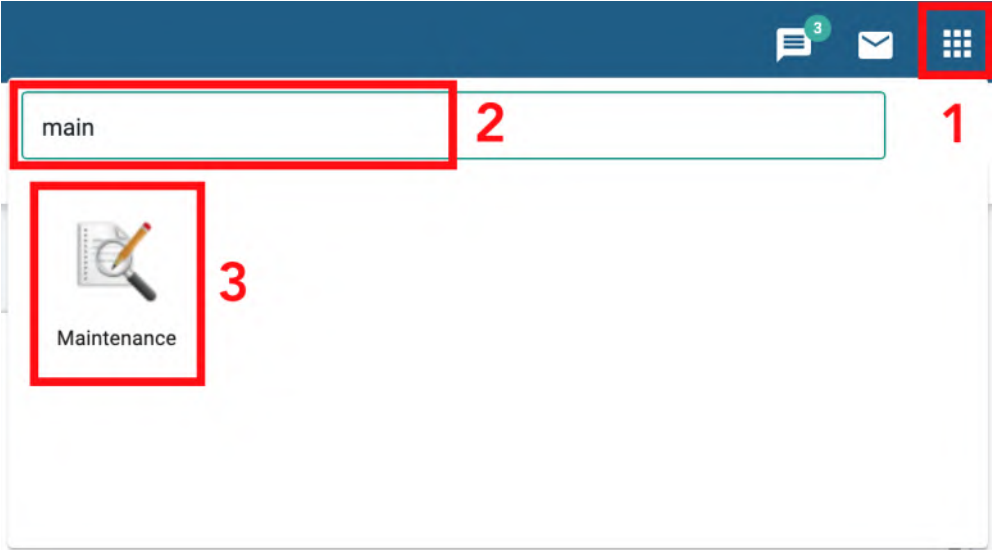
Scroll to the bottom of the page and click

Then click the button at the bottom of the next page to **Save** the changes.

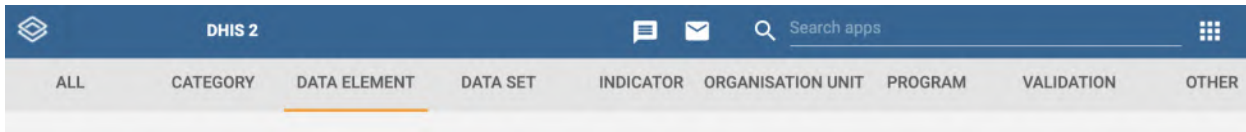
SAVE

### 1.3.3 Update existing data elements

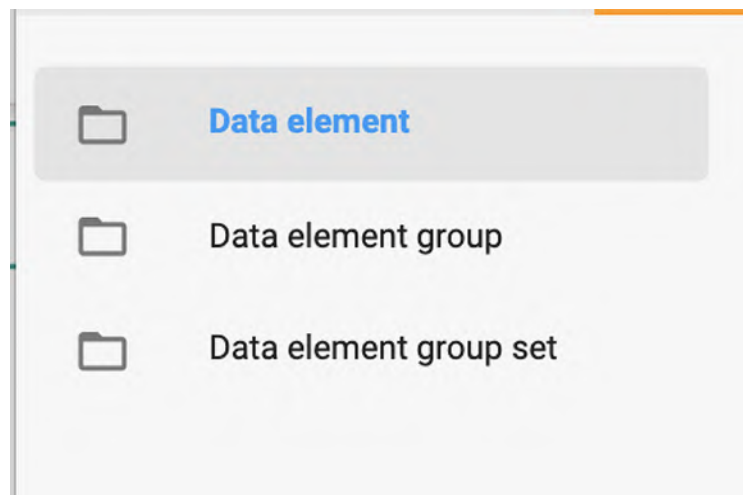
Navigate to the Maintenance app using the Search apps feature.




Select the **Data Element** option at the top of the page.



Then select the **Data Element** folder on the left.







Next, page through the list of data element form names using the paging arrows, or use the Search options available to find the relevant data element.

Data element management 

Search by name, code or id    Domain type    Value type    1 - 50 of 349

Category combination

Name	Code	Domain type	Value type	Category combo	Last updated	
HSP- Available at hot spot in last 12 months: Condoms/lube fo...	condoms_sale	Tracker	Yes/No	None	October 9, 2020	
HSP- Available at hot spot in last 12 months: Free condoms/lube	condoms_free	Tracker	Yes/No	None	October 9, 2020	
HSP- Available at hot spot in last 12 months: Safer sex educati...	sex_ed	Tracker	Yes/No	None	October 9, 2020	

*When you have located the data element you are looking for, click the row to edit the data element.*

Data element management ⓘ

Search by name, code or id

modality x Domain type Value type 1 - 1 of 1 < >

Category combination

Name	Code	Domain type	Value type	Category combo	Last updated	⚙
KP-HTS Modality	hts_modality	Tracker	Positive Integer	None	October 9, 2020	⋮

*From here you can update almost any property of the data element, for example to change the name as it appears in the data entry tools, you should update the form name field. For a brief description of the key fields, see the create a new data element part of the guide. Once the changes are complete scroll to the bottom of the page and click save.*

**SAVE**

**CANCEL**

*To see your changes in the data entry tools, you may have to clear your cache first with the cache cleaner app.*

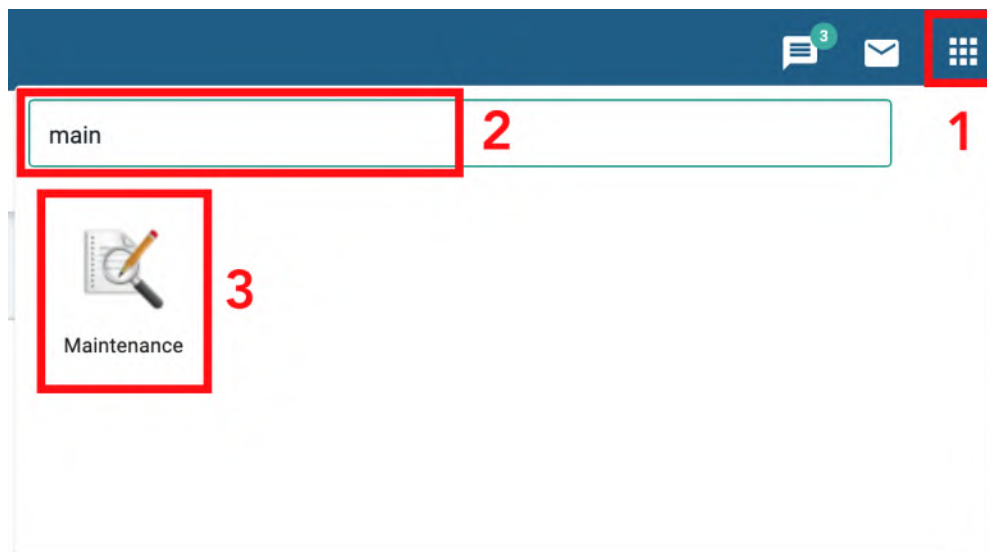
## 1.5 Tracked entity attributes

TEAs perform the same role as data elements (fields that are displayed for data entry), however they are linked to the contact directly, rather than being linked to a data entry tool such as the annual survey. These make up the contact information form which is used when creating or updating contacts in the system.

### 1.5.1 Create and update tracked entity attributes

This guide covers how to create a new tracked entity attribute and add it to the contact management form.

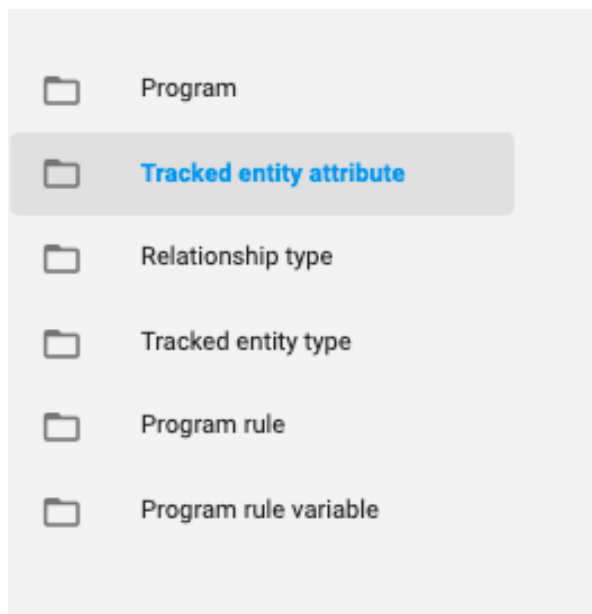
First navigate to the maintenance app.



Select **Program** from the top bar.

Next, select the Tracked entity attribute on the left.

*To create a new tracked select the blue + button.*



*entity attribute you can*



*Or you can search the list of existing tracked entity attributes using the search by name, code or id field. Once found click the row to begin editing.*

*Then complete or update the details in the form as required.*

*Tracked entity attributes have a number of properties, as described below.*

**Name:** *This is how the TEA will appear in the analytics and maintenance applications. A naming convention should always be used. 'Tool name abbreviation ', so for example the name for the first name field in the HIV Program Tracker is 'HIV - Gender'.*

**Short name:** *This is made with the naming convention 'HIV - Gender'. For example 'HIV - Gender'*



**Form name:** This is how the field will display in the contact management form in the tracker capture app. So the naming convention is not included. For example 'First name'

**Value type:** This determines how the field will display in the form and what type of values it can hold, below is an example of the different value types and what they look like in the form.

The screenshot displays a list of field types and their corresponding visual representations in a form:

- Yes Only:** A single checkbox.
- Yes / no:** Two radio buttons labeled 'Yes' and 'No'.
- Integer:** A standard text input field.
- Percentage:** A standard text input field.
- Text:** A standard text input field.
- Long text:** A larger text input field with a small icon in the bottom right corner.
- Organisation unit:** A dropdown menu with the placeholder text '[Please select]' and a small icon in the bottom right corner.
- Image:** A complex field with a header '[Please select an image]', a large dashed blue box containing the text 'Drop image', and a bottom bar with a file upload icon and a refresh icon.

**Aggregation type:** This determines how values entered against this field are combined together (aggregated) in the analytics apps. For example if the field has a value of 2 in Dominican Republic and a value of 4 Nepal. What should the value be for all of Asia? Typically for numerical values, sum is the right choice, however average may also be appropriate. Text values cannot be aggregated.

**Option set (optional):** This determines if the text field should have a dropdown list of options, rather than allowing the user to enter any value they wish. Option sets must first be made in the option sets part of the maintenance app before they can be added here. See the option set section on how to do this.

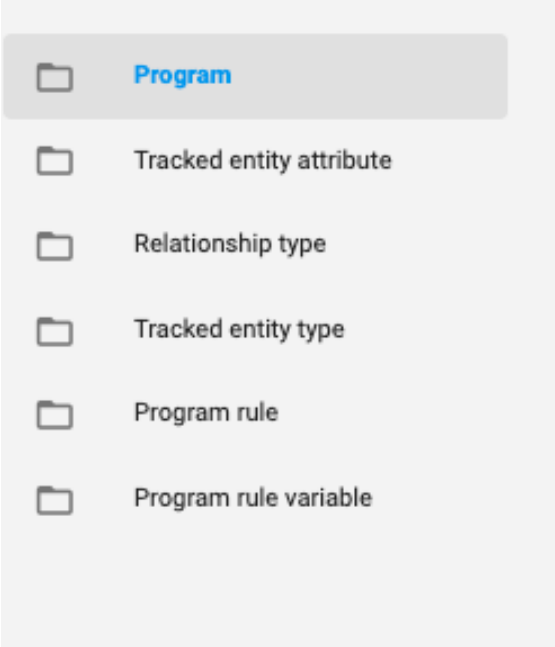
Any other fields in the TEA not mentioned above can be left as the default values.

Once these fields are complete, click the save button to create the tracked entity attribute.

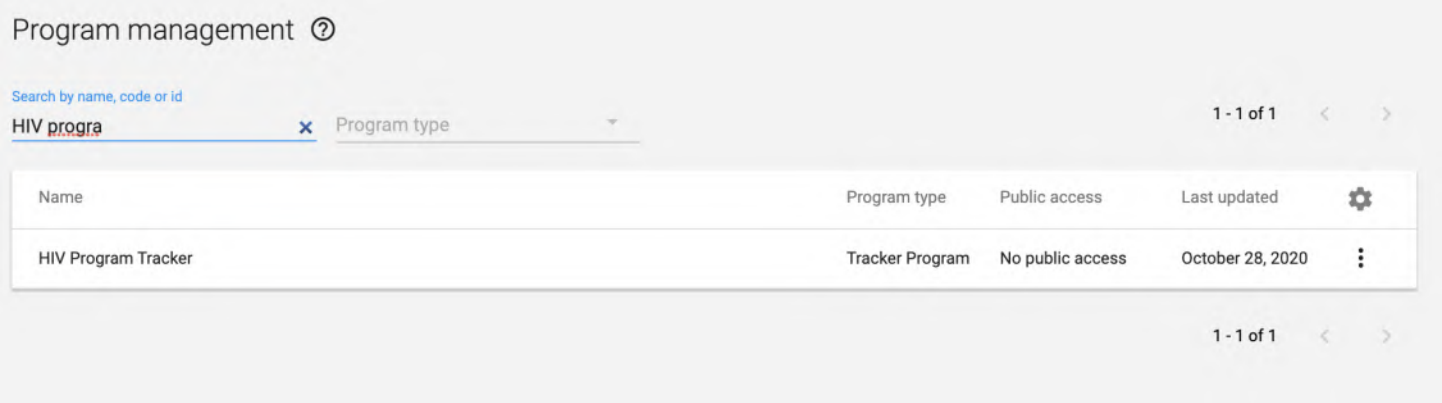


*1.5.2 Add the TEA to the HIV program tracker*

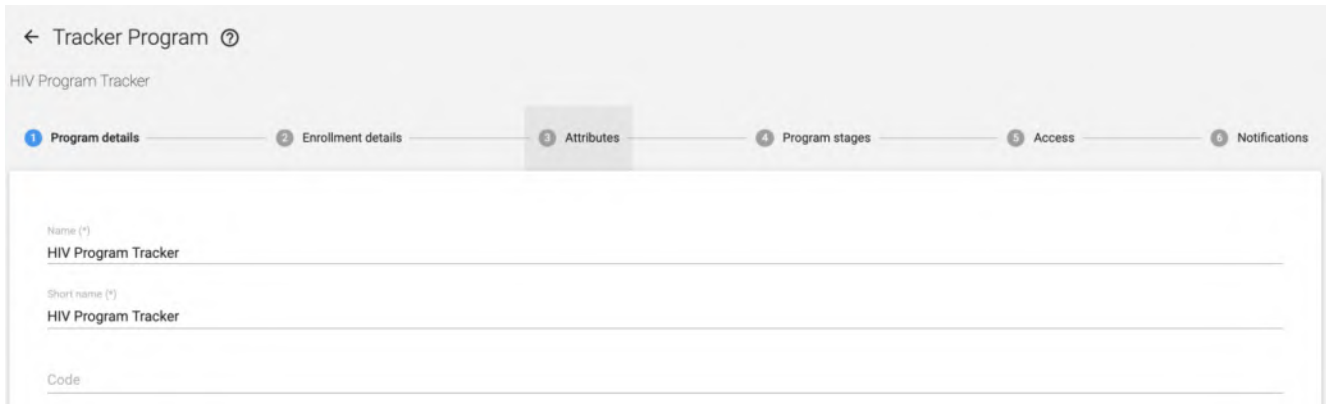
Now click on the Program folder on the left.



Select the HIV Program Tracker.



Next, select section 3, **Attributes**, then scroll down the page to find a list of the program's tracked entity attributes.



The screenshot shows a mobile application interface for a 'Tracker Program'. At the top, there is a back arrow and the text 'Tracker Program' with a help icon. Below this, the title 'HIV Program Tracker' is displayed. A horizontal navigation bar contains six items: '1 Program details', '2 Enrollment details', '3 Attributes' (which is highlighted with a grey background), '4 Program stages', '5 Access', and '6 Notifications'. Below the navigation bar, there are three input fields. The first is labeled 'Name (\*)' and contains the text 'HIV Program Tracker'. The second is labeled 'Short name (\*)' and also contains 'HIV Program Tracker'. The third is labeled 'Code' and is currently empty.

Use the search available field to search for the TEA created.

Then select the orange arrow button pointing to the right. This will assign the TEA to the HIV Program Tracker.

Program tracked entity attributes

Search available/selected program tracked entity attributes

HSP- Address/location  
HSP- Hot spot name  
HSP- Hot spot type  
HSP- Hot spot type: Other  
ITT- Age  
ITT - Phone number  
ITT-Preferred PNS approach  
ITT- Relationship to index client  
ITT- Sex  
KP- Gender  
PW- Peer worker type

1 selected

→

←

First name  
Last Name  
KP- Sex at birth  
KP- Date of birth  
KP- Country of birth  
KP- Address  
KP- Phone Number  
KP- Type of KP  
KP- First time in prison  
KP- Entry date  
KP- Exit date  
KP- HIV status at enrollment

↑

↓

ASSIGN ALL 11 →

← REMOVE ALL 21

1 selected

→

←

Now click Save.

SAVE

CANCEL

## 1.6 Program rules

*These create dynamic behaviour in the data entry forms, for example 'hide field B unless field A is yes', but they can also be used for much more complex behaviours as well. The full range of what you can do with program rules is outside the scope of this manual, so the most common use case is covered, hiding fields based on a condition.*

*Some examples of existing program rules being used to hide fields are:*

- *Hide viral load program stage sections unless HIV status at enrollment is positive*
- *Hide ART referral field in ART program stage section unless if not HIV positive and when HIV Client enrollee is on ART*

### 1.6.1 Create program rule variables

*Program rules will only run when certain conditions are met, these are defined in the filter, which we will cover in more detail later. These conditions may depend on other values in the form, so the rule needs a way to access the value from a specific field in the form.*

*Rather than referencing the DE or TEA directly, a middle layer called a program rule variable (PRV) is used. A program rule variable refers to a DE or TEA and allows extra logic, like fetching the value from the last form rather than the current one (for example you could get the 2018 annual survey value for a certain field and use it in the 2019 survey to do something).*

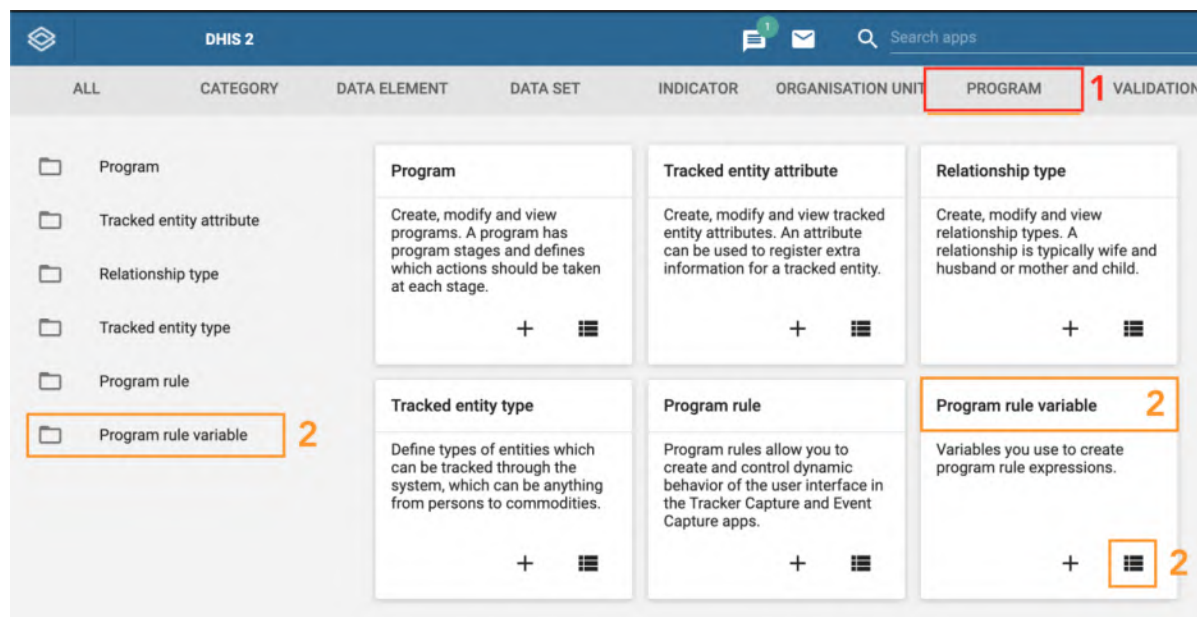
So before you create a program rule, for example to add some hide logic, you need to know what field(s) will make the rule run or not. Then create program rule variables for these.

For example suppose we have 4 fields:

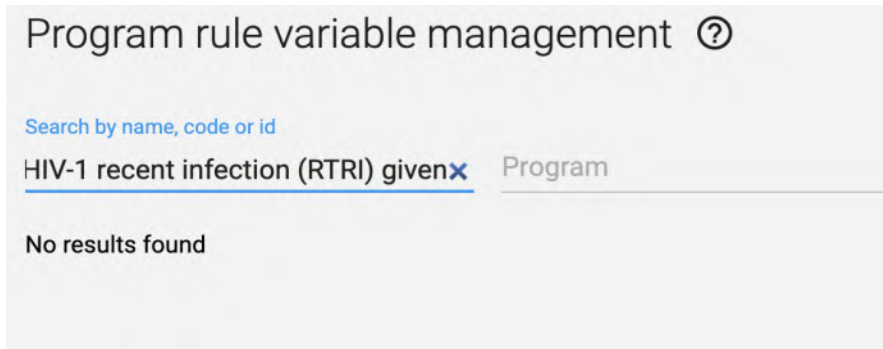
- Was a rapid test for HIV-1 recent infection (RTRI) given?
- Was a rapid test for HIV-1 recent infection (RTRI) result

The last question is only relevant if the RTRI was given, so we could add a program rule to hide the last field unless RTRI was given. In this example, the **control question** (the question which controls if the fields are hidden or not) is Was a rapid test for HIV-1 recent infection (RTRI) given? So in this case we would create a program rule variable for 'Was a rapid test for HIV-1 recent infection (RTRI) given?'

Before creating a program rule variable it's important to check if one doesn't exist already for the field you want. To view the existing program rule variables, open the maintenance application and click the programs tab, then select the program rule variable from either the left hand side or the

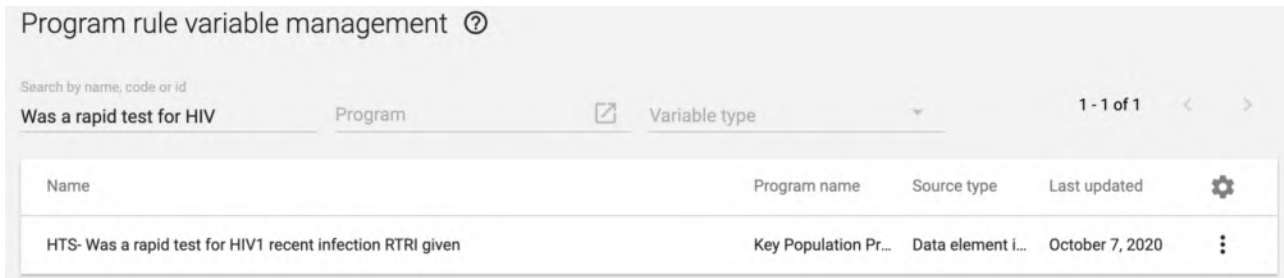


white labelled box.



*Next search for the name of the field in the 'Search by name code or id' field.*

*Initially it might look like this PRV does not exist, but there is a key thing to note. PRVs cannot have special characters in, other than '-' and '.'; and may have slightly different names, this means it's better to search by some keywords rather than the full field name.*



*Here we just search by 'Was a rapid test for HIV' and find the program rule variable exists already:*

*If you are not completely sure if the program rule variable is the one you need, you can open it and check the value of the data element field:*

Program (\*)  
Key Population Program

---

Name (\*)  
HTS- Was a rapid test for HIV1 recent infection RTRI given

---

Use code for option set

Source type (\*)  
Data element in current event

---

Data element  
KP-HTS Was a rapid test for HIV-1 recent infection (RTRI) given?

*If you are still not sure if this data element is the one you need, you may need to look up this data element in the maintenance app to ensure the form name is what you are expecting.*

*Here we can see the form name 'Was a rapid test for HIV-1 recent infection (RTRI) given?' Is already in the program rule variable found earlier, so there is no need to create a new one. PRVs exist for almost all fields in the system already.*

*If the program rule variable does not exist, click the blue + icon in the bottom right corner of the screen to create a new one.*

*Program rule variables are only made up of 5 fields:*

**Program:** Select the appropriate program in this case "HIV Program Tracker "

**Name:** This should be the same as the name of the DE or TEA (but with disallowed symbols removed), this makes it easier to find.

**User code for option set:** If the field has an option set assigned to it, this will return the option set code value from the field, rather than the value as the user selects it in the dropdown. If the field you are using have an option set, you should almost always tick this option.



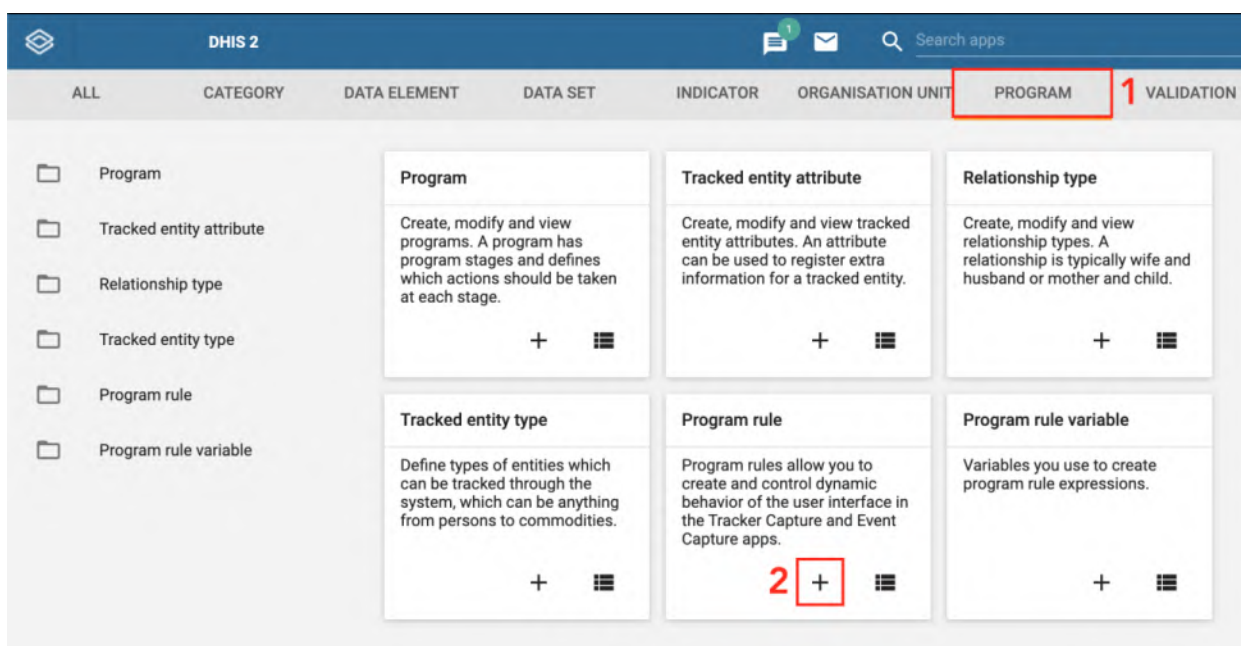
**Source type:** As mentioned earlier this allows an extra layer of functionality for the program rule variable as you can values from forms other than the current one. 99% of the time you will want the value from the current form though, so you select 'data element in current event'

**Data element:** Simply select the data element the program rule variable will get the value from (the **control question**) in this example 'Was a rapid test for HIV-1 recent infection (RTRI) given?'

## 1.6.2 Create program rules

Now program rule variables exist for all our control questions, we can make the program rule itself.

To do this, open the maintenance app, select the program tab at the top of the screen, then click the + symbol in the program rule section.



## 1.6.3 Program rule details

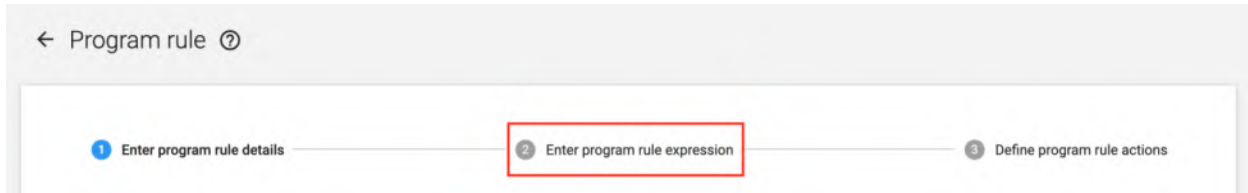
Select the program and give the rule a name, this should follow the format:

{Program stage abbreviation} - {Rule action} if {Rule condition}

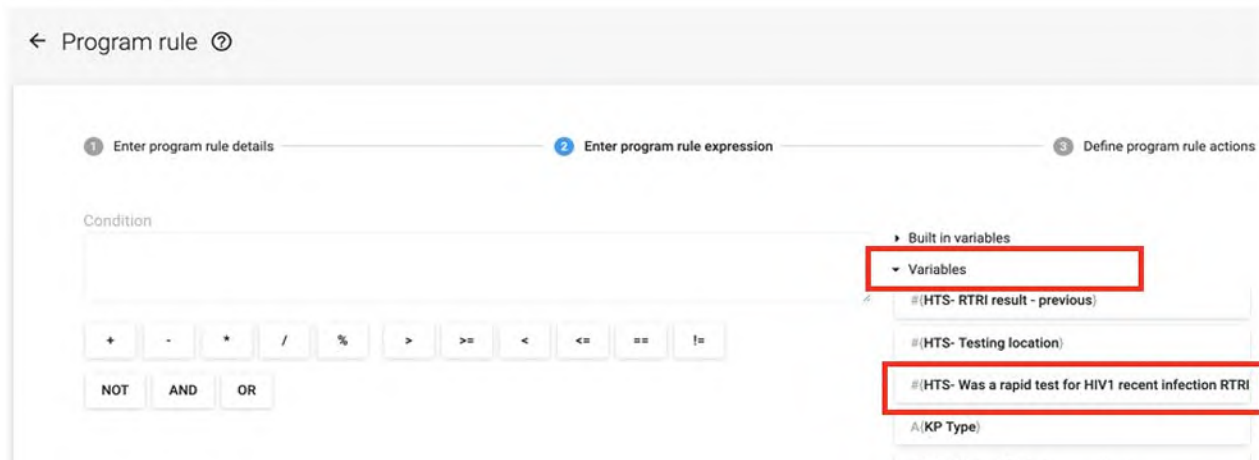
For example the HTS event rule which hides the RTRI questions unless Yes is selected:

HTS- Hide "RTRI result" field if Was a rapid test for HIV-1 recent infection (RTRI) given? Is not Yes  
Use the description field to add any further detail not included in the name.

Next select the option 2 Enter program rule expression to move to the next part of the program rule.



Here we enter a condition to decide if the rule should be run or not. In our example, we want to hide the RTRI questions unless they select 'yes' for the control question HTS-RTRI given First let's select the program rule variable created earlier to get the value from our control question. To do this first click the variables option on the right hand side, then search the page for the name of the program rule variable, in our example 'HTS-RTRI given', then click it to add it to the condition.



Now we need to specify how we want to use this value

The data element HTS-RTRI given has an option set associated with it as you can see from the dropdown menu:

Was a rapid test for HIV-1 recent infection (RTRI) given?  Yes  No

RTRI result

We want to run the rule only when the value 'Yes' is selected. However DHIS2 stored the value for the option code in the database rather than the option value. Generally the option code will be the lowercase version of the option name and where spaces are replaced with underscores. So:

Yes → yes

Not applicable → not\_applicable

*The means we want our condition to implement the logic: If the value selected is not yes, then run the rule to hide the fields.*

*To do this we add a != after our program rule valuable, this means not equal and the value we want to check which is 'yes', so our final condition is:*

*#{HTS- Was a rapid test for HIV1 recent infection RTRI given} !=1*

*Here you can see we are effectively saying, run the rule whenever the value of this HTS-RTRI given question is not yes. Which means show the HTS-RTRI given questions only when yes is selected.*

*Next click the **Define program rule actions** section.*

← Program rule ⓘ

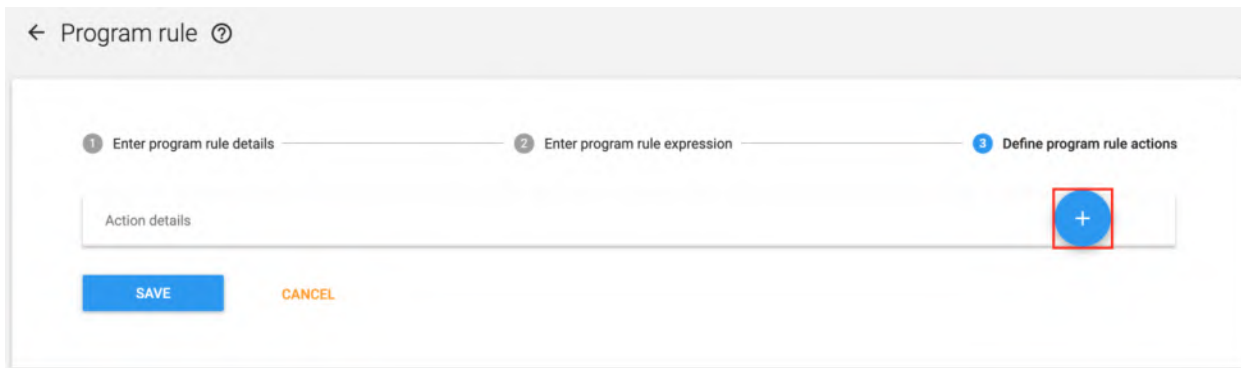
1 Enter program rule details — 2 Enter program rule expression — 3 Define program rule actions

*So far we have defined when the rule will run, now we define what it does when it does run. These are called program rule actions, and a program rule can have multiple actions.*

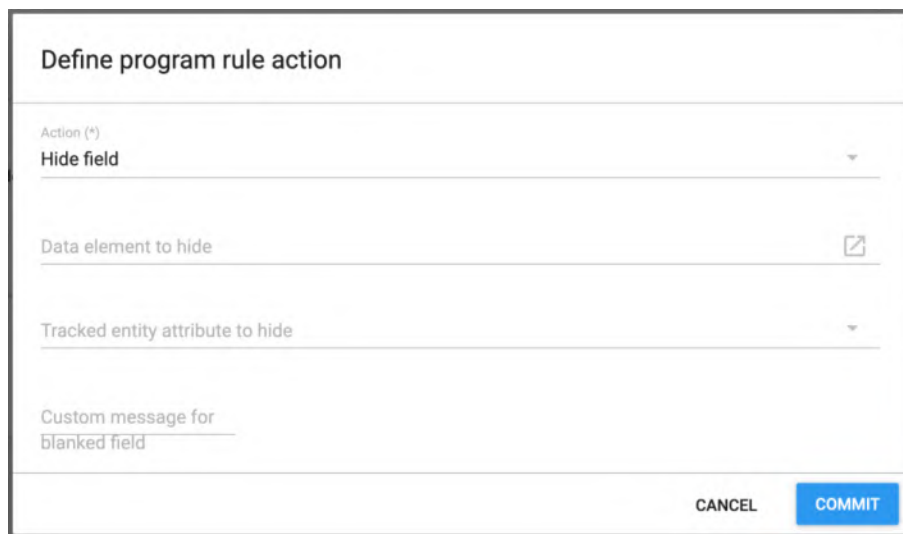
*In the example we want to hide*

- 'HIV - HTS RTRI result'

To do this we create a new action for each field we want to hide. To create a new action, click the blue + button:



First select the action, which could be one of many, in our example we are hiding fields, so selected the hide field option. A form containing other options will then appear based on your selection:



Then select the field you wish to hide from either the DE or TEA dropdown menus. Use the filter list option to search for the field by name.

## Data element to hide

---

Filter list

RTRI result

---

<No value>

KP-HTS RTRI result

---

CANCEL

Then click commit to save the action.

You can add additional actions using the blue + button as needed.

Finally click the save button to save the program rule.

To test the rule first clear cache, then open up the tracker capture app and make sure the rule is performing as expected.

### **Important Note**

*Hiding fields will clear the value in the field, this means if you have a field with a value in, then you hide it and unhide it, the value will be lost. Values in hidden program stage sections are not lost though, hide program stage section is a different option in the program rule action list and hides an entire section of the form.*

## 1.7 Program indicators

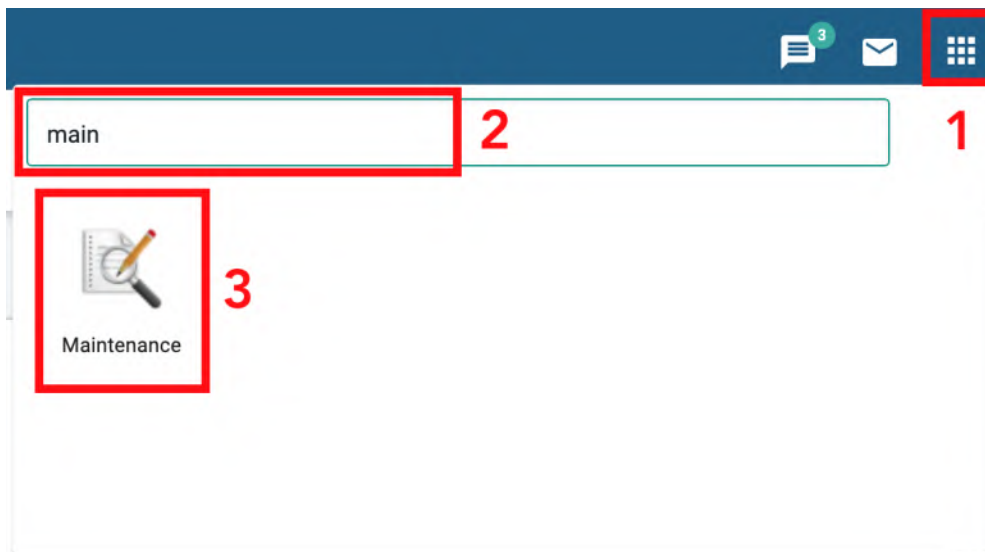
*Program indicators allow a wide variety of calculations to be performed on the data entered into the various tools in the FHI 360 system. One common calculation is to count the number of forms where a certain condition is met.*

## 1.7.1 Create a Program Indicator

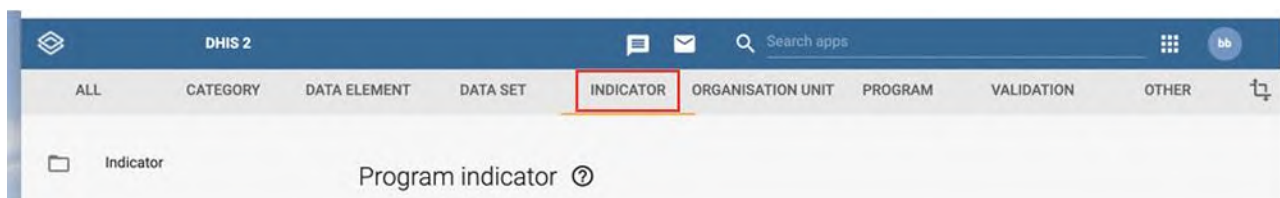
This guide covers how to create a program indicator that will count the number of events that is a number of requests in this case when a certain field value is selected. To get started

Example: suppose we want to create a program indicator that will calculate the number of HIV positive clients on enrollment.

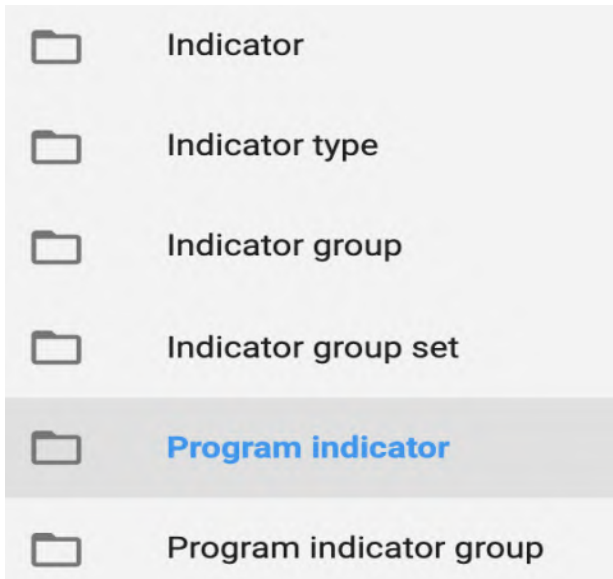
First navigate to the maintenance app.



Select Indicator from the top bar.



Next, select Program indicator on the left.

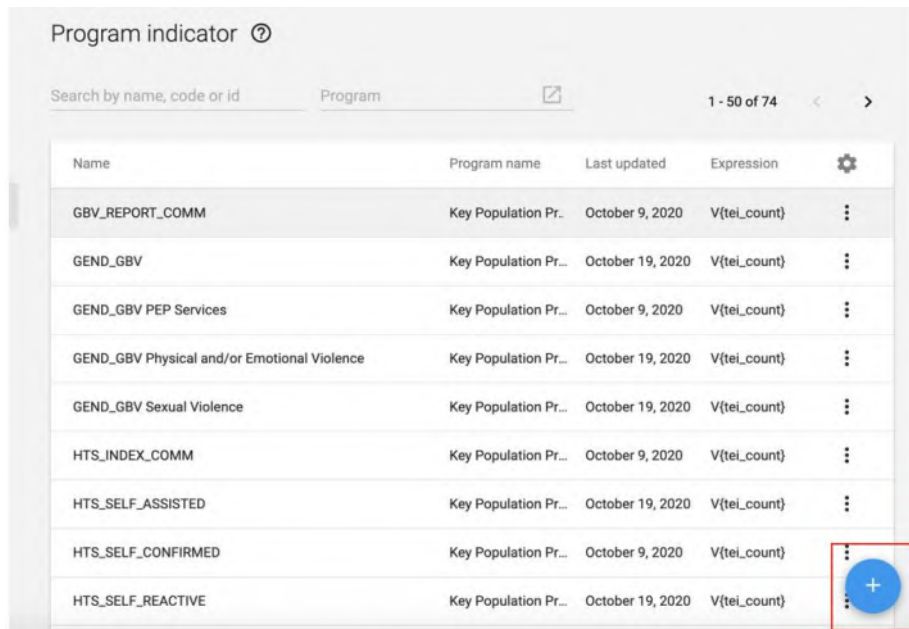


*Below are descriptions of the important fields to fill out when creating a new program indicator. Any other fields not mentioned can be safely ignored.*

<i>Program</i>	<i>Select the appropriate program example "HIV Program Tracker "</i>
<i>Name</i>	<i>Domain abbreviation_name abbreviation in capital letter for example KP_HIV_Positive</i>
<i>Short name</i>	<i>Same as name Program name abbreviation_name abbreviation in capital letter</i>
<i>Aggregation type</i>	<i>Determines how the program indicator will be aggregated. For this example the aggregation type will be "count"</i>

<i>Analytics type</i>	<i>Defines whether the program indicator is calculated based on events or program enrollments. In this case "Enrollment" will be used</i>
<i>Expression</i>	<i>Expression value will be aggregated according to the aggregation type of the program indicator</i>
<i>Filter</i>	<i>Determines the field/s that will be included in the evaluation</i>

To add a new program indicator, click the + symbol in the program indicator section.



Fill out the field as appropriate.



**1** Program indicator details

This object will be created with public edit and view rights

Program (\*)  
**Key Population Program**

Name (\*)  
**KP\_HIV\_POSITVE**

Short name (\*)  
**KP\_HIV\_POSITVE**

Code

Color  
**SELECT COLOR**

Icon  
**ADD ICON**

Description

Decimals in data output

Aggregation type  
**Count**

Analytics type (\*)  
**Enrollment**

Analytics period boundaries

Next click the “Expression” to include the program indicator expression, functions, variables that are used in program indicator. For this example, the variable “Tracked entity instance count” is used for the expression.

1 Program indicator details 2 Edit expression

This object will be created with public edit and view rights

Color

---

Icon

---

**1** The expression defines how the indicator is calculated. Tip: use `d2.condition('bool-expr',true-val,false-val) d2.daysBetween(date,date) d2.zing(x) d2.oizp(x)`

`V{tei_count}`

Tracked entity instance count

- ▶ ART Register
- ▶ Cervical Cancer (CXCA)
- ▶ EPOA
- ▶ HIV Self-Testing
- ▶ HIV Testing Services (HTS)
- ▶ Medication-Assisted Therapy (MAT)
- ▶ Outreach and Risk Assessment
- ▶ Pre-Exposure Prophylaxis (PrEP)
- ▶ Sexually Transmitted Infections (STI)
- ▶ TB Screening
- ▶ Violence and Abuse Disclosure
- ▶ Viral Load (VL)
- ▶ Attributes
- ▼ Variables
  - Completed date
  - Creation date
  - Current date

*Filters determine the field that will be included in the evaluation. Available fields can be found on the left hand side. The fields are separated into different program stages.*

*To select the field of interest, Open the program stage and search for the field.*

*This example is an attribute,*

*Click on "Attribute" folder and search for "HIV status at enrollment"*

- ▶ Pre-Exposure Prophylaxis (PrEP)
- ▶ Sexually Transmitted Infections (STI)
- ▶ TB Screening
- ▶ Violence and Abuse Disclosure
- ▶ Viral Load (VL)
- ▼ Attributes
  - First name
  - Last Name
  - KP- Sex at birth
  - KP- Gender
  - KP- Date of birth
  - KP- Country of birth
  - KP- Address
  - KP- Phone Number
  - KP- Type of KP
  - KP- First time in prison
  - KP- Entry date
  - KP- Exit date
  - KP- HIV status at enrollment
  - KP- National ID number
  - KP- National program ID
  - KP- UIC (program ID)
  - KP- Best place to meet in community for outreach

*Click on the field, a special characters representing the field are added to the program indicator filter section.*

*The condition is to count the number of positive enrollment, an equal must be added with the option code positive.*

1 Program indicator details      2 Edit expression      3 Edit filter

This object will be created with public edit and view rights

Color  
SELECT COLOR

Icon  
ADD ICON

The filter is applied to events and filters the data source used for the calculation of the indicator. The filter must evaluate to either true or false. Use single quotes for text values. Use option codes for option set references. Tip: use d2.condition('bool-expr',true-val,false-val) d2.daysBetween(date,date) d2.zing(x) d2.oizp(x)

A{tmruMXIFo2s} == 1

+ - \* / % > >= < <= == != NOT AND OR

✓ KP- HIV status at enrollment == 1

- ART Register
- Cervical Cancer (CXCA)
- EPOA
- HIV Self-Testing
- HIV Testing Services (HTS)
- Medication-Assisted Therapy (MAT)
- Outreach and Risk Assessment
- Pre-Exposure Prophylaxis (PrEP)
- Sexually Transmitted Infections (STI)
- TB Screening
- Violence and Abuse Disclosure
- Viral Load (VL)
- Attributes
  - First name
  - Last Name
  - KP- Sex at birth
  - KP- Gender
  - KP- Date of birth

Once the format for the expression is correct, a green button will show up at the bottom, the green button will contain the text based representation of the field.

The filter is applied to events and filters the data source used for the calculation of the indicator. The filter must evaluate to either true or false. Use single quotes for text values. Use option codes for option set references. Tip: use d2.condition('bool-expr',true-val,false-val) d2.daysBetween(date,date) d2.zing(x) d2.oizp(x)

A{tmruMXIFo2s} == 1

+ - \* / % > >= < <= == != NOT AND OR

✓ KP- HIV status at enrollment == 1

Click on Save to save program indicator

**SAVE**

**CANCEL**

## 2. Data

---

### 2.1 HIV Program Tracker

*The HIV Program Tracker is a tool that allows enrolling HIV Clients targeted by FHI 360 to be able to offer them various of the services included in the in the standard HIV metadata package:*

- *Outreach and Risk Assessment.*
- *HIV Testing Services (HTS).*
- *HIV Self-Testing.*
- *Sexually Transmitted Infections (STI).*
- *Pre-Exposure Prophylaxis (PrEP).*
- *ART Register.*
- *Medication-Assisted Therapy (MAT).*
- *Violence and Abuse Disclosure.*
- *Viral Load (VL).*
- *EPOA.*
- *Cervical Cancer (CXCA).*
- *TB Screening.*

## 2.1.1 HIV Program Tracker Enrollment

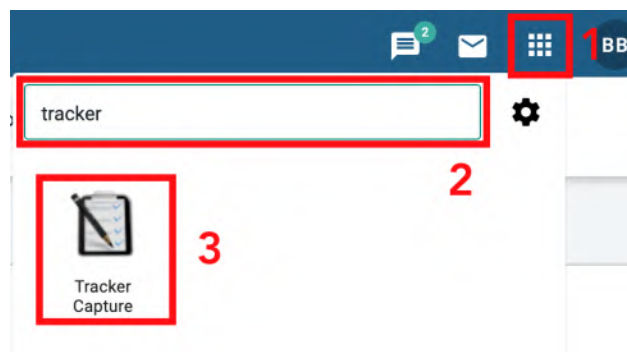
*This section will guide you in recording information for new HIV Clients or editing data for existing ones.*

### 2.1.1.a Create a new HIV Program record

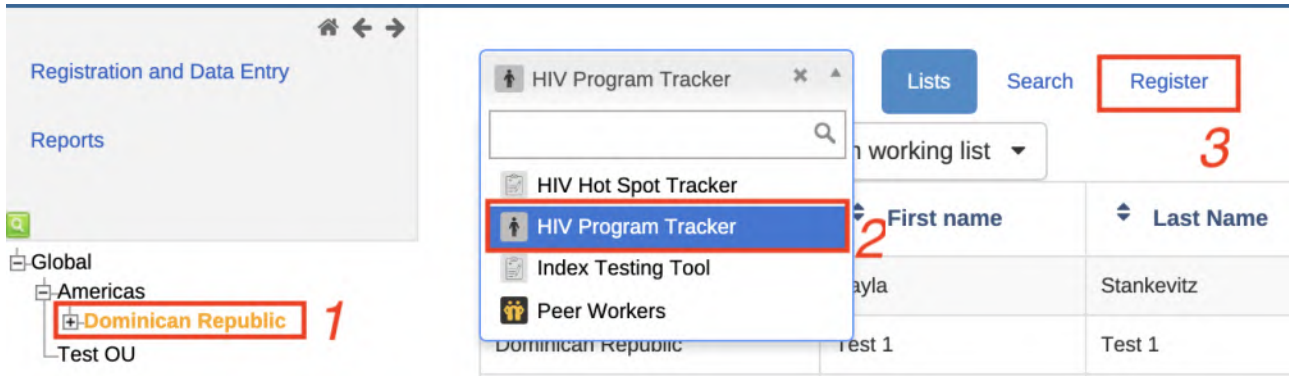
*Key records are added into the DHIS2 system to keep track of personal data and capture information on the different services included in the HIV package.*

*The method for creating a new record for an individual is described below.*

1. *In the top bar, select the app menu at the top right of the screen (the 9 dots). Then search for the tracker capture app and click on the icon to open it.*

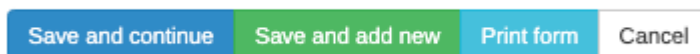


- Next, using the Organization Unit Hierarchy on the left, select the org unit you would like to register your contact in. Then, select the HIV Program Tracker from the programs list and click on the Register button at the top of the page.



- The HIV Program Tracker enrollment form is displayed. This form holds all the personal and contact details for the HIV Program Tracker record. It also records other relevant information such as **Type of KP**, and HIV status at enrollment. It also contains a field automatically generated by the system, the UIC (Program ID), which allows to uniquely identify an HIV Client within the program.

- Fill out the form and then select **Save and continue**.





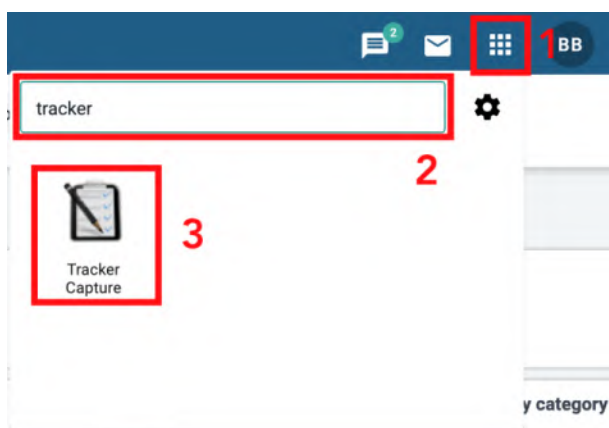
You will then arrive on the HIV Program Tracker Dashboard (TEI Dashboard).

### 2.1.1.b Find an existing HIV Program Record

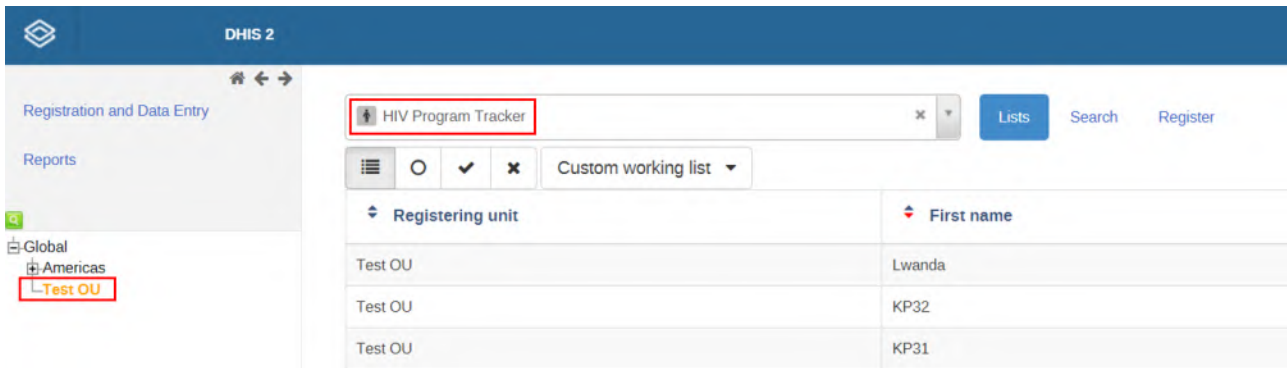
If you are a user who would like to find an existing HIV Program Tracker profile to update it or just view form data, this is the part of the guide you need to get started.

If you already know which country or region the HIV Client has been enrolled in, you can find it quickly from the tracker capture app.

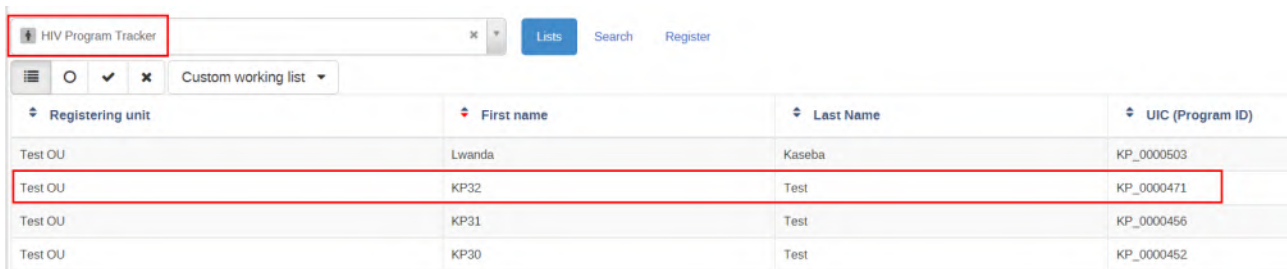
1. Open the tracker capture app from the app menu.



2. Select the country or region where the contact is on the left. Then choose the HIV Program Tracker from the programs list.



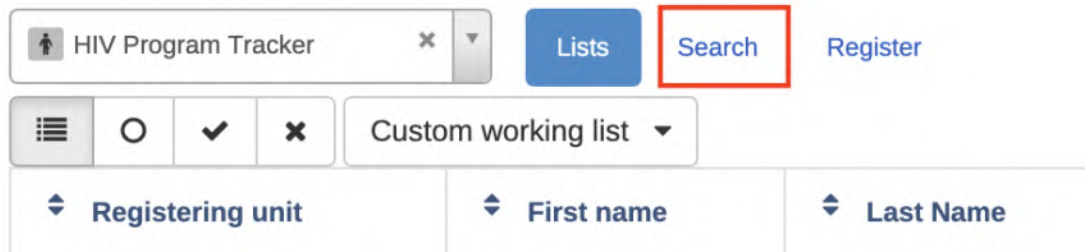
3. Click the row containing the HIV Client you would like to open



You have now successfully selected the HIV Client.

If you do not know the country or region where the contact is, but you know some other identifying information, such as the **KP UIC** or Phone number, you may still be able to find the client by taking the following steps:

1. Click the search button at the top of the screen in the tracker capture app.



2. Enter any identifying information you have for the HIV client, for example the name of and gender. Then, click the magnifying glass icon to search for the client.

The screenshot shows the search form in the HIV Program Tracker app. At the top, there is a navigation bar with a tab labeled 'HIV Program Tracker', a 'Lists' button, a 'Search' button (blue), and a 'Register' button. Below the navigation bar is a section titled 'Search for client' with a person icon. The form contains several input fields: 'HIV- UIC (program ID)', 'First name', 'Last Name', 'HIV- Gender' (a dropdown menu with the text 'Select or search from the list'), 'HIV- Phone Number', and 'HIV- Type of KP' (a dropdown menu with the text 'Select or search from the list'). Below these fields is a section titled 'More options' with a dropdown arrow. At the bottom of the form, there is a text prompt 'Fill in at least 2 attributes to search' and a magnifying glass icon (highlighted with a red box) to initiate the search.

3. You will get a pop up box listing all the HIV Clients which match your search, find the for the client with the correct details and select it. Note that if the client's UIC is specified, only one record will appear in the pop up box.

Client search results

Registering unit	Registration date	Inactive	First name	Type of KP/PP	UIC (Program ID)	Li Name
Global	2020-10-09	No	Tester2		KP_0000071	Idowu
Global	2020-10-12	No	Testing		KP_0000077	HIV neq
Global	2020-10-09	No	Tester1		KP_0000067	Idowu

### 2.1.3 Edit an existing HIV Program Tracker record

It is possible to update the profile information of any existing HIV Program Tracker records after registration. To do so, we need to follow these steps:

1. Search the relevant HIV client following the steps explained in the previous point.
2. From the HIV Program Tracker dashboard, click on the Edit button in the Profile section.



3. The Profile section will expand and you will be able to see all fields and make the necessary changes.

A screenshot of the "Profile Edit" window showing an expanded form. The header is the same as in the previous image. The "Profile" section is expanded to show a list of fields, each with a light blue header and a corresponding input field or dropdown menu. The fields are: "First name" with the value "Maria"; "Last Name" with the value "Vargas"; "Sex assigned at birth" with the value "Female" and a dropdown arrow; "Gender Identity" with the value "Select or search from the list" and a dropdown arrow; "Date of birth" with a date picker showing "Date of bi", "Years", "Months", and "Days", and a red trash icon; "Country of birth" with the value "Brazil" and a dropdown arrow; "Contact address" with an empty text input field; "Phone Number" with an empty text input field; "Type of KP/PP" with the value "Female sex worker (FSW)" and a dropdown arrow; "HIV status at enrollment" with the value "Negative" and a dropdown arrow; "ID number" with an empty text input field; "National program ID" with an empty text input field; and "UIC (Program ID)" with the value "KP\_0000334".

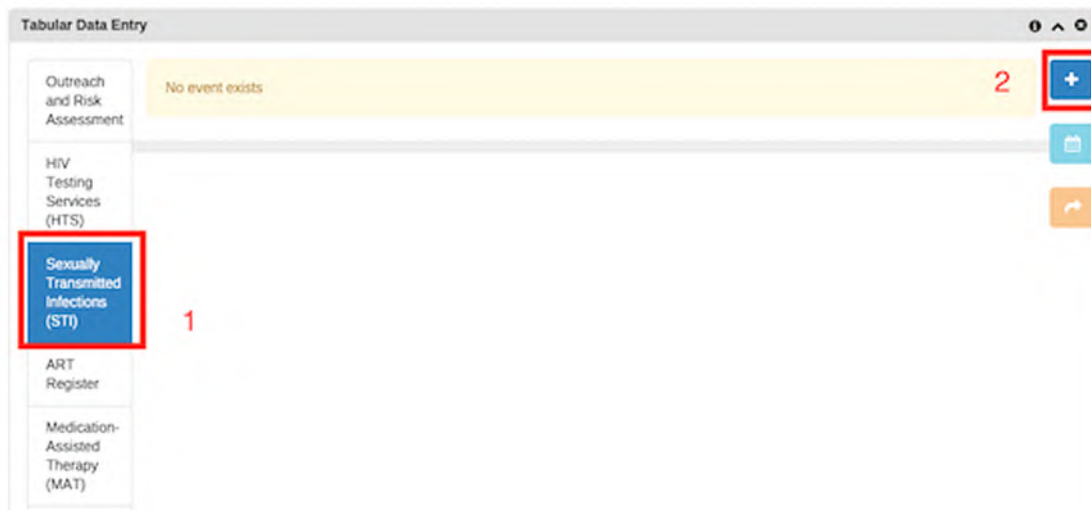
4. Click **Save**.


## 2.1.4 Create a new event for an existing HIV Program record

In this section explains how to create events in the HIV Program Tracker.

To record events for each one of the services included in the HIV Program, please follow these steps:

1. First, [create a new record](#) in the HIV Program Tracker
2. Then scroll down to the Tabular Data Entry section of the HIV Program Tracker client



dashboard, select the relevant program stage and then click on the  button to create a new event for the selected service.

3. Add a date for the selected stage as the Visit date in below example.

## Add new event for stage **Sexually Transmitted Infections (STI)**

Date of visit

2020-10-20

Save

Cancel

4. This section will expand allowing to fill all necessary fields then ....

The screenshot shows a web-based data entry form titled "Tabular Data Entry". On the left is a sidebar with a list of service categories: Outreach and Risk Assessment, HIV Testing Services (HTS), Sexually Transmitted Infections (STI) (highlighted in blue), ART Register, Medication-Assisted Therapy (MAT), Violence and Abuse Disclosure, Viral Load (VL), EPOA, Cervical Cancer (CXCA), and TB Screening. The main form area contains the following fields:

- Date of visit \***: A text input field containing "2020-10-20".
- STI details**:
  - Screened for STI**: Radio buttons for Yes (checked) and No.
  - Diagnosed with STI**: Radio buttons for Yes and No (checked).
- Etiologic Testing**: A section with several dropdown menus for test results:
  - Syphilis test result (e.g. VDRL/RPR)
  - Syphilis treponemal test result titer
  - Syphilis non-treponemal test results (rapid test)
  - Neisseria gonorrhoeae test results
  - Chlamydia trachomatis test results
  - Trichomonas vaginalis test results
- Hepatitis B test type**: A text input field.
- Hepatitis B test results**: A dropdown menu.
- Hepatitis C test type**: A text input field.
- Hepatitis C test results**: A dropdown menu.

## 2.1.5 Update an existing event for a given HIV Program record

1. First, navigate to the existing contact's `_dashboard`
2. To update an existing event scroll down to the Tabular Data Entry box, then select the program stage and the existing record will be displayed for modification.

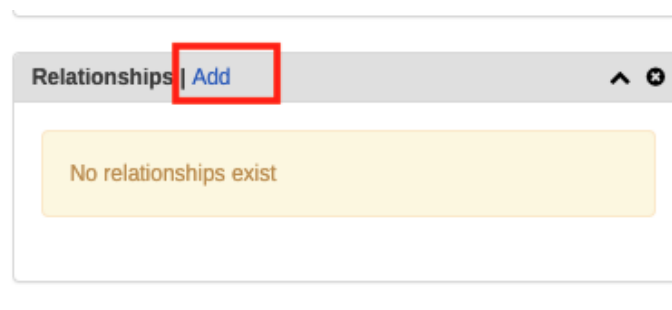
## 2.2 Add Relationships

### 2.2.1 Add relationship for a HIV Program Tracker event (Peer worker to client)

#### ***HIV Client to PW relationship***

*In this section we will describe how to define a relationship between 'HIV Client' (HIV Program Tracker) and Peer Worker (PW).*

1. Within the Relationships widget click on **Add**






2. A drop down menu will appear, displaying all of the available relationships when the downward arrow is clicked.

Add relationship

---

Please select a relationship 

---

Close

3. Below is the list of all relationships from HIV Clients to programs such as 'Client to Hot spot,' 'Index clients to contacts' and 'Peer worker to client.'

Add relationship

---

✓ Please select a relationship

Client to Hot spot

Index client to contacts

**Peer worker to client**

Close

4. Once the relationship is selected, in the new page we can:
- a. Create a new Peer Worker by clicking on **Register**; fill all the required fields and click on **Save**.

**Add relationship**

Peer worker to client

Assign a peer worker → Link to a client

**Register**

**Enrollment**

Enrolling organisation unit: Global

Date of enrollment: 2020-11-03

**Profile**

First name: [Text Field]

Last Name: [Text Field]

Peer worker type: Select or search from the list

Save Cancel

First name	Test 1
Last Name	Test 1
HIV- Sex at birth	Female
HIV- Gender	
HIV- Date of birth	2002-10-27
HIV- Age (years)	
HIV- Country of birth	Barbados
HIV- Address	
HIV- Phone Number	
HIV- Type of KP	Female sex worker (FSW)
HIV- First time in prison	
HIV- Entry date	
HIV- Exit date	

*b. Search for the existing Peer Worker by filling one of the attributes and select the search button.*

Peer worker to client

---

Assign a peer worker → Link to a client

First name Test case

Last Name Pop ups

KP- Sex at birth Female

KP- Gender Woman

KP- Date of birth 2003-08-07

KP- Country of birth Angola

KP- Address

KP- Phone Number

KP- Type of KP AGYW

KP- First time in prison

Register

**Search for worker**

First name

PW- Peer

worker type

More options

Fill in at least 1 attribute to search

c. A list of registered PW will be displayed.

Worker search results

Registering unit	Registration date	Inactive	First name	Last Name	Peer worker type	
Test OU	2020-12-10	No	PW 3		1	<a href="#">Flag possible duplicate</a>

Number of rows per page:  Jump to page:

« « 1 » »

If none of the matches above is the worker you are searching for, choose 'Go to registration'.

d. Select the desired one and then click on **Save**.

Peer worker to client

Assign a peer worker → Link to a client

HIV- HIV status at enrollment	Positive
HIV- Age (years)	31
HIV- UIC (program ID)	KP_0000456
First name	KP31
Last Name	Test
HIV- Type of KP	PWID
HIV- Sex at birth	Male
HIV- Date of birth	1989-11-06

**Back**

Registering unit	Test OU
Registration date	2020-12-10
Inactive	false
First name	PW 3
Last Name	
PW- Peer worker type	1

**Save** **Close**

e. Once it is done the new relationship will be added as shown below.

i. Click on the relationship to edit the event under the related program

ii. This relationship can be removed by selecting the bin symbol on the right.

**Relationships** | [Add](#) ^ ✕

Relationship	Worker First name	Worker Last Name	
Assign a peer worker	PW 3		

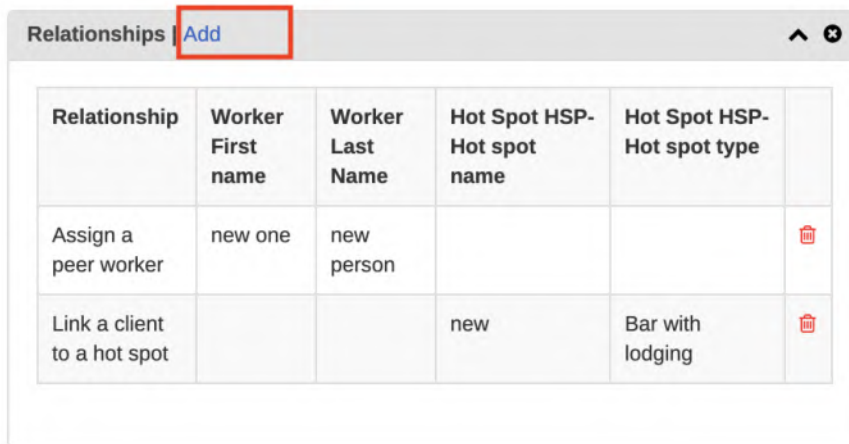
## 2.2.3 Add relationship to Index testing (Index client to contacts)

### HIV Client to Index testing Relationship

In this section we will describe how to define a relationship between HIV Clients and Index testing.

We use this to link a client to contacts

1. Within the 'Relationships' widget click on **Add**.



The screenshot shows a window titled 'Relationships' with an 'Add' button highlighted in a red box. Below the button is a table with the following data:

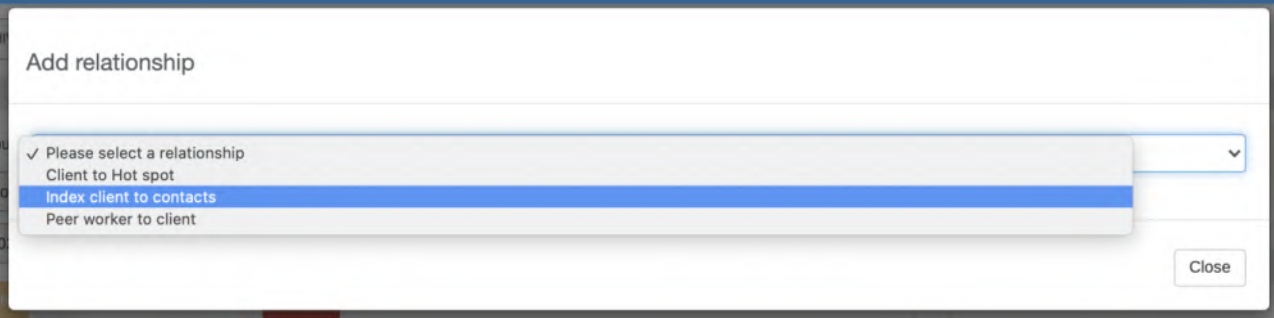
Relationship	Worker First name	Worker Last Name	Hot Spot HSP- Hot spot name	Hot Spot HSP- Hot spot type	
Assign a peer worker	new one	new person			
Link a client to a hot spot			new	Bar with lodging	

2. A drop down menu will appear, displaying all of the available relationships when the downward arrow is clicked.



The screenshot shows a dialog box titled 'Add relationship'. It contains a text input field with the placeholder text 'Please select a relationship'. A red box highlights the downward arrow icon on the right side of the input field, indicating that clicking it will open a dropdown menu. A 'Close' button is located at the bottom right of the dialog box.

3. Below is the list of all relationships from HIV Program Tracker to programs such as 'Client to Hot spot,' 'Index clients to contacts' and 'Peer worker to client.' Select Index client to contacts.



The screenshot shows a web interface titled "Add relationship". It features a dropdown menu with the following options: "Please select a relationship", "Client to Hot spot", "Index client to contacts" (which is highlighted in blue), and "Peer worker to client". A "Close" button is located in the bottom right corner of the dropdown menu.

4. Once the relationship is selected, in the new page we can:
- Create a new Contact by clicking on 'Register'. Then fill all the required fields and click on **Save**.

Index client to contacts

Add contacts → Link to Index client

First name Female

Last Name Positive

HIV- Sex at birth Female

HIV- Gender

HIV- Date of birth

HIV- Age (years)

HIV- Country of birth

HIV- Address

HIV- Phone Number

HIV- Type of KP AGYW

HIV- First time in prison

HIV- Entry date

Register

### Enrollment

Enrolling organisation unit Global

Date contact was elicited from index client 2020-11-03

### Profile

First name

Last Name

Age (approximate age is okay)

Date of birth

Years

Months

Days

Sex at birth

Select or search from the list

Relationship to index client

Select or search from the list

Close



- a. Search for the existing contact events by using the First name, age, ect... and select the search button.

The screenshot shows a web application interface for searching contact events. At the top, there is a dropdown menu labeled "Index client to contacts". Below it is a button labeled "Add contacts → Link to Index client". The main search form is divided into two columns. The left column contains a list of attributes: First name, Test age, Last Name, HIV- Sex at birth, HIV- Gender, HIV- Date of birth (1992-10-30), HIV- Age (years) (28), HIV- Country of birth, HIV- Address, HIV- Phone Number, HIV- Type of KP, HIV- First time in prison, and HIV- Entry date. The right column contains search fields: First name (with the letter 'a' entered), Last Name, ITT- Age (with a dropdown menu set to 'Is' and 'Exact date' selected), ITT- Sex (with a dropdown menu set to 'Select or search from the list'), ITT- (with a dropdown menu set to 'Select or search from the list'), Relationship to index client, ITT- Phone number, and More options (with a dropdown arrow). At the bottom of the search form, there is a text prompt "Fill in at least 1 attribute to search" and a search button with a magnifying glass icon.

- b. A list of all Registered events will be displayed.

## Contact search results

Registering unit	Registration date	Inactive	First name	Last Name	Age (approximate age is okay)	Sex at birth
Dominican Republic	2020-10-13	No	Test index case	Relationship	1998-10-13	2
Dominican Republic	2020-10-12	No	Jane	Doe	2003-10-01	2

Number of rows per page:

Jump to page:

« « 1 » »

If none of the matches above is the contact you are searching for, choose 'Go to registration'.

[Back](#)

[Go to registration](#)

c. *Select the desired one and then click on Save.*

Index client to contacts

Add contacts → Link to Index client



First name	Test age	Back	Registering unit	Dominican Republic
Last Name			Registration date	2020-10-12
HIV- Sex at birth			Inactive	false
HIV- Gender			First name	Jane
HIV- Date of birth	1992-10-30		Last Name	Doe
HIV- Age (years)	28		ITT- Age	2003-10-01
HIV- Country of birth			ITT- Sex	2
HIV- Address			ITT- Relationship to index client	1
HIV- Phone Number			ITT- Phone number	
HIV- Type of KP			ITT- Preferred PNS approach	2
HIV- First time in prison				
HIV- Entry date				

Save Close

d. Once it is done the new relationship will be added as shown below.

- i. Click on the relationship to edit the event under the related program.
- ii. This relationship can be removed by selecting the Recycle bin symbol on the right.

Relationships | Add

Relationship	Contact First name	Contact Last Name	
Add contacts	Jane	Doe	
Add contacts	Test1	Test2	

## 2.3 HIV Hot Spot Tracker

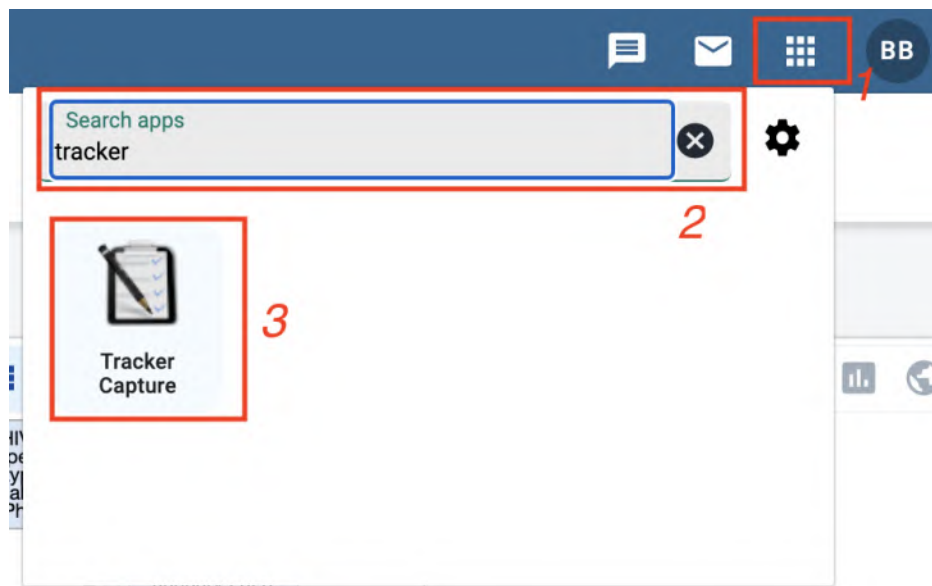
The HIV Hot Spot Tracker is used to record profile data on HIV hot spots. This tool allows us to capture information on the workers supporting particular hot spots and on the HIV Client individuals who work at or visit these hot spots.

The data entered undergoes further analysis to provide meaningful information regarding the current status of hot spots, their relationships with other hot spots and their links with HIV clients. Results of this analysis can be viewed through charts and tables displayed within the system dashboards.

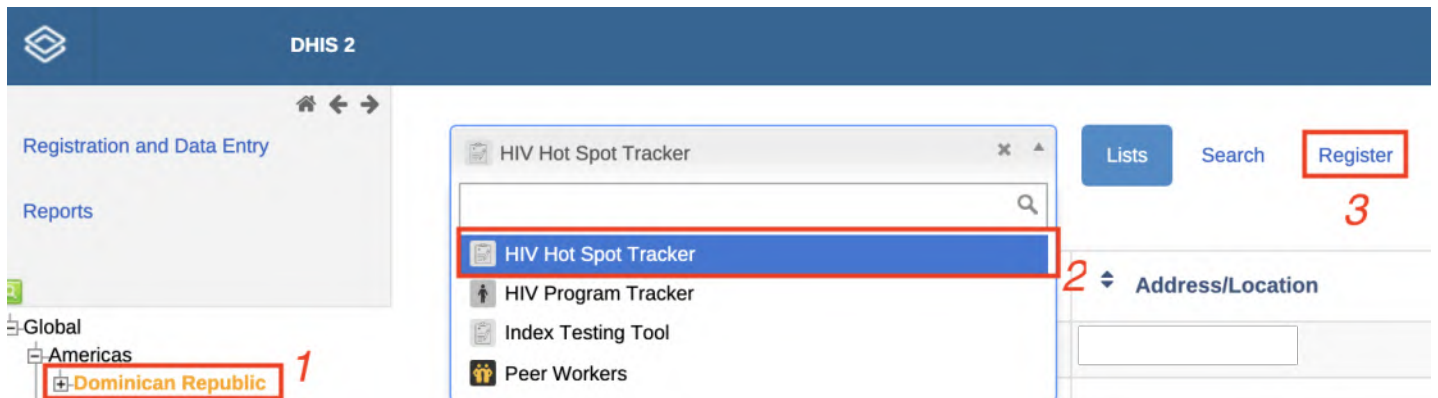
### 2.3.1 Create a new Hot Spot

The steps for creating a new hot spot are described below.

1. In the top bar, select the app menu at the top right of the screen (the grid symbol). Then search for the tracker capture app and click on the icon to open it.



2. Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit you would like to create the hot spot. Then, select 'HIV Hot Spot Tracker Program' from the programs list and click on the **Register** button at the top of the page.



3. The HIV Hot Spot Tracker registration form is displayed. This form contains the questions for all the information on the hot spots to be registered. It also contains the 'Enrollment point' which allows the entry of geo-coordinate input values or to capture the coordinates of the location by searching for the exact location on the map (click on 1)

## Enrollment

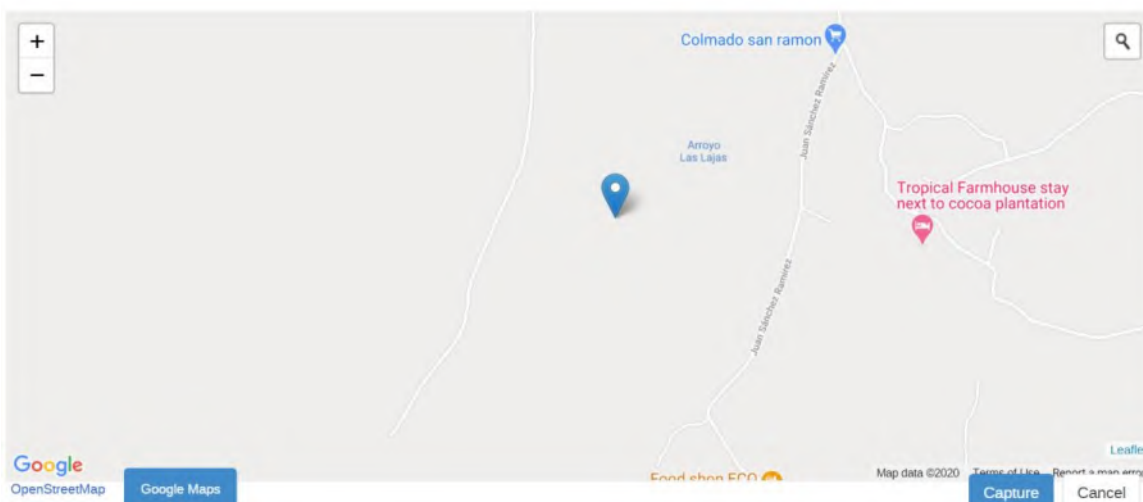
Enrolling organisation unit	Dominican Republic	
Enrollment point	Latitude	Longitude <span>📍</span>
Enrollment date	2020-10-20	

## Profile

Hot spot name	<input type="text"/>
Address/Location	<input type="text"/>
Hot spot type	Select or search from the list <span>▾</span>

[Save and continue](#) [Save and add new](#) [Print form](#) [Cancel](#)

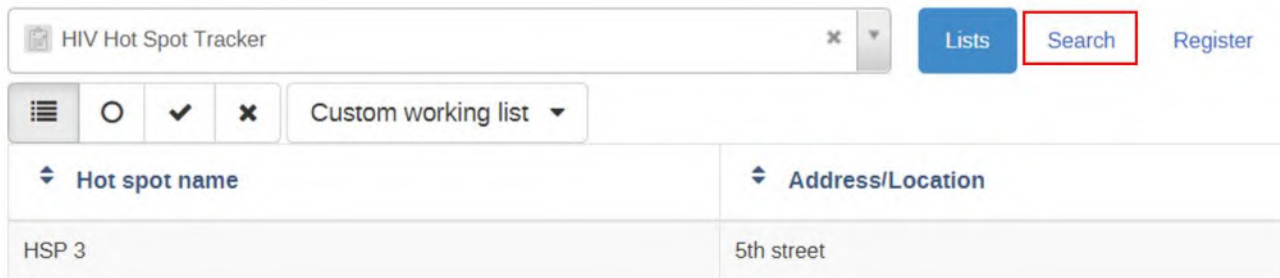
4. Search the location on the map and capture the coordinates of the hot spot y clicking on **Capture**



5. Fill out the form and then select **Save and Continue**.

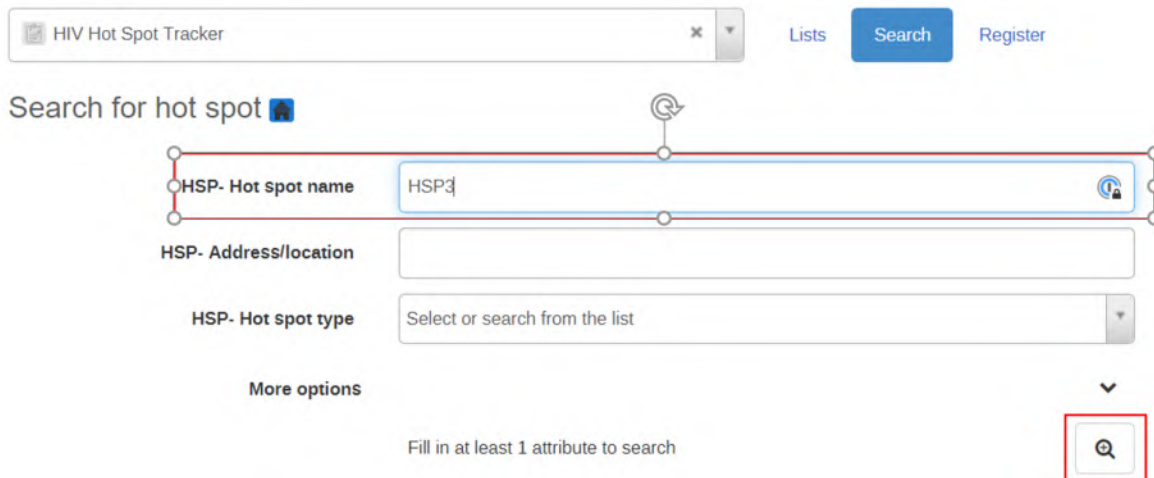
### 2.3.2 Search for a Hot Spot

You can search for a specific Hotspot by clicking on the Search button



Hot spot name	Address/Location
HSP 3	5th street

Then fill at least one the HSP attributes and click on search.



Search for hot spot

HSP- Hot spot name: HSP3

HSP- Address/location:

HSP- Hot spot type: Select or search from the list

More options

Fill in at least 1 attribute to search

You will get a list of existing hotspots. Select the chosen one.

### Hot Spot search results

Registering unit	Registration date	Inactive	Hot spot name	Address/Location	Hot spot type	
Test OU	2020-10-30	No	HSP 3	5th street	Strip club	Flag possible duplicate

Number of rows per page:  Jump to page:

« « 1 » »

## 2.3.3 Update a Hot Spot event

1. *Navigate to your Hotspot of choice for updating.*

The screenshot shows the DHIS 2 interface for the HIV Hot Spot Tracker. The left sidebar contains a navigation menu with 'Registration and Data Entry' and 'Reports' sections. The main content area displays a table with columns for 'Hot spot name' and 'Address/Location'. The table lists three hot spots: HSP 3 (5th street), HSP 2 (Sun Blvd), and HSP 1 (Test street). Above the table, there are controls for 'Custom working list', 'Lists', 'Search', and 'Register' buttons.

2. *Open the Hot Spot Tracker dashboard page in the tracker capture app.*



The screenshot displays the DHIS 2 interface for the HIV Hot Spot Tracker. The main content area is divided into four sections:

- Enrollment:** Shows details for a hot spot owned by the Dominican Republic. Fields include Enrolling organisation unit (Dominican Republic), Enrollment point (Latitude and Longitude), and Enrollment date (2020-10-14). Buttons for Complete, Deactivate, and Delete are visible.
- Indicators:** A message states "No indicators exist".
- Tabular Data Entry:** A table with one row for "HIV Hot spot assessment" and a blue "+" button to add a new entry.
- Report:** A message states "No records exist for reporting".

The right-hand sidebar contains four sections:

- Feedback:** A message states "No feedback exist".
- Profile Edit:** Fields for Hot spot name (Test HS1), Address/Location, and Hot spot type (Bar with lodging).
- Relationships | Add:** A message states "No relationships exist".
- Notes:** A text area for "Your note here" and "Add" and "Clear" buttons.

3. From the Tabular Data Entry section, use the blue **+** button to create a new HIV hot spot assessment.

3.1. Please note that it may take a few minutes to record the assessment form for the first time.

Back HIV Hot Spot Tracker

**Enrollment**

Owned by: Dominican Republic

Enrolling organisation unit: Dominican Republic

Enrollment point: Latitude Longitude

Enrollment date: 2020-10-14

Complete Deactivate Delete

**Indicators**

No indicators exist

**Tabular Data Entry**

HIV Hot spot assessment No event exists

+

4. If a hot spot assessment already exists, the most recent one will automatically open for editing.

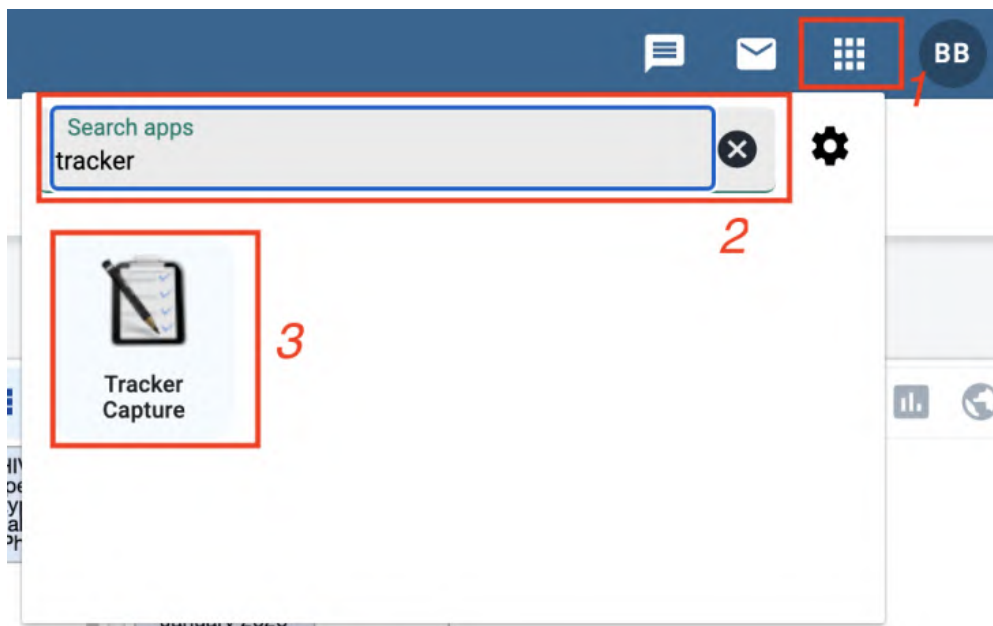
## 2.4 Peer Workers Registry

The Peer Workers Registry tool allows for registration of peer workers into the system; it provides a way to keep track of their status and also links them to existing HIV clients.

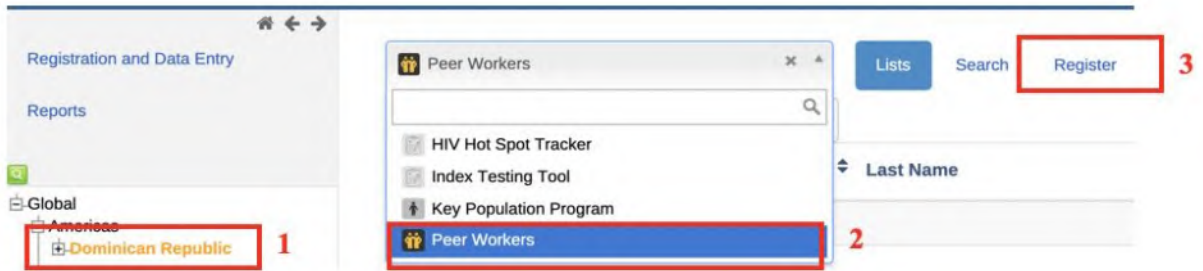
## 2.4.1 Create or update a Peer Worker

The process of creating a new peer worker is described below.

1. In the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.



2. Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit and then select "Peer worker" from the programs list and click on the Register button at the top of the page.

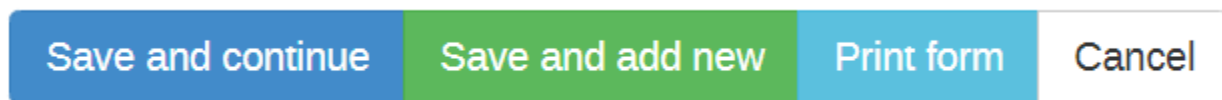


3. The Peer Workers registration form is displayed. This form contains the responses for information on the Peer Worker to be registered, including first name, last name and type.

The screenshot shows the 'Peer Workers' registration form. At the top, there is a header with 'Peer Workers', 'Lists', 'Search', and 'Register' buttons. The form is divided into sections: 'Enrollment' and 'Profile'. In the 'Enrollment' section, there is a dropdown for 'Enrolling organisation unit' set to 'Dominican Republic' and a text input for 'Date of enrollment' set to '2020-10-20'. In the 'Profile' section, there are text inputs for 'First name' and 'Last Name', and a dropdown for 'Peer worker type' set to 'Outreach peer worker'. Below these is a 'Data entry' section, which is highlighted with a red box. It contains a text input for 'Date of enrollment \*' set to '2020-10-20', a dropdown for 'Peer worker status' set to 'Active', and a radio button group for 'Complete stage? \*' with 'No' selected. At the bottom, there are four buttons: 'Save and continue' (highlighted with a red box), 'Save and add new', 'Print form', and 'Cancel'.

4. Fill out the form being sure to provide answers to the mandatory questions, which are represented by the asterisk \*, and then select:

- a. 'Save and Continue' to save the current registration and display information about the new event related to it.
- b. 'Save and add new' will save the current PW without an event and allow the creation of a new one. A new form will then appear.
- c. 'Print form' will display a printing format for all information in the current registration form.
- d. 'Cancel' will discard all information about the current registration



### 2.4.2 Search for a Peer worker

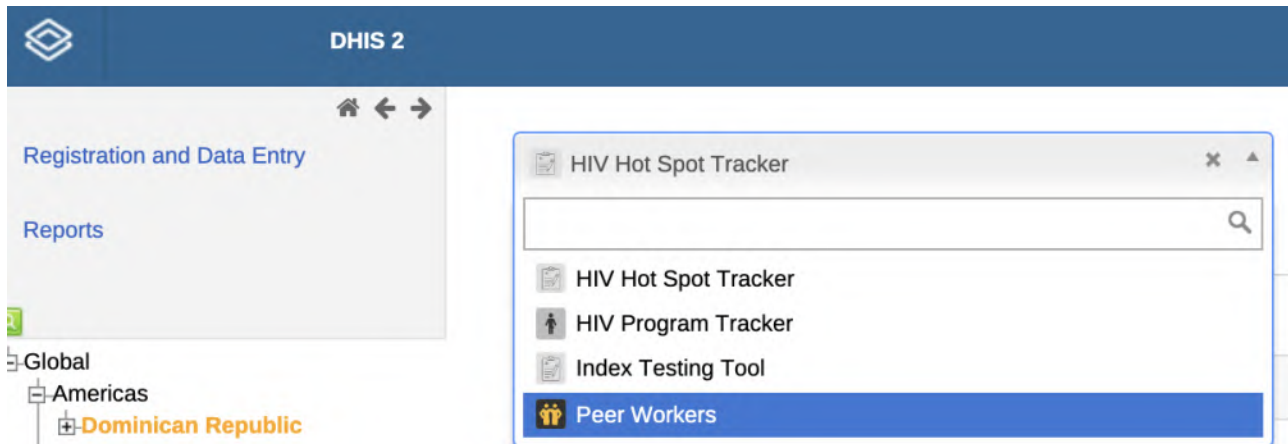
As we explain in the previous section, you can for a PW by browsing the list of the existing ones or doing research.

First name	Last Name
PW 3	
PW4	PeerWorkerLN02
PW2	
PW1	Test
PW5	TestLastName

### 2.4.3 Create or update a PW event


1. Open the Peer Workers dashboard page from the tracker capture app.

- a. To do so, in the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.
- b. Then select the Org unit of your choice and the 'Peer Workers' program.



- c. Navigate to a Peer Worker dashboard, Choose the relevant Peer Worker event from the list, or follow these steps to search for a specific Peer Worker event that you do not see in the list of relevant program events.

## 2. Updating PW status:

- a. To add a new status for a Peer Worker profile, select the blue  button and click save to create a new event on the current date

Back Peer Workers

**Enrollment**

Owned by: Dominican Republic

Enrolling organisation unit: Dominican Republic

Date of enrollment: 2020-10-20

Complete Deactivate Delete

**Indicators**

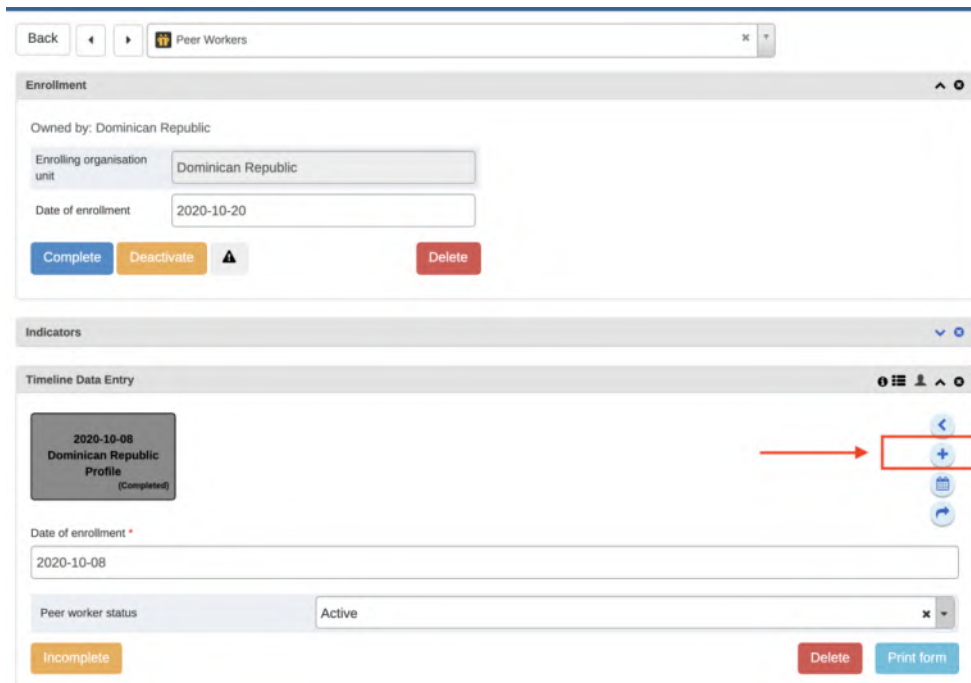
**Timeline Data Entry**

2020-10-08 Dominican Republic Profile (Completed)

Date of enrollment: 2020-10-08

Peer worker status: Active

Incomplete Delete Print form



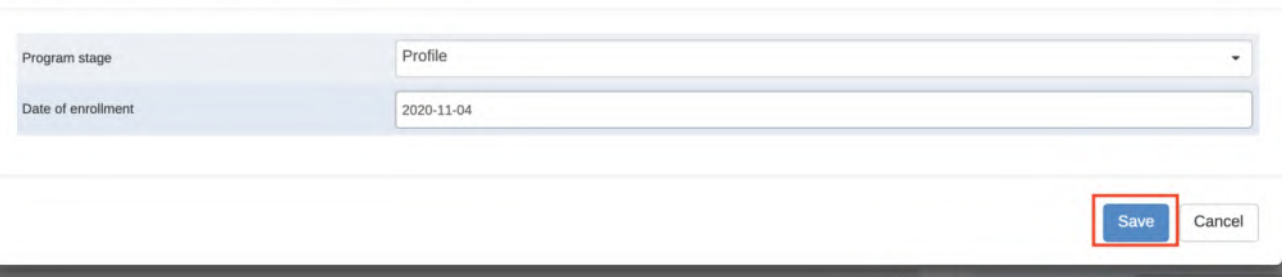
b. Enter the correct date of enrollment and then select **Save**.

Add new event for stage **Profile**

Program stage: Profile

Date of enrollment: 2020-11-04

Save Cancel



- c. Then select the new profile status using the downward arrow to display the dropdown menu.

The screenshot shows the 'Timeline Data Entry' interface. At the top, there is a header with the title 'Timeline Data Entry' and several icons on the right. Below the header, there are two profile cards. The first card is grey and labeled '2020-10-08 Dominican Republic Profile (Completed)'. The second card is yellow and labeled '2020-11-04 Dominican Republic Profile (Open)', with a red box around it and the text 'New profile' written above it in red. Below the profile cards, there is a 'Date of enrollment' field with the value '2020-11-04'. To the left of the dropdown menu, there is a 'Peer worker status' label and a 'Complete' button. The dropdown menu is open, showing a search bar and two options: 'Active' and 'Inactive'. Below the dropdown menu, there is a 'Your note here' text area and two buttons: 'Add' and 'Clear'.

***N.B : You can update the status of a PW on a regular basis by creating a new event .***



## 2.5 Index Testing Tool

The Index testing tool tracker is used to track information about individuals living with HIV to record details regarding their sexual or injecting partners, their biological children, or biological parents for HIV testing and counseling. This tool allows recording information about contacts and attempting to reach them.

There is one Program stage :

- Contact Tracing and Outcome.

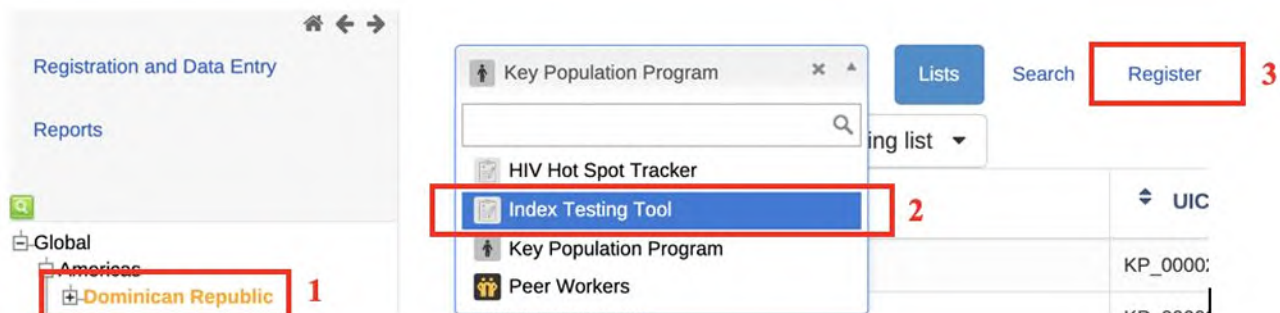
### 2.5.1 Create an IT contact

Before linking an index client and a contact, you need to create a contact. The steps for creating a contact are explained below.

1. Navigate to the Tracker Capture app
  - a. To do so, in the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.



2. Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit you would like to create the IT contact. Then select 'Index Testing Tool' from the programs list and click on the Register button at the top of the page.



3. The Index Testing Tool form is displayed.

Index Testing Tool
Lists
Search
Register

### Enrollment

Enrolling organisation unit	<input type="text" value="Dominican Republic"/>
Date contact was elicited from index client	<input type="text" value="2020-10-20"/>

### Profile

First name	<input type="text"/>					
Last Name	<input type="text"/>					
Age (approximate age is okay)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid #ccc; padding: 2px;">Date of bir</td> <td style="border: 1px solid #ccc; padding: 2px;">Years</td> <td style="border: 1px solid #ccc; padding: 2px;">Months</td> <td style="border: 1px solid #ccc; padding: 2px;">Days</td> <td style="border: 1px solid #ccc; padding: 2px; background-color: #f08080; text-align: center;">✕</td> </tr> </table>	Date of bir	Years	Months	Days	✕
Date of bir	Years	Months	Days	✕		
Sex at birth	<input type="text" value="Select or search from the list"/>					
Relationship to index client	<input type="text" value="Select or search from the list"/>					
Cell Phone no or Alternate no	<input type="text"/>					
Preferred PNS approach	<input type="text" value="Select or search from the list"/>					

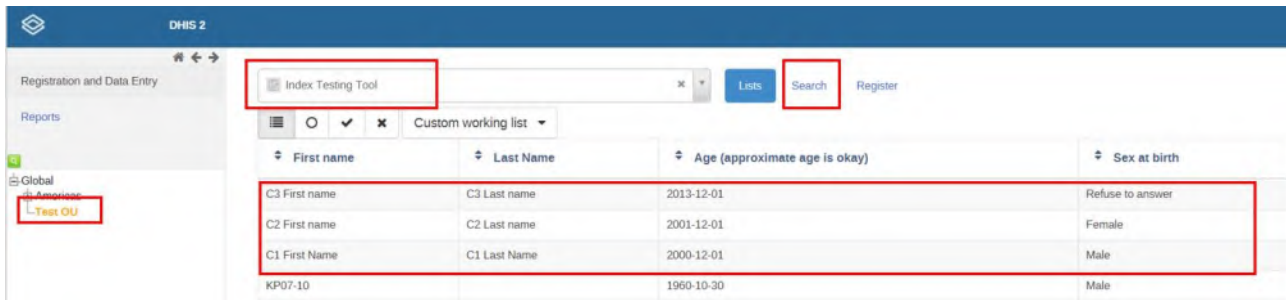
Save and continue
Save and add new
Print form
Cancel

4. Fill out the form and then select **Save and Continue**.

**N.B :** Most of the time, a contact will be created from the Relationships widget from the HIV client dashboard. Follow the steps described in the relative section.

## 2.5.2 Search for an contact of an index client

From the capture, when you have selected the Index testing tool program tracker you can see the list of contacts registered in this OU.

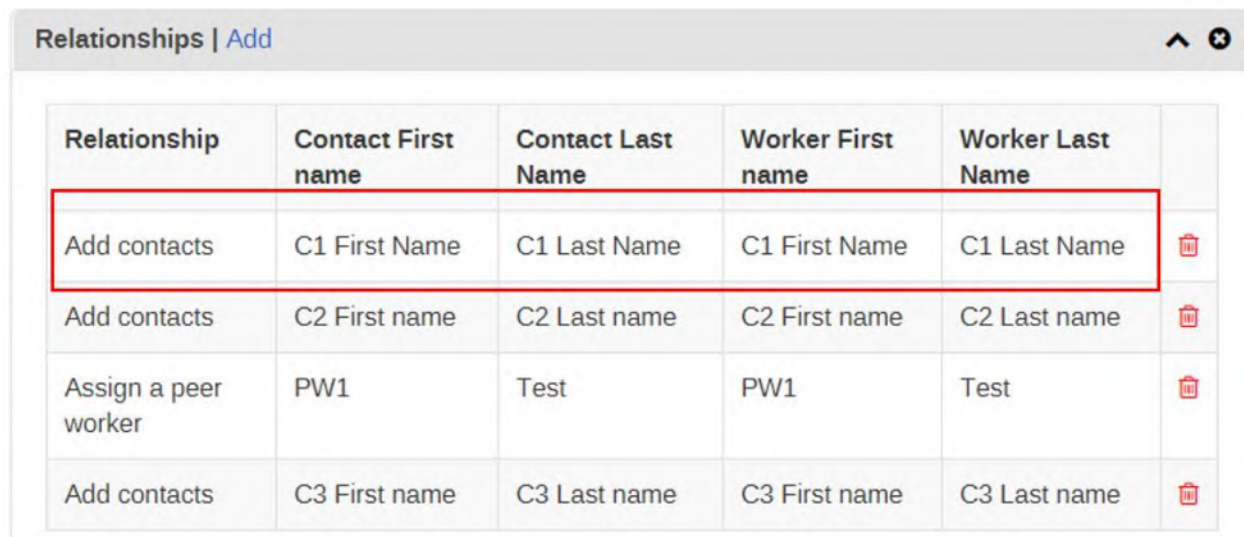


## 2.5.3 Create / Update an ITT event

Once a contact of an index client is created, you want to record the attempt to reach it and the outcome of the tracing. For this you need to create an event for the chosen contact.

1. Open the 'Index Testing Tool' dashboard page from the tracker capture app and choose the relevant Index event from the list or search for it.

*N.B:* You can access a specific contact from the relationship widget from the HIC client dashboard. Click on the chosen contact displayed in the widget and you will open the contact dashboard.



2. Select the program stage Contact Tracing and Outcome on the Tabular Data Entry section.

Tabular Data Entry

Contact Tracing and Outcome

Date of contact attempt \* 2020-12-17

Next contact 2020-12-17

**Contact tracing**

Contact by Phone

Contact outcome Contacted

**Contact information**

HIV status reported by contact Negative

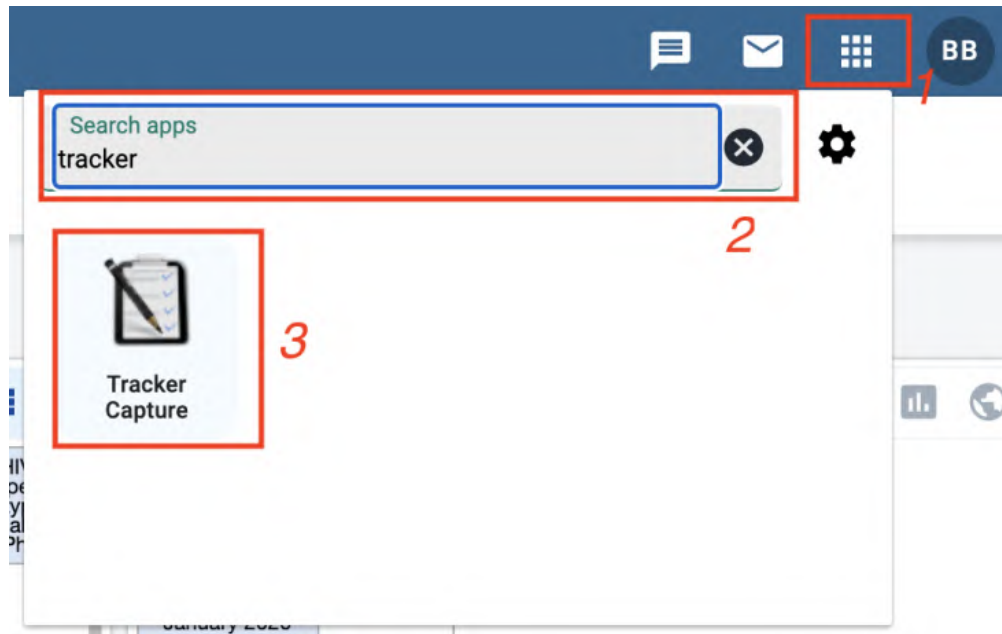
Contact Consented for Testing ?  Yes  No

Complete Delete Print form

3. **Create a new ITT Event:** Use the blue **+** button to create a new IT event. Please note it may take a few minutes to record the assessment form for the first time.
4. **Update an IT Event:** If an IT record already exists, the most recent one will open automatically for you to edit.

## 2.6 Remove data - Delete an event

First, navigate to the relevant dashboard of the event that needs editing. To do so, in the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.



- a. Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit. Then on the right, the relevant program for the event from the programs list. Then select the relevant client from the list of items that appear.

*Example: We want to delete the last PrEP visit for the client KP-32*

The screenshot shows the DHIS2 interface for the HIV Program Tracker. The left sidebar contains navigation options: 'Registration and Data Entry', 'Reports', 'Global', 'Americas', and 'Test OU'. The main content area displays a table with the following data:

Registering unit	First name
Test OU	Lwanda
Test OU	KP32
Test OU	KP31
Test OU	KP30

### **Delete an event (form)**

Once arriving on the relevant event's dashboard, to delete an event, first navigate to the **Tabular Data Entry** box. Then, select the Program Stage (1) on the left side of the box by clicking on it. You can select the chosen event from the event history section (2)

Tabular Data Entry

Date of visit	Organisation unit	PrEP status	Next follow up date
2020-07-02	Test OU	Initiated	2020-08-01
2020-08-01	Test OU	Ongoing	2020-10-30
<b>2020-10-30</b>	<b>Test OU</b>	<b>Ongoing</b>	<b>2021-01-30</b>

Date of visit \*

2020-10-30

Implementing Partners

Type of services

Type of services \* Direct service delivery

Drug dispensing

PrEP status Ongoing

PrEP\_RETURN\_OTHER

Preferred PrEP regimen Daily

How many pills do you still have at home? 2

Number of pills dispensed 90

Dispensing location Onsite, at the facility

Last date with PrEP (if taken daily) 2021-01-30

Next follow up date 2021-01-30

Now the form is open scroll to the bottom of the form, where you will see a delete button which you can click to permanently delete the event.

Delete

*Use with caution!*



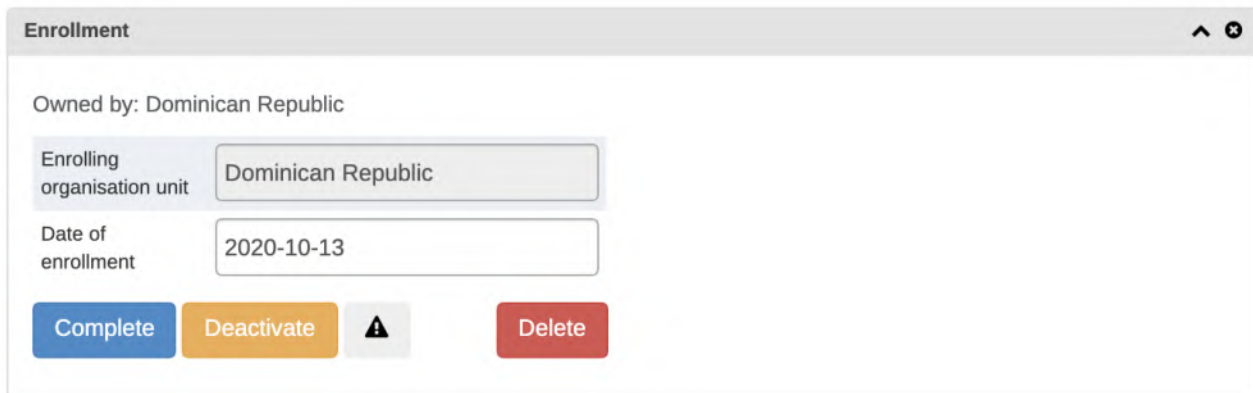
### Delete a client (event enrollment)

To delete the entire client, you must first delete a client's enrollment in the program.

**This can only be done if they have no events at all, this is a safety measure to prevent accidentally deleting a client.**

To delete the enrollment

1. Navigate to the relevant TEI (client, contact, PW, Hot Spot) dashboard page.
2. Look near the top of the client's page for the enrollment widget as shown below:

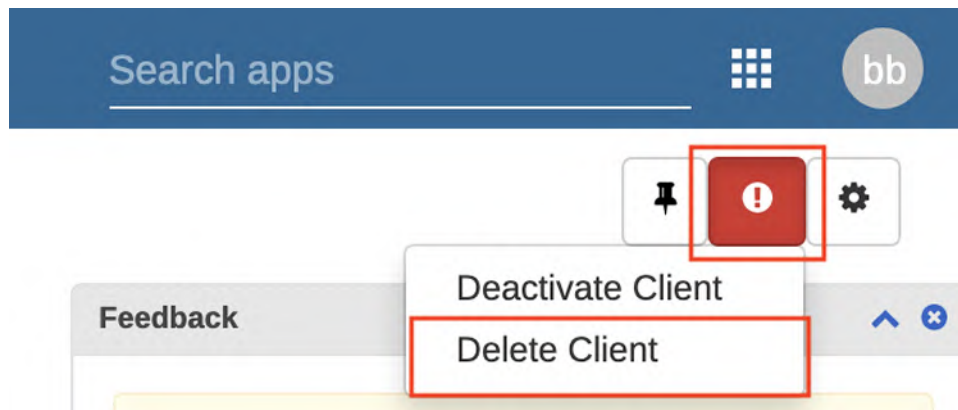


3. Click the delete button here to permanently delete the enrollment of this client from the relevant program.

Delete

**Use with caution!**

Now, click on the **!** icon and select **Delete Client**.



**Warning** - this will completely remove them from the system.

*It is only possible to proceed with this if all the contact's events and enrollments have been deleted.*

# 3. Analysis

---

*The FHI 360 system not only supports entering a wide variety of data into the system where it is stored, FHI 360 can also be used to analyse this data as well.*

*You are encouraged to not only enter data but also, with the help of this guide, create and customize tables, charts and maps, all of which will help you understand the story your data is telling. Chart and tables (referred to as visualizations) can also be shared with other groups and may be used as a reference globally, for the entire FHI 360 network.*

*Sharing: all charts and tables can also be downloaded in pdf/Jpg format to be shared with HIV Program Tracker members or stakeholders that may require them. Please always make sure you have permission to share the data before downloading and sharing the information outside of the database.*

## *A note on sharing when creating new graphs/tables*

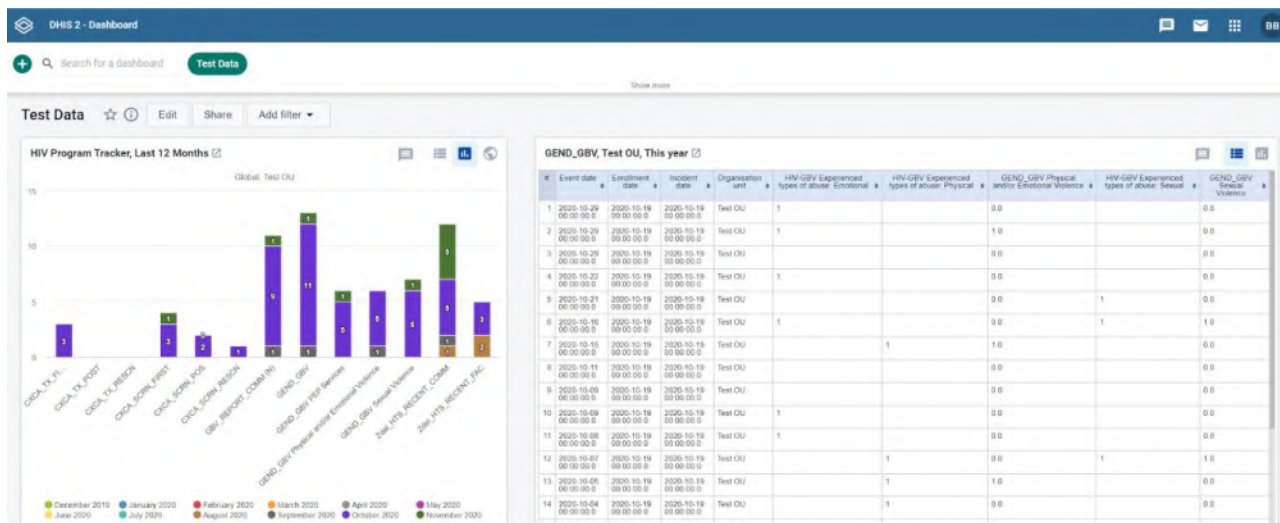
*All visualizations (charts, maps and tables and dashboards) created in the system will be private to you by default; this means other users in the system will not be able to access them (even admins for personal dashboards). If you have a visualization which you think would be useful for others, you can share it with other HIV Program Tracker Programs. It is important to note that, although the*

other HIV Client Programs will have access to your chart after you have shared it, they will not be able to see your data on the chart, only the data for their own country.

For example, if the HIV Client Program in Dominican Republic shared a chart showing the number of impacts they had submitted by month for the last year, and a HIV Client Program user in Benin opened this chart, they would see the number of impacts submitted in Benin by month for the last year, but not the number of impacts submitted in Dominican Republic. To reiterate, this is because each country user only has access to input/visualize data from their own country.

### 3.1 Dashboards

A dashboard page, not to be confused with the contact dashboard or TEI dashboard page, is what you see when you first login to DHIS2. See a screenshot below of the Annual survey dashboard.

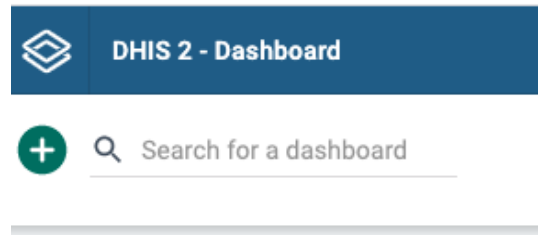


As a user in the FHI 360 system, you will have access to a number of dashboards that have been prepared. However, you are also welcome to make your own dashboards; these will be private by default. On your own dashboards you are free to customise everything on it, for example which charts it should have, the layout of those charts, the dashboard name and description. For more details on how to do this yourself, see the sections below:

### 3.1.1 Create new dashboards

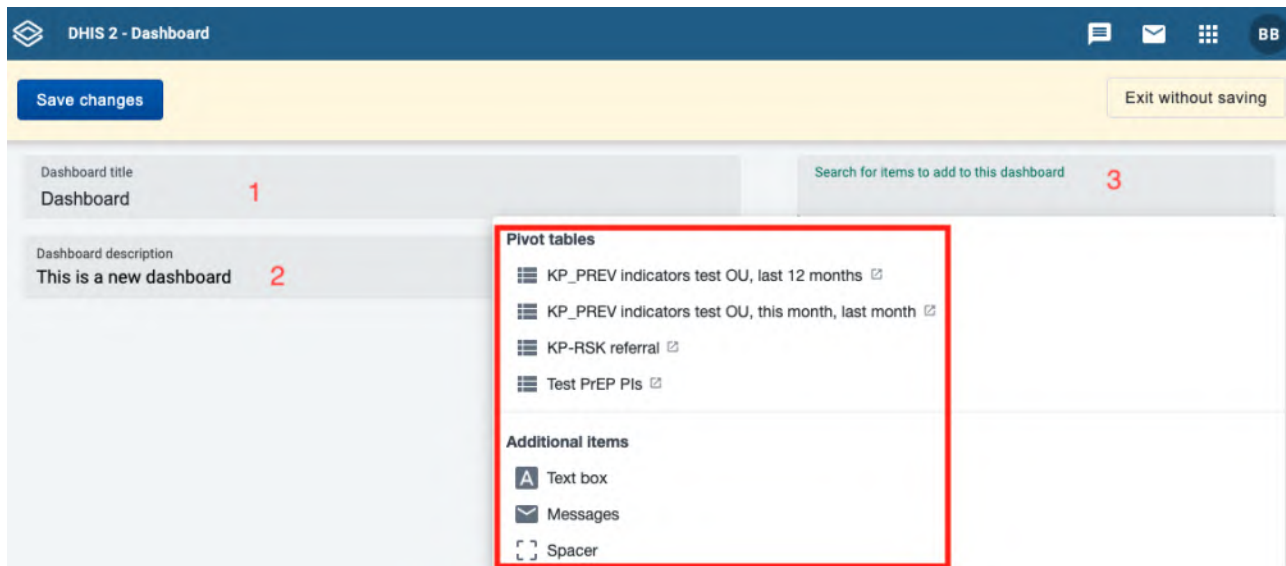
To create a new dashboard we need to

1. Click on the green + button on the top left of the Dashboard page

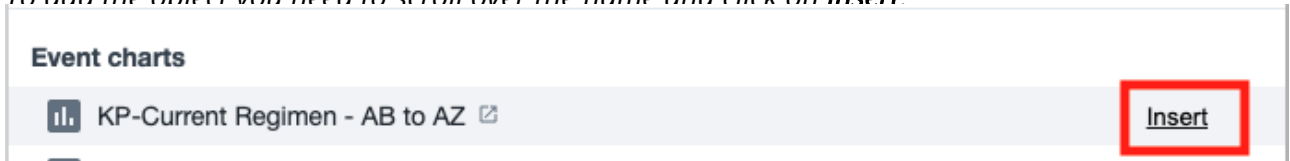


2. In the new page, provide the new dashboard with the following details:

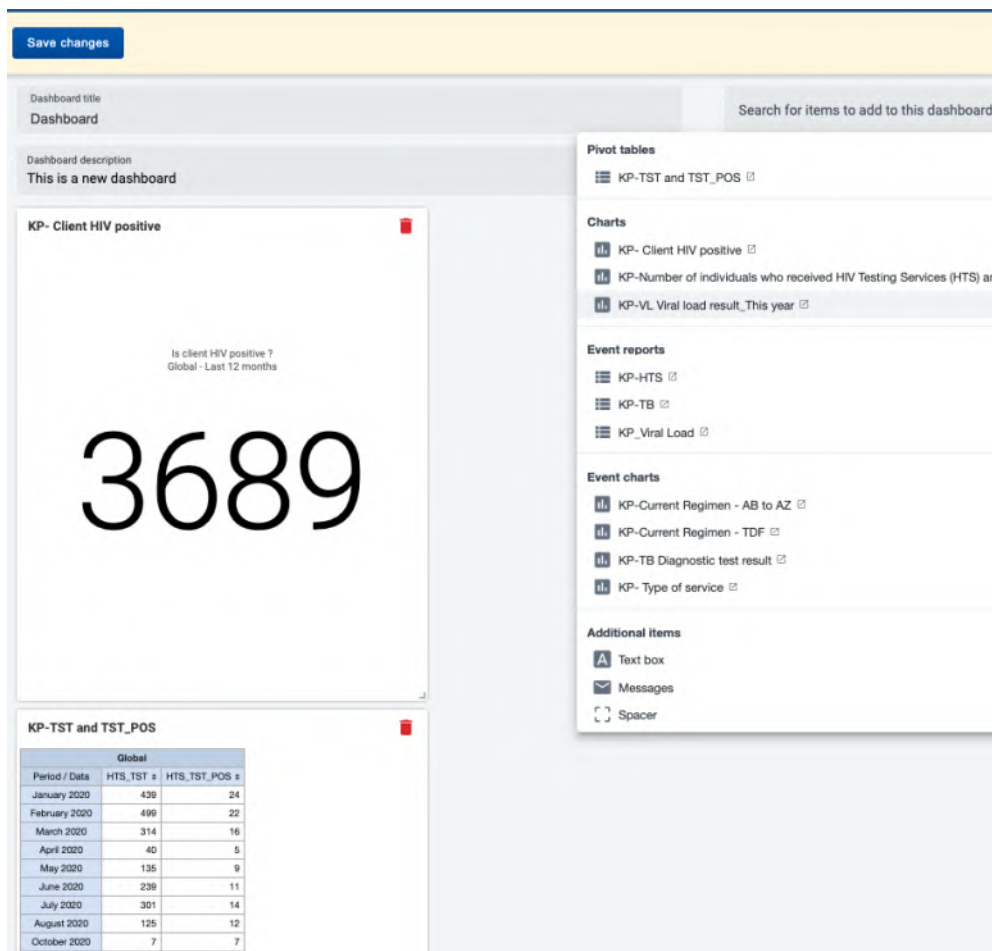
- 1) **Title** - this should be a name that reflects the dashboard's components.
- 2) **Description** - only if necessary; this will provide more information about the dashboard.
- 3) **Items to be added** - these include pivot tables, charts, maps, text etc.



3. To add the object you need to scroll over the name and click on **Insert**

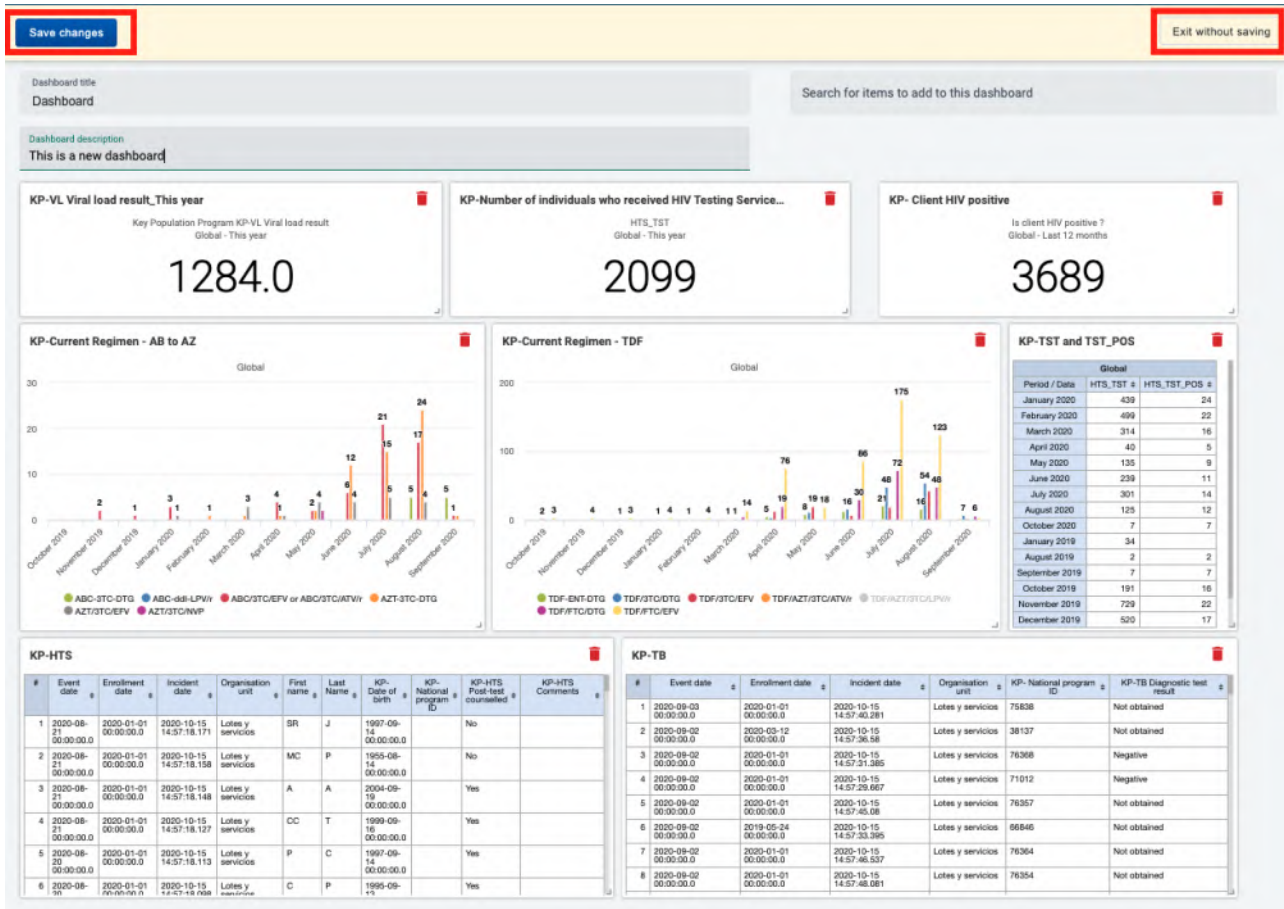


4. The new objects will be added to the dashboard vertically, with each item placed one above the other.

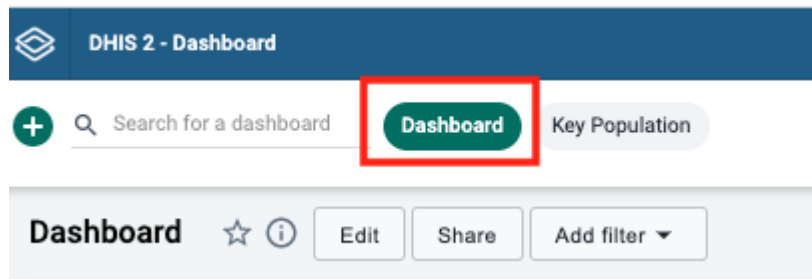


5. Each each object can be

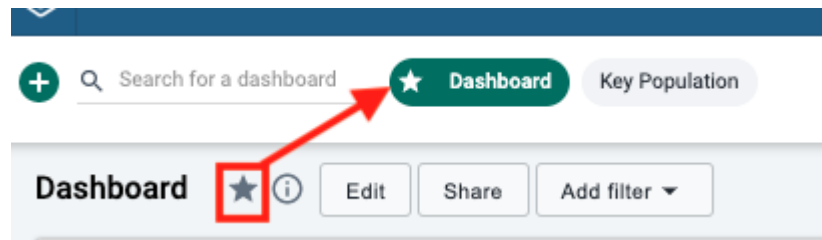
- Resized by clicking on the bottom right corner
- Positioned as needed in the dashboard by doing a drag and drop
- Removed by using the trash symbol on the top right corner



6. Once all edits to the dashboard have been completed, click on:
  - a. Save the changes to save the dashboard as is it displayed
  - b. Exit without saving to discard all changes and delete the dashboard if it wasn't saved before
7. Once the dashboard is saved it will listed in the Dashboard App



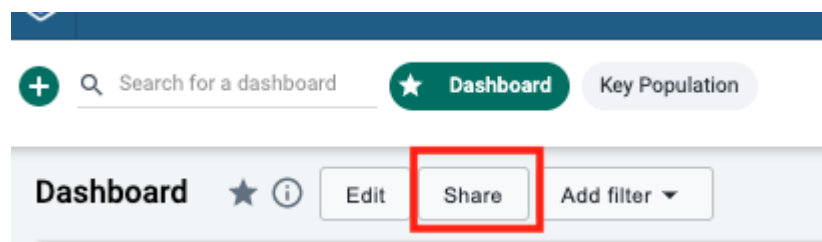
8. *Clicking the star button will mark the Dashboard as a favorite, this favorite will be the first one to be displayed when logging into the system.*



### 3.1.2 Sharing settings on the dashboard

*Dashboards, by default, are viewable by the user who created it. In order to allow other users to have access to view and/or edit it, we need to share it with them.*

1. *To do so, once within the relevant dashboard, click on the **Share** button*



2. *A prompt requesting the Sharing settings details will be displayed; under 'Add users and user groups' type the name of the user or group the dashboard is intended to be shared with. Click on the name to select it.*









### Sharing settings

Dashboard


Created by: bao-admin bao-admin

#### Who has access

 Public access No access	 
 External access No access	 

Add users and user groups

Proje|

Project review 

[CLOSE](#)

- Once added it will appear under the section 'Who has access' list. View the editing rights by selecting the pencil symbol on the right.

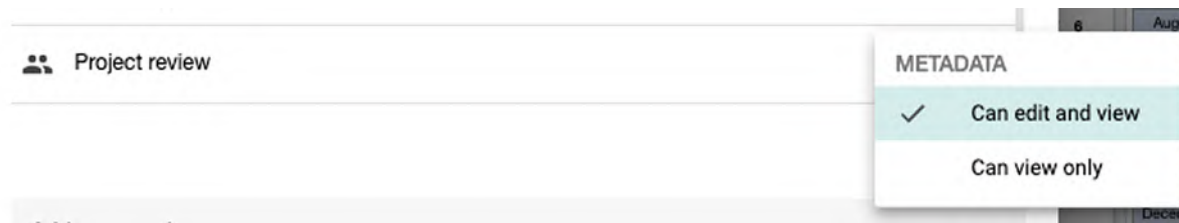
Dashboard


Created by: bao-admin bao-admin

#### Who has access

 Public access No access	 
 External access No access	 
 Project review	 

- Using the pencil symbol, it is possible to change the access for any user or user group.



5. By default, Public access and External access is disabled but can be modified by clicking on this  symbol.

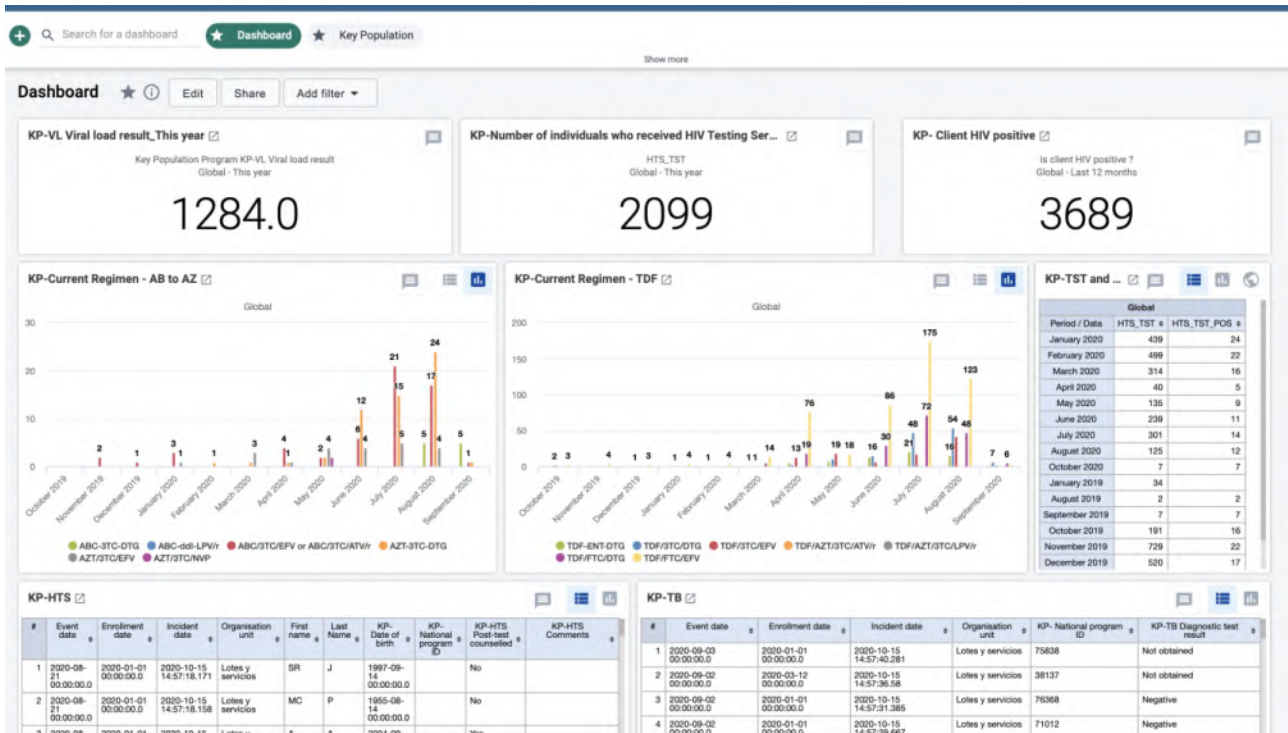


6. Once completed click on **Close**.

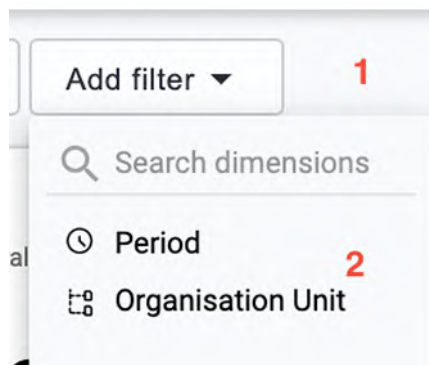
### 3.1.3 Filter a dashboard

To apply a 'filter' in a dashboard means utilizing the filter on all objects within a dashboard. Applying a filter will override the original value in the dashboard.

1. Using the Dashboard menu at the top of the page, select the dashboard that is to be filtered.



2. Next, click on the **Add filter** button and then select the desired dimension type. In this case we will use the 'Period'.

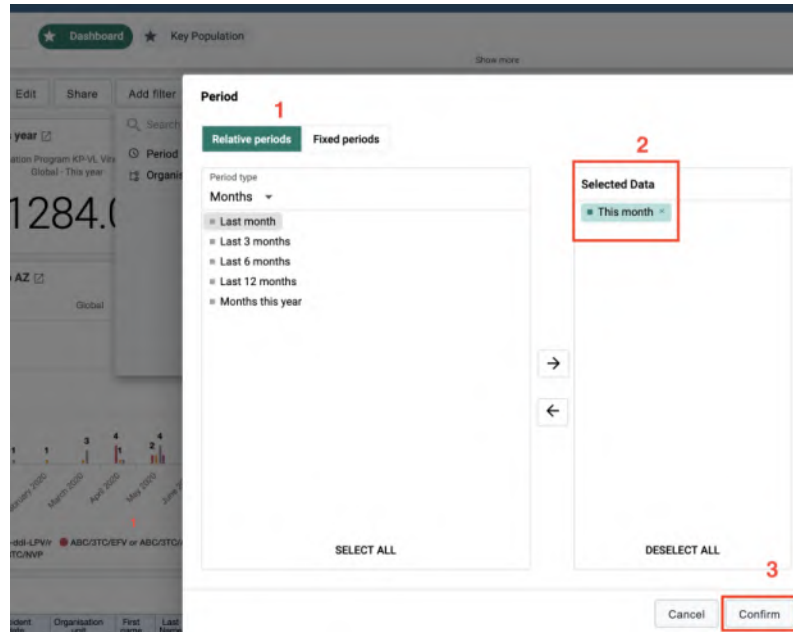


3. When prompted, select:

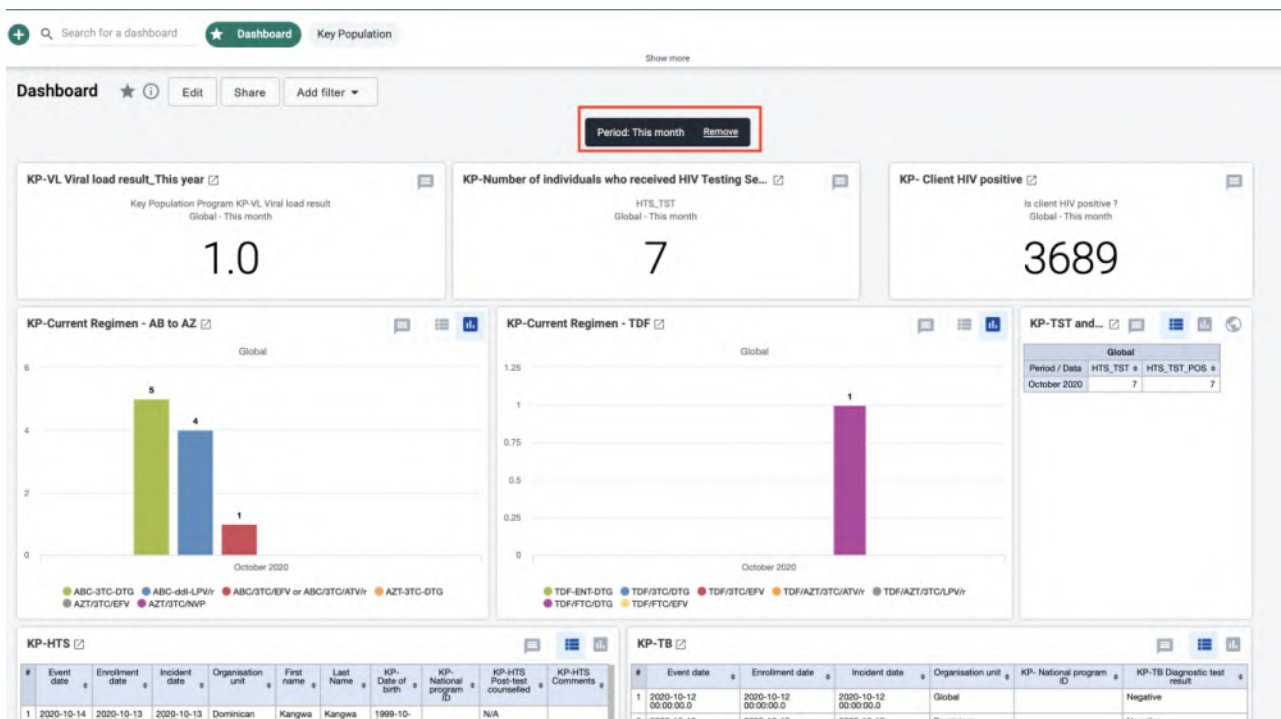
a. 'Relative periods'

b. Period type: 'Months,' 'This month'

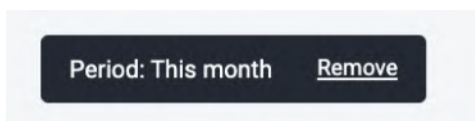
c. Then click **Confirm**



4. The data on the dashboard will now only show results for the selected period.



5. This filter can be removed by selecting another dashboard, or by clicking on Remove.



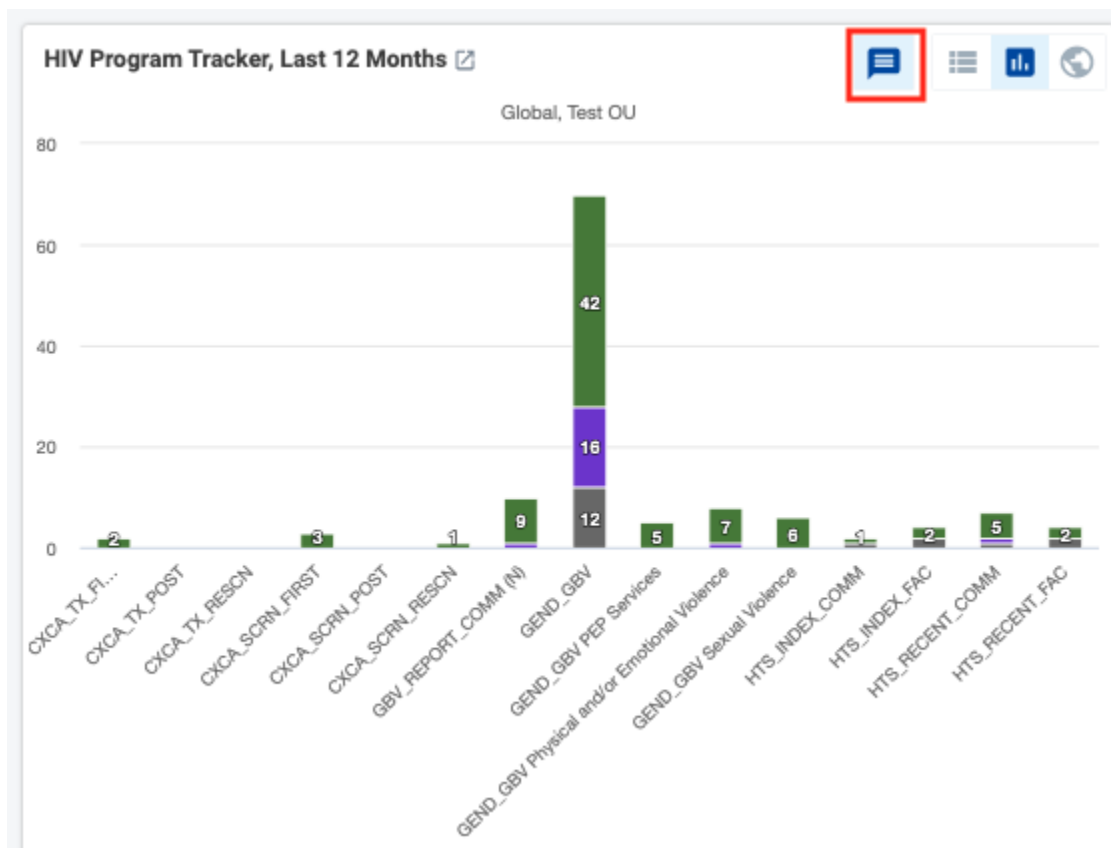
### 3.1.4 Creating Interpretations

Using the Interpretations features in dashboards, users can write interpretations for objects in dashboards and tag users and user groups in the comments.

This feature allows users to:

- Create interpretations
- Tag users or user groups in comments
- Interact with other interpretations
- Edit and share interpretations
- Delete interpretations

1. To access the interpretations, first navigate to the dashboard with the item or items of interest.
2. Find the item within the dashboard, then click on the speech bubble symbol in the upper right corner of this item. Next, select 'Show interpretations and details'.

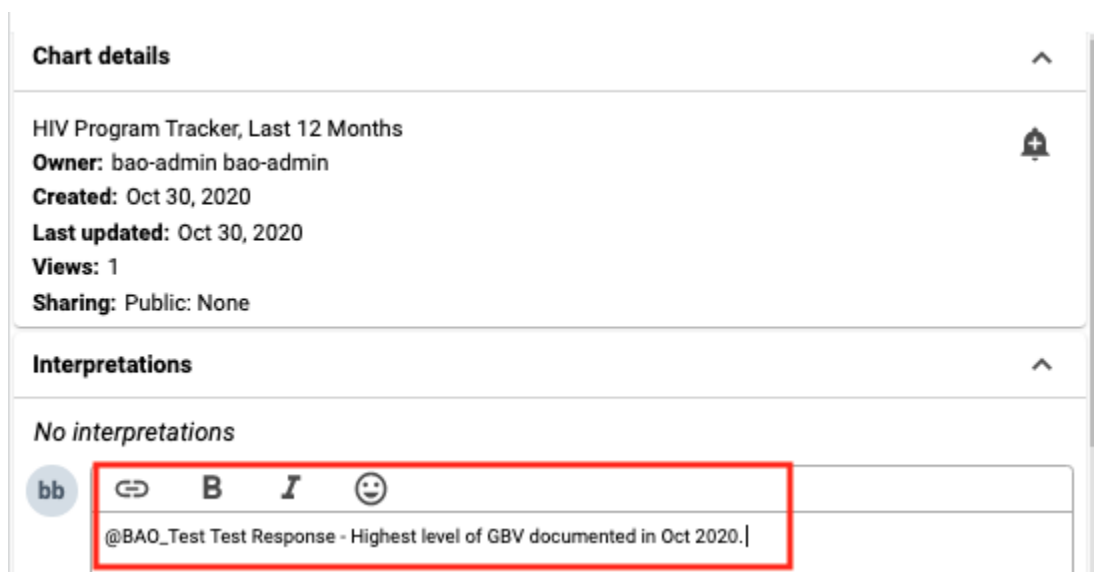


Below the object you can see the object's details which contain a description, the owner of the object, when it was created and updated, object views and, lastly, sharing details. It is possible to collapse this section by clicking on the up arrow.



Located below these object details are the interpretations. Here you can view other users' interpretations of the object and write your own. You can also reply to other interpretations with your own interpretations.

Within your own interpretation you can tag other users and user groups. It is also possible to add links, format the text and add emojis. Once you add a new interpretation, click on **Save interpretation**.



## 3.2 Event reports

*Data can be put into two main categories, quantitative and qualitative. Quantitative data is numerical or binary data, including numbers or 'yes/no'. We can also get quantitative information from text fields with drop down menus, for example, the number of forms where 'option A' was selected. Qualitative data refers to open text fields which may contain anything the user wants to write; this cannot be analysed in the same way. Therefore, FHI 360 has different applications for the various types of data.*

### 3.2.1 Introduction to event reports

*To understand how the event report app works and how to use it to create and share reports which are customized and most useful to you, see section below:*

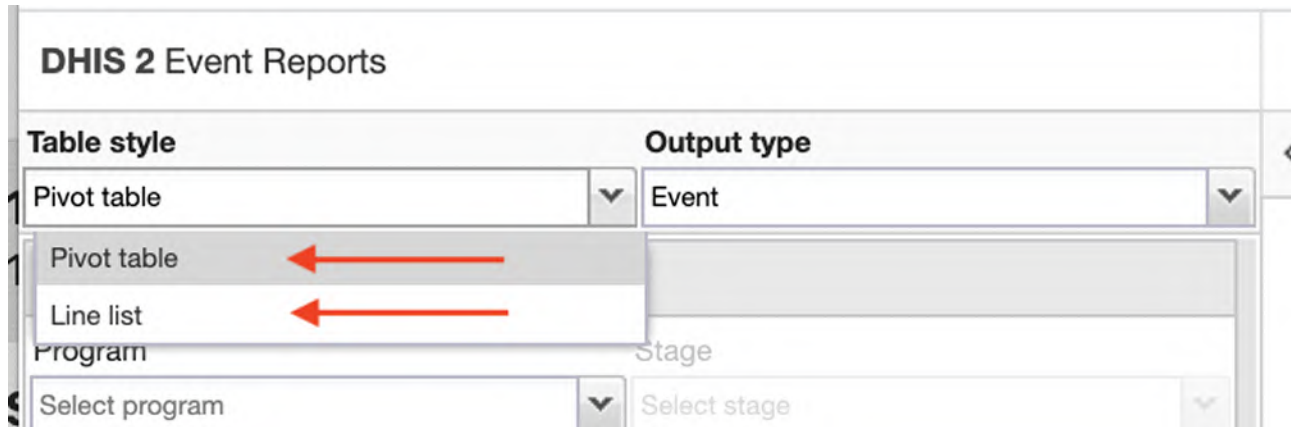
#### *Types of analysis*

- 1) *In the Event Reports app, analysis can be performed using two different methods:*
  - a) *Pivot table for aggregate value of events*
  - b) *Line list of events*



**DHIS 2 Event Reports**

Table style	Output type
Pivot table	Event
Pivot table	
Line list	
Program	Stage
Select program	Select stage



2) Analysis can be performed using multiple dimensions available in the left side menu. These include:

- a) Data
- b) Period
- c) Organisation units

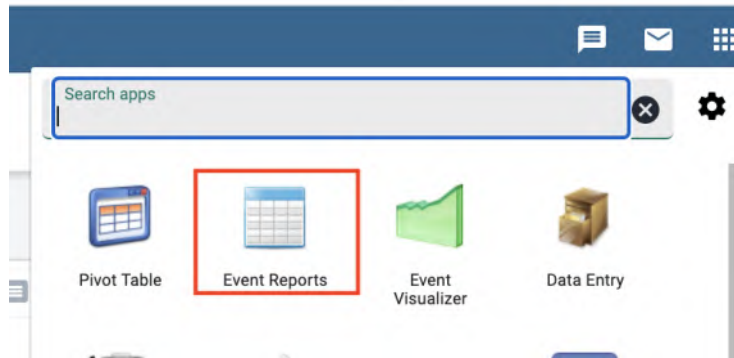
**DHIS 2 Event Reports**

Table style	Output type
Pivot table	Event
<b>Data</b>	
<b>Periods</b>	
<b>Organisation units</b>	
<input type="checkbox"/> User org unit <input type="checkbox"/> User sub-units <input type="checkbox"/> User sub-x2-units	
Global	
Americas	
Test OU	

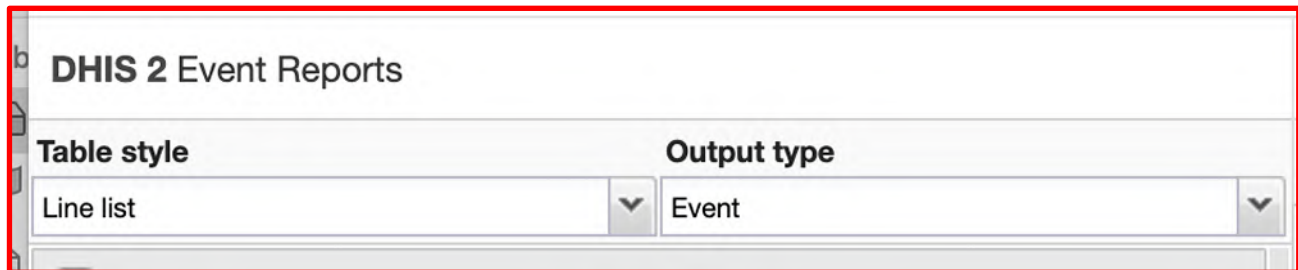
*Each dimension can have a corresponding filter.*

### 3.2.2 Pivot table style event reports - Viewing data in event report

1. Select Event report in the Apps menu. In this example we will visualize data for the HIV Program Tracker.



2. Select the **Table style** 'Line list' and **Output type** 'Event'.



3. For this example, select the following details for the **Data** dimension:

- a) **Program:** HIV Program Tracker
- b) **Stage:** ART Register

- c) Under **Available** all of the elements related to the program and this program stage are listed. This includes all of the data elements [DE], program attributes [PA] and program indicators [PI] (d)
- d) Scroll through the list of Data Elements and, or use the search feature to add the following **Data** items to the selected data items list. Double click the item to move it to the selected box.
- i) [PA] First name
  - ii) [PA] Last name
  - iii) [PA] HIV - UIC (program ID)
  - iv) [DE] HIV - ART Data start ARV
  - v) [DE] HIV - ART Treatment status

Table style		Output type	
Line list	▼	Event	▼
<b>Data</b>			
Program		Stage	
HIV Program Tracker	▼	ART Register	▼
statu	×	All	▼
[DE] HIV-ART TPT status [PA] HIV- HIV status at enrollment [DE] HIV-ART Patient status			
Selected data items <span>⌵</span>			
[PA] First name			Remove
Contains	▼		
[PA] Last Name			Remove
Contains	▼		
[PA] HIV- UIC (program ID)			Remove
Contains	▼		
[DE] HIV-ART Date start ARV			Duplicate Remove
=	▼		
[DE] HIV-ART Treatment status			Remove
One of	▼	Search..	▼
		No selected items	

The 'Remove' button is used to remove a selection of data items.

The 'Duplicate' button is used to duplicate a data item.

A filter can be applied to the selected data items by using a data items' filter drop down menu: 'One of,' 'Contains,' 'greater than,' 'equal to,' etc.

Example: HIV-ART Treatment status is equal to Ongoing will list all the TEI which are under ART

[DE] HIV-ART Date start ARV Duplicate Remove

=

[DE] HIV-ART Treatment status Remove

One of  Search..  No selected items

**Periods**

- Ongoing
- Stopped

4. Under **Periods** two options are available, 'Fixed and relative periods' and 'Start/end dates.'

- Fixed and relative periods
- Fixed and relative periods
- Start/end dates

'Start/End dates' are used to select a specific range of dates, and 'Fixed and relative periods' to select a period type such as Daily, weekly, etc.

For this example, select the **Period** 'Fixed and relative periods', and the **period type** 'Yearly'. Move the year '2020' and '2019' from the **Available** to **Selected** box, double click on the year, or use the available arrows to do so. Also, make sure the 'This month' box is checked.

**Periods**

Fixed and relative periods ▼

Yearly ▼
Prev year
Next year

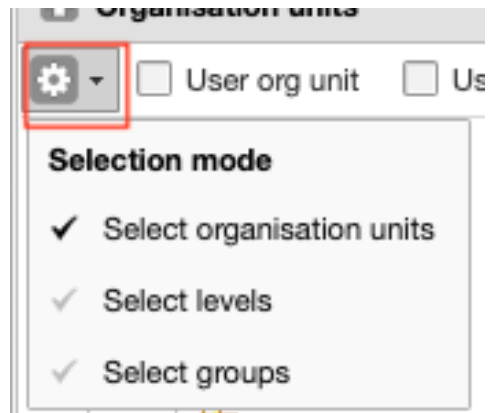
Available
> >>
<< <
Selected

2018	2019
2017	2020
2016	

<p><b>Days</b></p> <input type="checkbox"/> Today <input type="checkbox"/> Yesterday <input type="checkbox"/> Last 3 days <input type="checkbox"/> Last 7 days <input type="checkbox"/> Last 14 days <p><b>Months</b></p> <input checked="" type="checkbox"/> This month <input type="checkbox"/> Last month <input type="checkbox"/> Last 3 months <input type="checkbox"/> Last 6 months <input type="checkbox"/> Last 12 months <input type="checkbox"/> Months this year <p><b>Six-months</b></p> <input type="checkbox"/> This six-month <input type="checkbox"/> Last six-month <input type="checkbox"/> Last 2 six-months	<p><b>Weeks</b></p> <input type="checkbox"/> This week <input type="checkbox"/> Last week <input type="checkbox"/> Last 4 weeks <input type="checkbox"/> Last 12 weeks <input type="checkbox"/> Last 52 weeks <input type="checkbox"/> Weeks this year <p><b>Bi-months</b></p> <input type="checkbox"/> This bi-month <input type="checkbox"/> Last bi-month <input type="checkbox"/> Last 6 bi-months <input type="checkbox"/> Bi-months this year <p><b>Financial years</b></p> <input type="checkbox"/> This financial year <input type="checkbox"/> Last financial year <input type="checkbox"/> Last 5 financial years	<p><b>Bi-weeks</b></p> <input type="checkbox"/> This bi-week <input type="checkbox"/> Last bi-week <input type="checkbox"/> Last 4 bi-weeks <p><b>Quarters</b></p> <input type="checkbox"/> This quarter <input type="checkbox"/> Last quarter <input type="checkbox"/> Last 4 quarters <input type="checkbox"/> Quarters this year <p><b>Years</b></p> <input type="checkbox"/> This year <input type="checkbox"/> Last year <input type="checkbox"/> Last 5 years
---	---	--

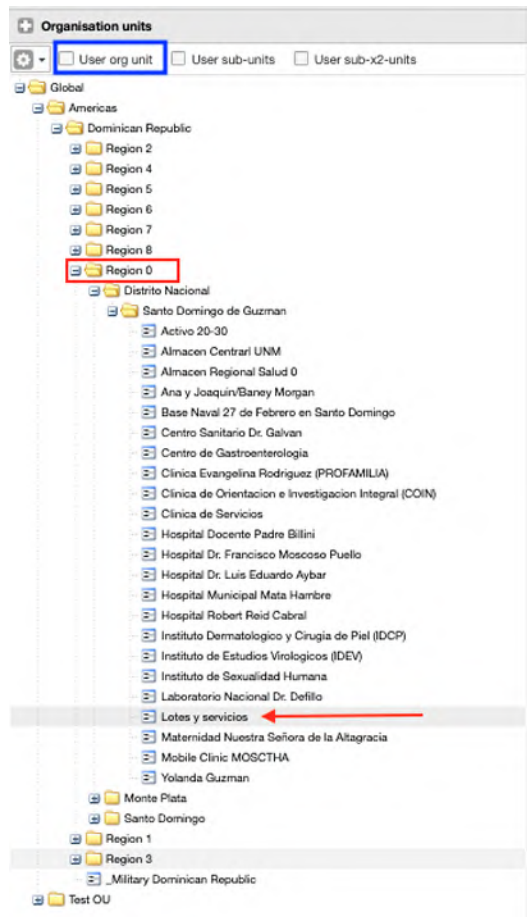
5. Under the **Organisation Units** section, we will need to define the location of the data that will be displayed.

- a. Click on the arrow next to the gear button to expand the dropdown menu for the selection mode menu, which provides the mode option for your OU selection, such as 'levels'.



- b. Click on the + button next to the parent organisation unit to display the children below it. For this example, expand the organisation unit **Global > Americas > Dominican Republic > Region 0 > Distrito Nacional > Santo Domingo de Guzman > Lotes y servicios**.
- c. Check the box 'User org unit' to only display data for organisation units that you have access to.





6. Click on **Update** to display the final result

- a. The double arrows within each field in the table header allow you to sort the columns in the report.

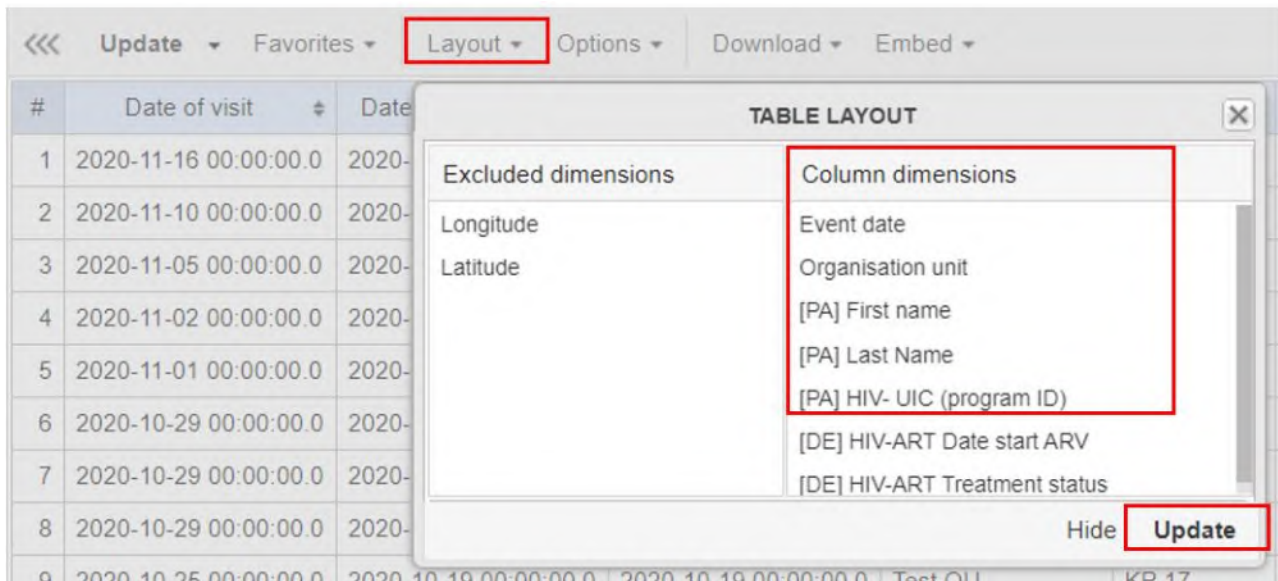
#	Date of visit	Date of enrollment	Incident date	Organisation unit	First name	Last Name	HIV- UIC (program ID)	HIV-ART Date start ARV	HIV-ART Treatment status
1	2020-11-16 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP16	Test	KP_0000264		Ongoing
2	2020-11-10 00:00:00.0	2020-01-01 00:00:00.0	2020-11-06 00:00:00.0	Test OU	KP31	Test	KP_0000456	2020-11-10 00:00:00.0	Ongoing
3	2020-11-05 00:00:00.0	2020-08-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP27	Test	KP_0000438		Stopped
4	2020-11-02 00:00:00.0	2020-08-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP25	Test	KP_0000430		Stopped
5	2020-11-01 00:00:00.0	2020-09-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP24	Test	KP_0000426		Stopped
6	2020-10-29 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP19		KP_0000302	2020-10-29 00:00:00.0	Ongoing
7	2020-10-29 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP20	Test	KP_0000310	2020-10-29 00:00:00.0	Ongoing
8	2020-10-29 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP18	Test	KP_0000290	2020-10-29 00:00:00.0	Ongoing
9	2020-10-25 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP 17	Test	KP_0000270	2019-10-16 00:00:00.0	Stopped
10	2020-10-21 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP01	Test	KP_0000238	2020-10-13 00:00:00.0	Ongoing
11	2020-10-13 00:00:00.0	2020-10-19 00:00:00.0	2020-10-19 00:00:00.0	Test OU	KP14	Test	KP_0000304	2020-10-14 00:00:00.0	Ongoing
12	2020-10-01 00:00:00.0	2020-08-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP25	Test	KP_0000430	2020-10-01 00:00:00.0	Ongoing
13	2020-10-01 00:00:00.0	2020-01-01 00:00:00.0	2020-11-06 00:00:00.0	Test OU	KP31	Test	KP_0000456		Stopped
14	2020-10-01 00:00:00.0	2020-08-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP27	Test	KP_0000438	2020-10-01 00:00:00.0	Ongoing
15	2020-10-01 00:00:00.0	2020-08-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP23	Test	KP_0000424		Stopped
16	2020-10-01 00:00:00.0	2020-09-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP26	Test	KP_0000434		Stopped
17	2020-10-01 00:00:00.0	2020-09-01 00:00:00.0	2020-11-05 00:00:00.0	Test OU	KP24	Test	KP_0000426	2020-10-01 00:00:00.0	Ongoing
18	2020-09-01 00:00:00.0	2020-01-01 00:00:00.0	2020-11-06 00:00:00.0	Test OU	KP30	Test	KP_0000452	2020-09-01 00:00:00.0	Ongoing

<< < Page 1 of 1 > >> 1-32 of 32 cases

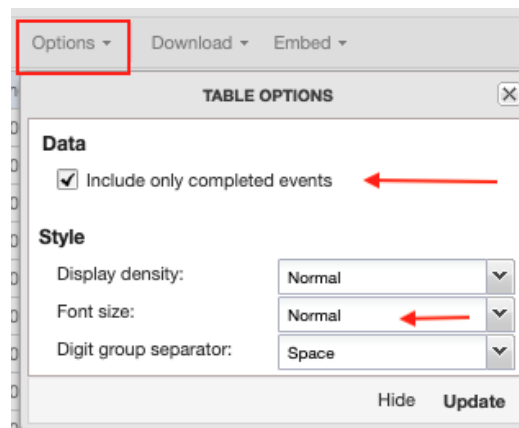
b. At the bottom of the page the number of pages are pages, along with the navigation symbols, and the total number of records.

7. The **Layout**, located in the header menu, allows you to modify the dimensions in the report.

- a. To test this, move a dimension from 'Excluded dimensions' to 'Column dimensions'
- b. Re-order the elements under Column dimensions
- c. Then click on **Update** to apply

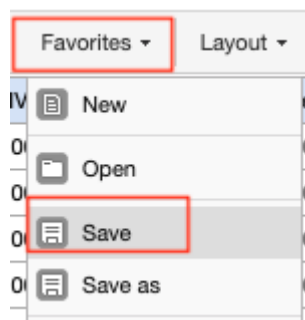


8. The **Table Options**, also located in the top header, let's you edit the 'Data' and 'Style' display. For example, you have the option to 'include only completed events' in the table. Feel free to test this by selecting one of these options and then clicking **Update**.



### 3.2.3 Save a report

1. Select **Favorites > Save**



2. To name the report, since DHIS2 doesn't have a folder structure, it is useful to save the reports using a standard naming convention per program that will make the item easier to find.

We suggest using the following standard naming convention recommended by most DHIS2 trainers:

*YourUsername\_Program name\_What\_Where\_When*

Using this standard format, for example, the naming convention would be:

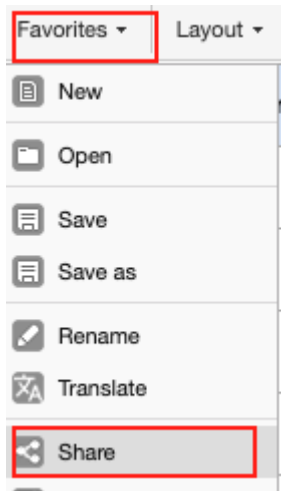
**BAO\_ART Register\_Site name\_ID\_GBV\_Unassisted\_User Org Unit\_2019\_2020**

- Program name: ART Register
- What (Data dimension): Site name\_ID\_GBV\_Unassisted
- Where (Org unit dimension): User Org Unit
- When: 2019\_2020

### **3.2.4 Share a report**

Once the report is saved by default it is only viewable by the user who created it. In order to share it with others, follow the steps below:

1) Click on Favorites then Share

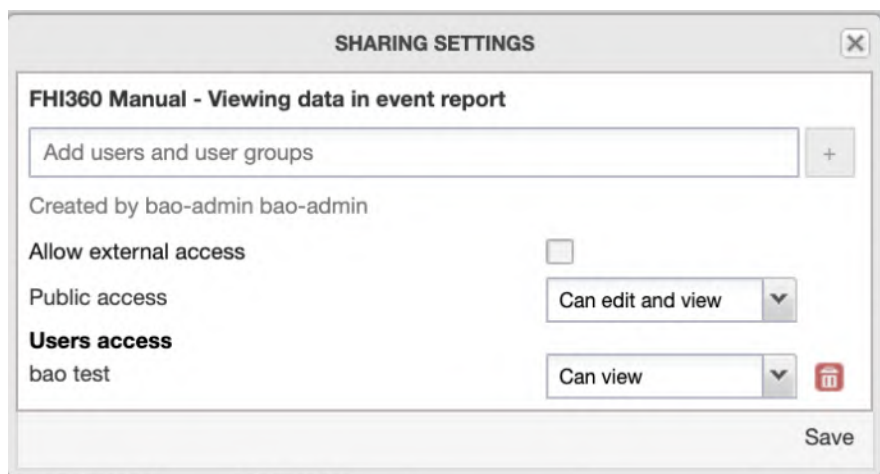


2) When prompted

a) Search for the group in the 'add users or user groups' field. Click on the + button to add them.

b) Once added, click on the downward arrow next to the dropdown menu to expand it and provide them with appropriate access. Remember that 'Can edit and view' will allow the user to modify the report, and for this reason, this type of access should be used with caution.

c) Click on **Save**

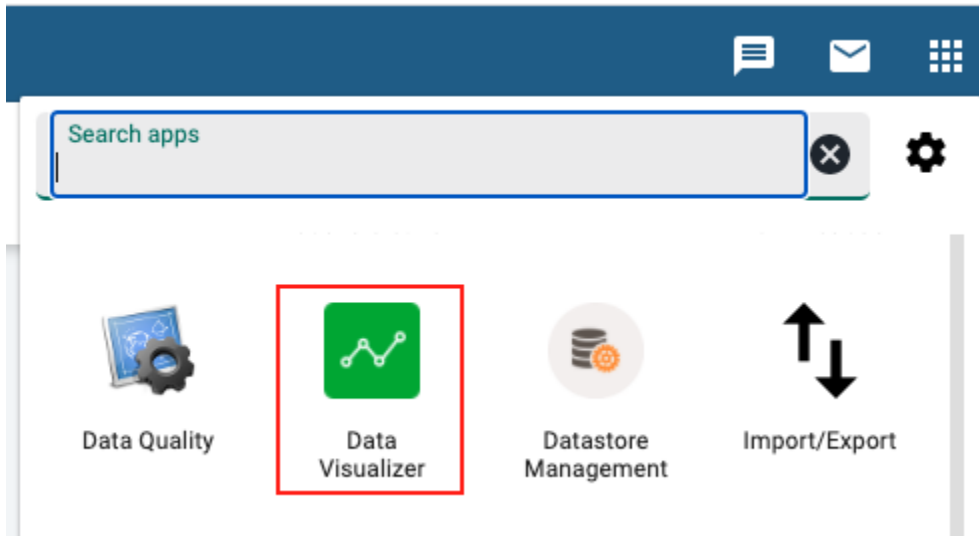


## 3.6 Data visualizer

*This app provides a method for analysing quantitative (numerical) data within the FHI 360 system. With this app it is possible to create visualizations for the integrated analysis of aggregate and event/tracker data through indicators. You can create tables, a wide variety of charts (bar, line, pie, radar ect.), or just display single values of significance, for example, total count of annual surveys. This app allows you to save and share your visualizations with others as well.*

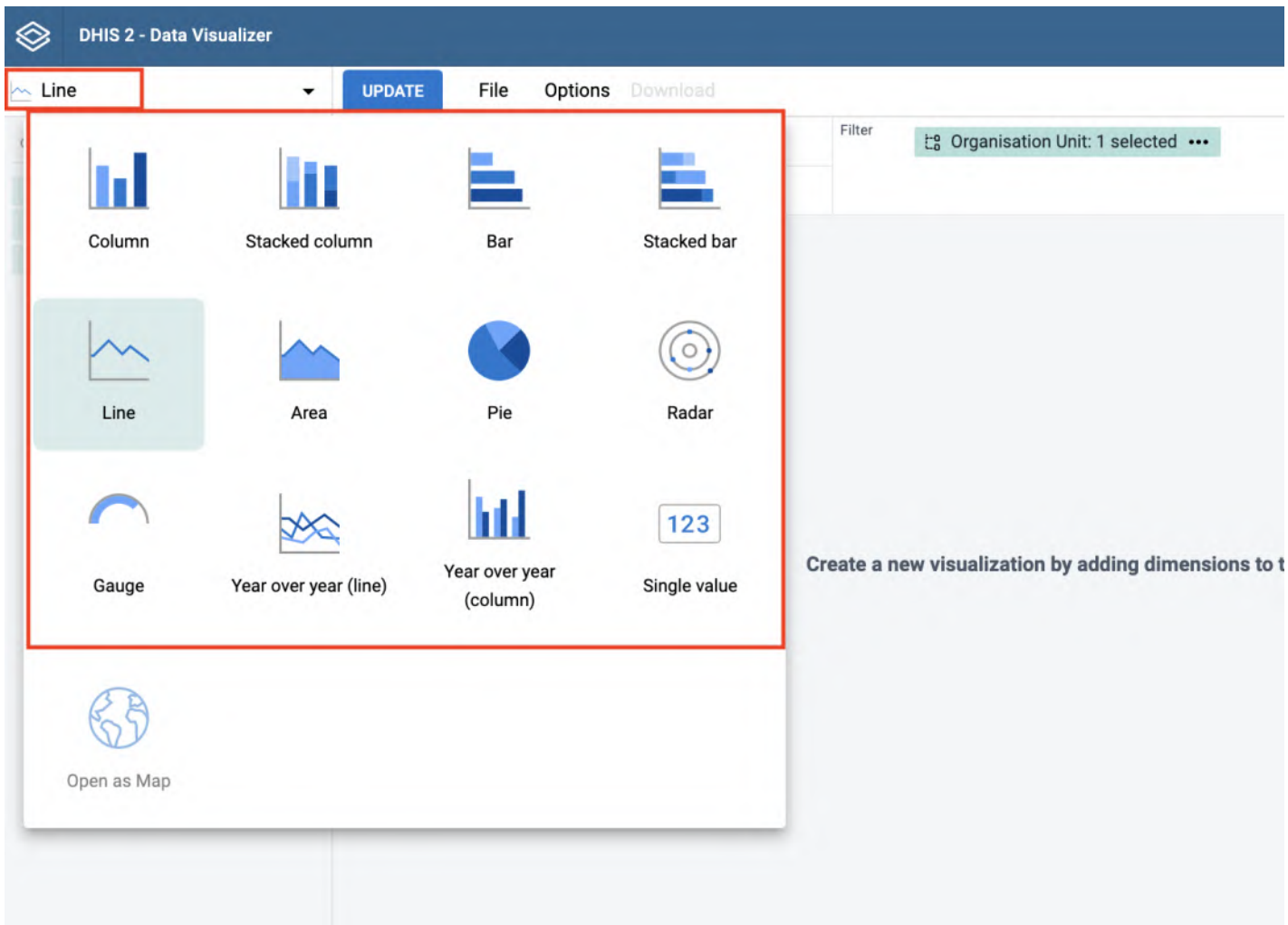
### ***3.6.1 Introduction to data visualizer***

1. In the App menu bar search for Data visualizer.



2. First, select the chart type menu in the upper left to choose which chart type you would like to use.





3. Now let's review how to proceed with inputs for the three key dimensions:

- a. **Data** dimension: this refers to the 'what', meaning data elements, indicators and datasets (reporting rates), and describes the phenomena or event of the data.
  - i. Under the **data** tab, select the data dimensions that represent which data values or calculated value from the form you want to display.

## Data

Data Type  
Program indicators ▼

Program  
HIV Program Tracker ▼

🔍 Search

- CXCA\_SCRN
- CXCA\_SCRN\_FIRST
- CXCA\_SCRN\_POS
- CXCA\_SCRN\_RESCN
- CXCA\_TX
- CXCA\_TX\_FIRST
- CXCA\_TX\_POST
- CXCA\_TX\_RESCN
- GBV\_REPORT\_COMM (N)
- HTS\_RECENT
- HTS\_SELF\_ASSISTED
- HTS\_SELF\_CONFIRMED Assisted

SELECT ALL

## Selected Data

- GEND\_GBV ×
- GEND\_GBV Physical and/or Emotional Violence ×
- GBV\_REPORT\_COMM (D) ×
- GEND\_GBV PEP Services ×
- GEND\_GBV Sexual Violence ×



DESELECT ALL

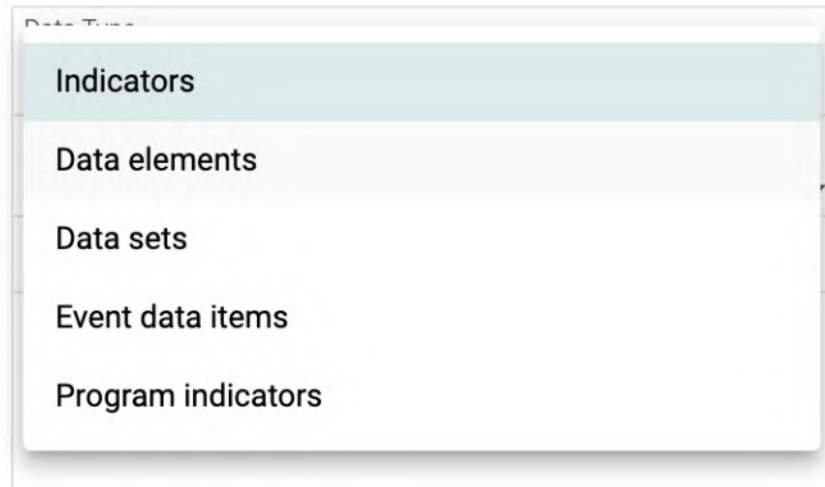
HIDE

UPDATE

*Please note DHIS2 is separated into different data types. Under the Data tab the various types are listed:*

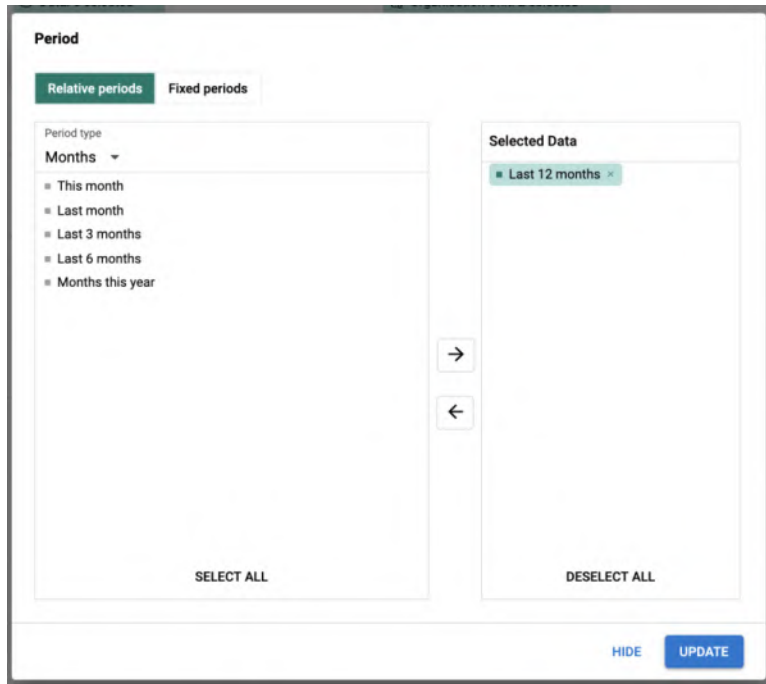
- *'Event data items' refer to raw data values entered for the programs.*
- *'Indicators' and 'Program indicators' are calculated values from the raw values in each program.*
- *'Data elements' and 'data sets' are data from a different data model based on aggregated values different from the Event/tracker programs*

## Data



b. **Period** dimension: this describes 'when' the event took place; in data visualizer you can create charts based on fixed or relative periods

- ii. The **period** input is the dimension that represents the date(s) you want to represent data for.



c. Organisation

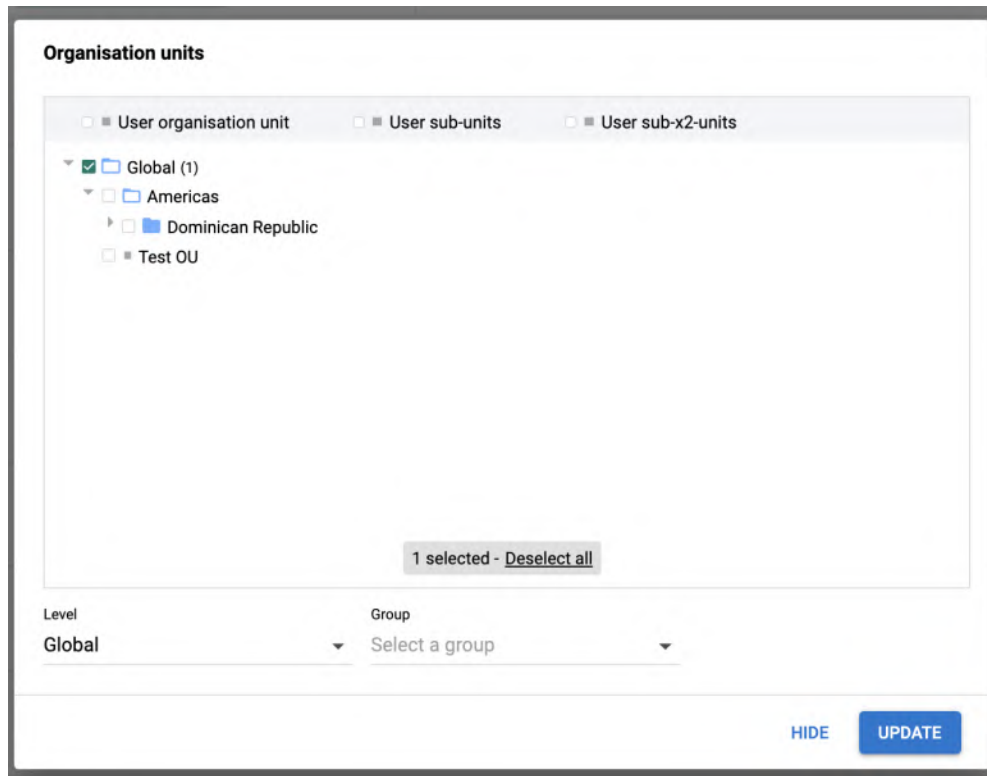
Unit dimension:

ii. The Organisation

Unit input

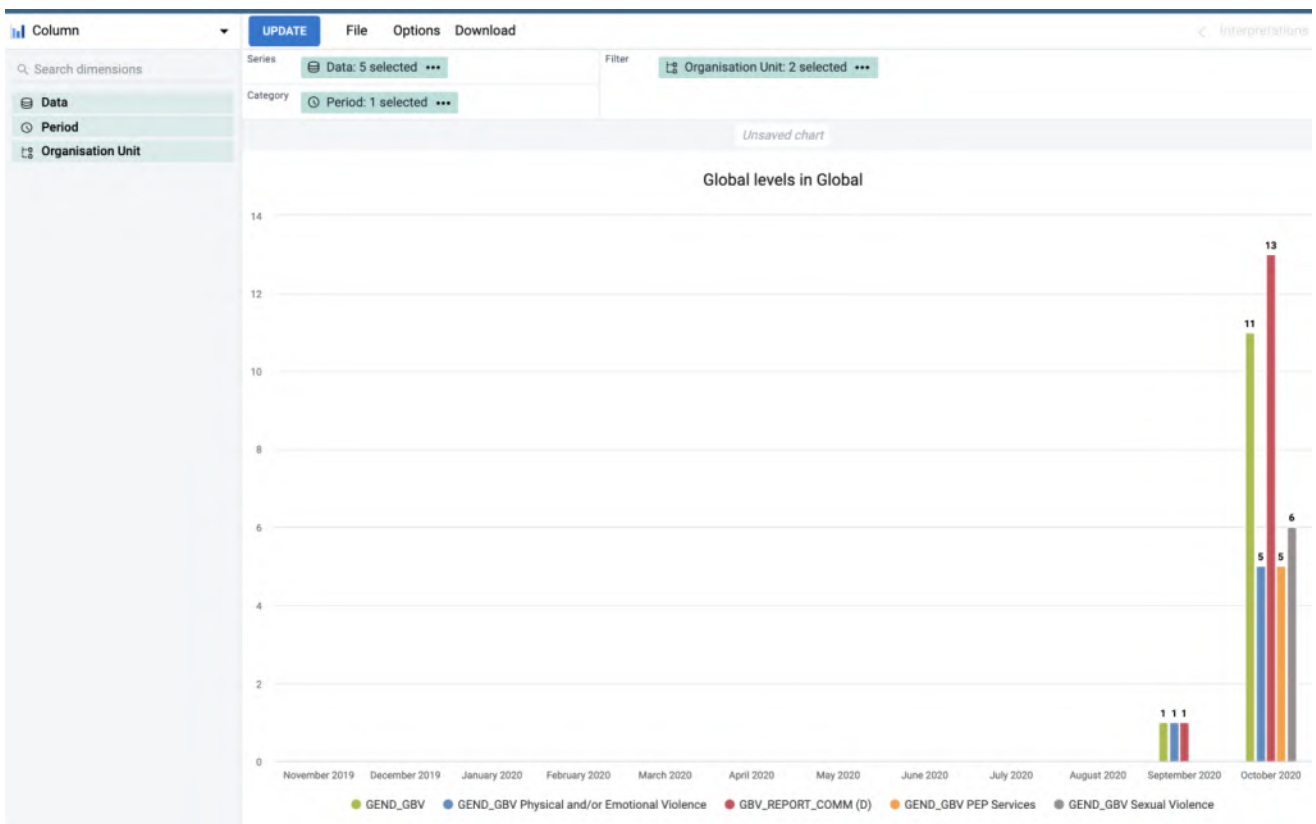
determines which geographic regions you want to include data for.

Example:



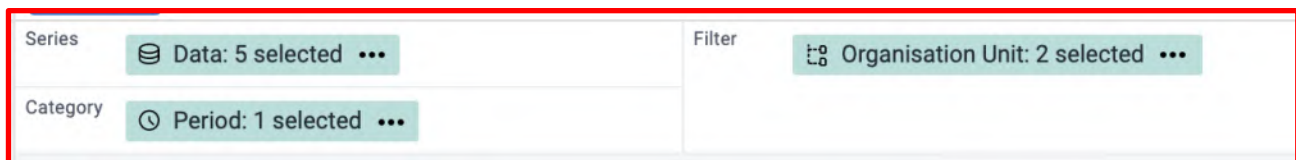
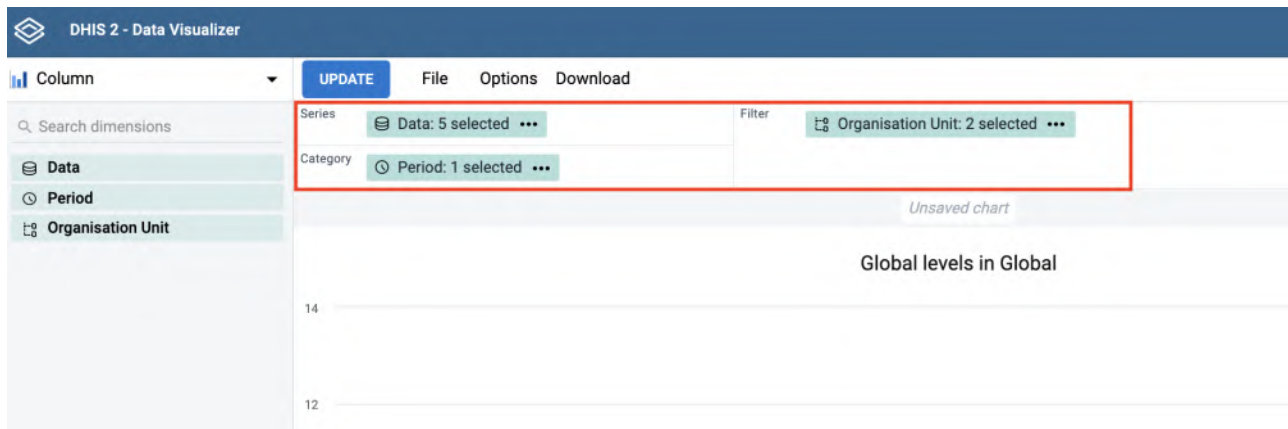
Click on **Update**. Based on the data and chart type you chose, your results should be produced in the chart.

Example:



As a reminder, the chart layout determines how and where the three main dimensions, the data, period and organisation unit dimension, are all organized in the chart. The layout is the section where it is possible to, with the flexibility the app provides, to define which dimension of the data should appear as a 'series', 'category' and 'filter' by simply dragging and dropping these options to their appropriate space.

- The series dimension refers to the Y or vertical axis
- The category dimension refers to the X or horizontal axis
- The report filter is the aggregating dimension



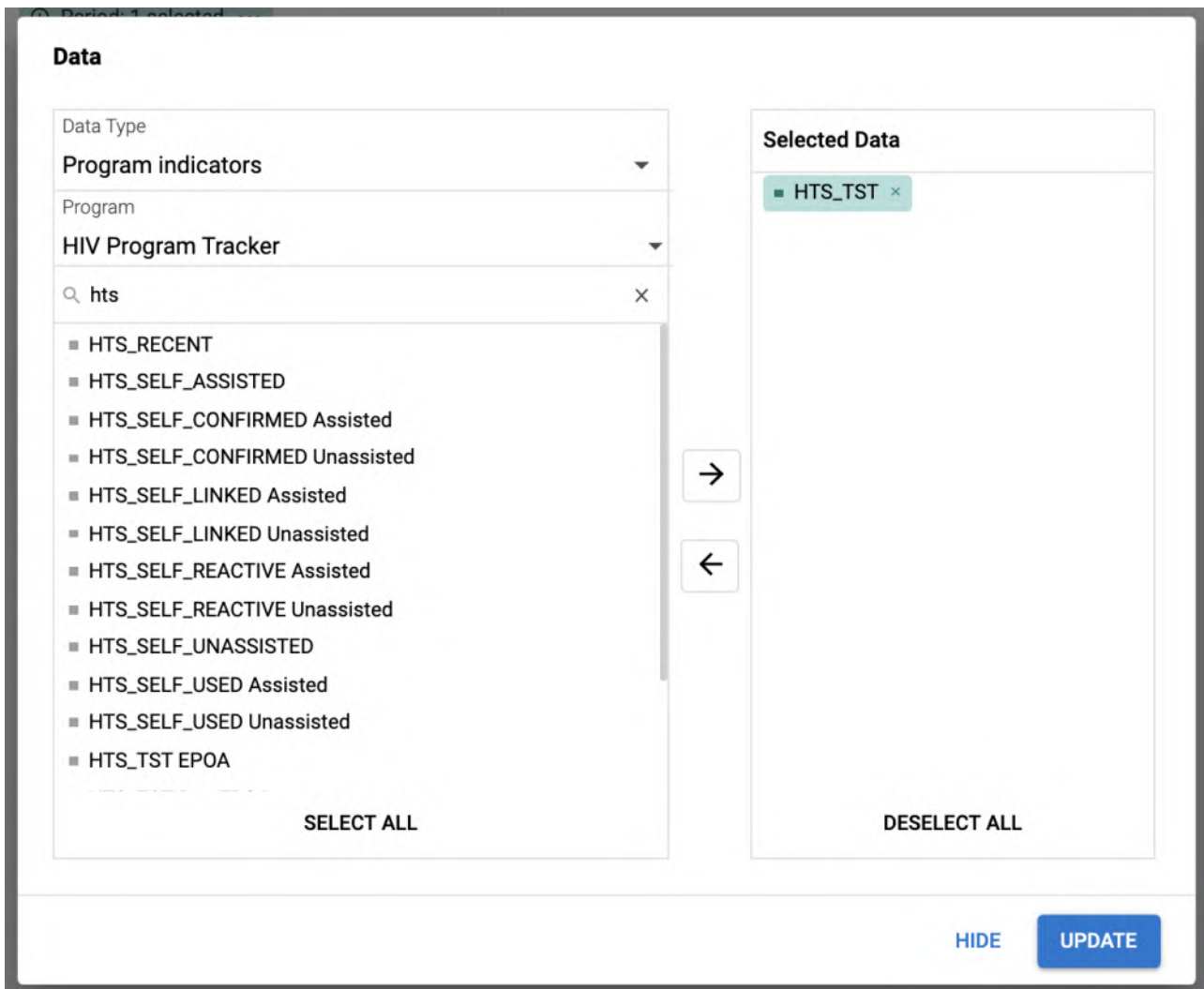
4. *The following steps will provide an example of a column chart visualization.*

*First, we will outline the **Data** section inputs.*

- a. **Chart type:** Column*
- b. **Data type:** Program indicators*
- c. **Program:** HIV Program Tracker*
- d. In the search field you can either (i) type to look for the element or (ii) scroll down the list of items below.*
- e. Choose the desired element by double clicking on it, or use the arrow symbol '-->' to move it to the **Selected Data** section. To remove the element click on the X symbol next to it. or simply click on it and then click on the arrow symbol '<--'.*

*Example:*



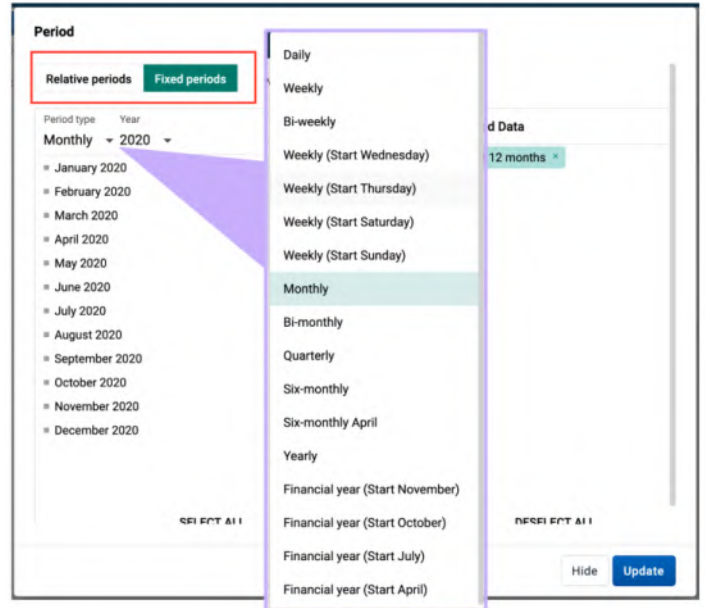
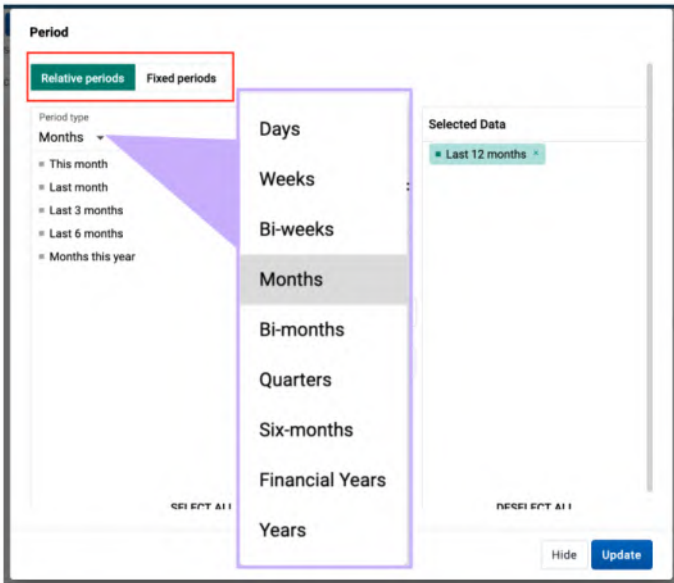


5. Click on **Update**

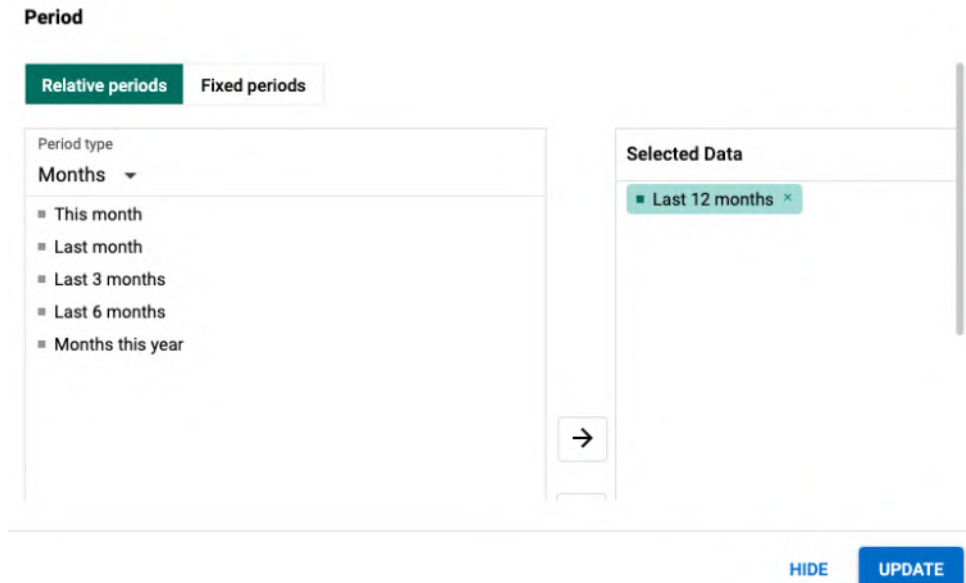
6. For this example make sure to choose 'Relative periods'; the Period type 'Months' and the Selected Data 'Last 12 Months'. Then, click on **Update**.

- Relative and fixed periods are separated through icons at the top of the menu and periods selected for both options appear as a drop down menu.

- The 'Fixed periods' option allows for the choice of a specific year and not only 'previous' or 'next' year.



**Example:**



7. Next, proceed to select the **Organisation Unit** 'Global'.



Results:



## 3.7 Maps

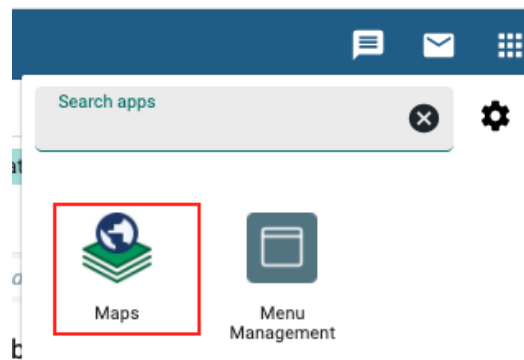
*The maps application is a powerful tool for creating eye catching visualizations, however just because the final visualization looks good does not mean it's the best way to represent the data, in many cases a chart is a much better way to display the data, as it allows the viewer to more easily compare values across different categories, and can display multiple series items at once.*

*Maps are most useful when trying to show a geospatial trend, for example "These four countries in Africa with the highest number of challenges in category X are all next to one another". This type of information is immediately clear on a map, but harder to spot on a chart, where the relative location of the countries is less obvious.*

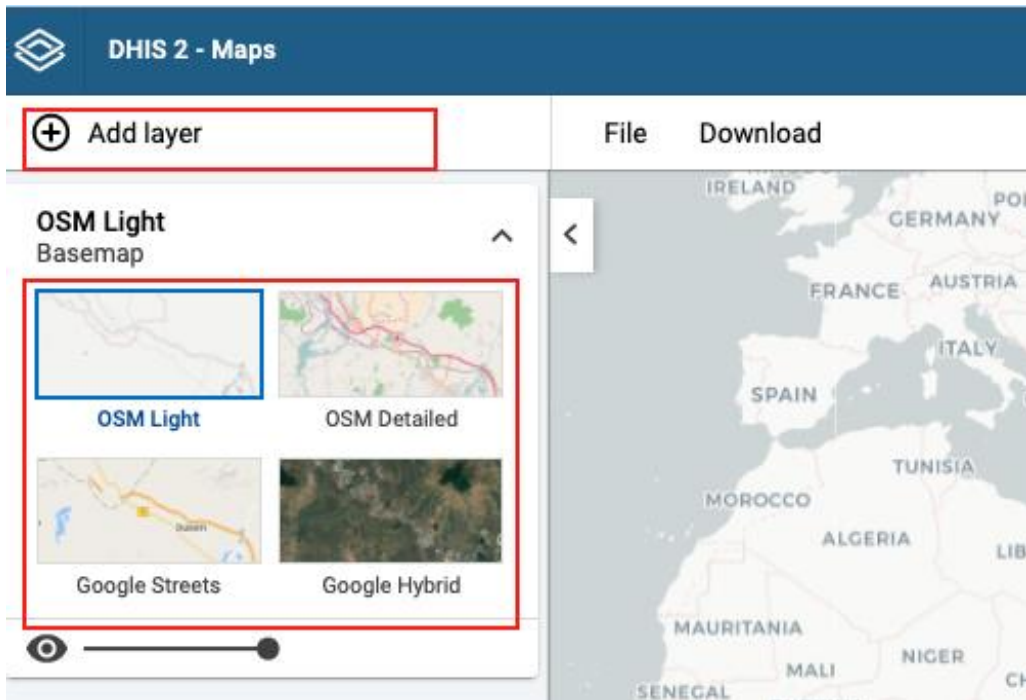
The section will provide a solid introduction to the maps application and how to use it to analyse numerical fields.

### 3.7.1 Introduction to maps

1. First, let's navigate to the Maps app. Search for it using the Search apps menu in the top bar and then click on it to open it.



2. Next, familiarize yourself with the Maps app interface.



3. Create a boundary layer

a. Select Add Layer and then Boundaries



b. Select the organisation unit and under Selected Level click on OU/ COUNTRY

### Add new boundary layer

The screenshot shows the 'Add new boundary layer' interface. On the left, under the 'ORGANISATION UNITS' tab, a tree view is displayed with the following structure:

- Global (1)
  - Americas (1)
    - Dominican Republic (1) (selected)

On the right, a dropdown menu is open, showing a list of levels. The 'OU / Country' option is selected with a green checkmark. The other options are:

- Global
- Region
- Province / Region
- In-country level 3
- In-country level 4
- In-country level 5
- In-country level 6
- In-country level 7

A blue 'UPDATE' button is partially visible at the bottom right of the interface.

c. Click on *Update*



4. Create a Thematic layer

a. Click on Add layer - select Thematic



b. Define the data dimension by selecting the Item type, the Program and the Program indicator: HTS\_TST and click on Update layer



### Add new thematic layer

DATA	PERIOD	ORG UNITS
Item type		
Program indicators		▼
Program		
Key Population Program		▼
Program indicator		
HTS_TST		▼
Aggregation type		
By data element		▼

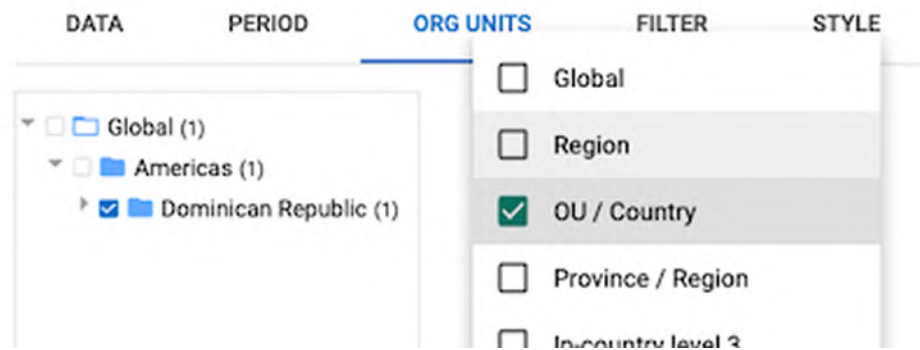
c. Define the Period and click on Update layer

### Add new thematic layer

DATA	PERIOD	ORG UNITS	FILTER	STYLE
Period type				
Relative				▼
Period				
Last year				▼

d. Define the Organisation unit and click on Update layer

### Add new thematic layer



e. Define the style and click on Update layer


### Add new thematic layer

DATA    PERIOD    ORG UNITS    FILTER    **STYLE**

Automatic     Predefined

Classification  
Equal intervals

Classes  
6



Low size    High size  
5    15

Labels    Size 11    **B**    *I*    ▼

CANCEL    **ADD LAYER**

f. Click on Update layer

