FHI 360 Standard HIV Tracker Metadata Package Complete Manual

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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

Acronyms and technical terms

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

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

Dashboard	*Dashboard*	*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.*
Metadata	*Metadata*	*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*
Form name	*Form name*	*The name of the DE or TEA as is appears in the data entry tools (rather than the name which is what is used in the maintenance app)*
UID	*Unique Identifier*	*This is a unique combination of letters and number which is user to uniquely define all metadata in DHIS2*
FHI 360 Specific		
KP	*Key Population*	
HTS	*HIV Testing Services*	
VL	*Viral Load*	
MAT	*Medication Assisted Therapy*	

STI	*Sexually Transmitted Infections*	
TB	*Tuberculosis*	
PrEP	*Pre-Exposure Prophylaxis*	
TPT	*Tuberculosis Preventive Therapy*	

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

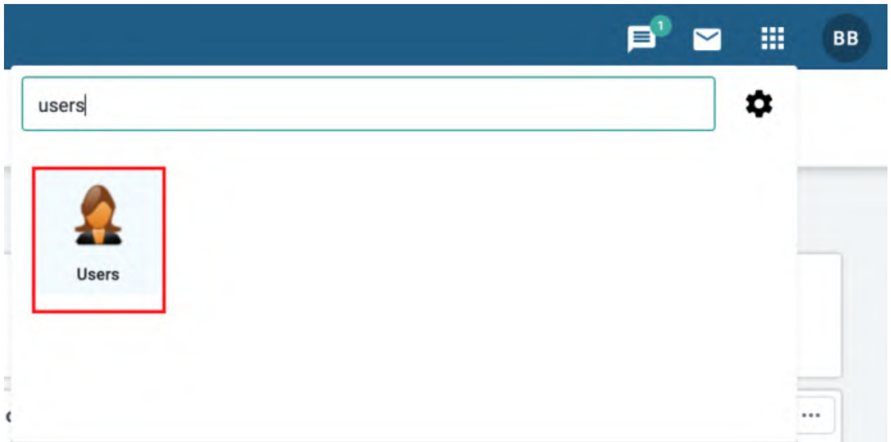
Roles and authorities in DHIS2 can be considered functionally, i.e. in terms of what a user can do from a simple functional level in the system.

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.

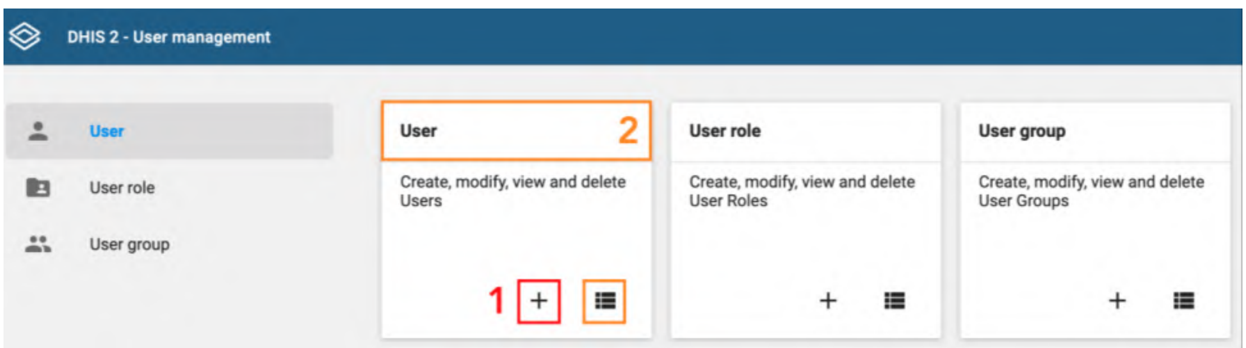
User Role	*Description*
*1. **Dashboards**: Read and create private Dashboards*	*Includes dashboard module only and ability to create private dashboards.*
*2. **Analytics**: Read and create private analytic favourites*	*Includes dashboard module, Pivot Table, Data Visualizer, Maps, Reports. Users with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

1.1.2 Create and update users

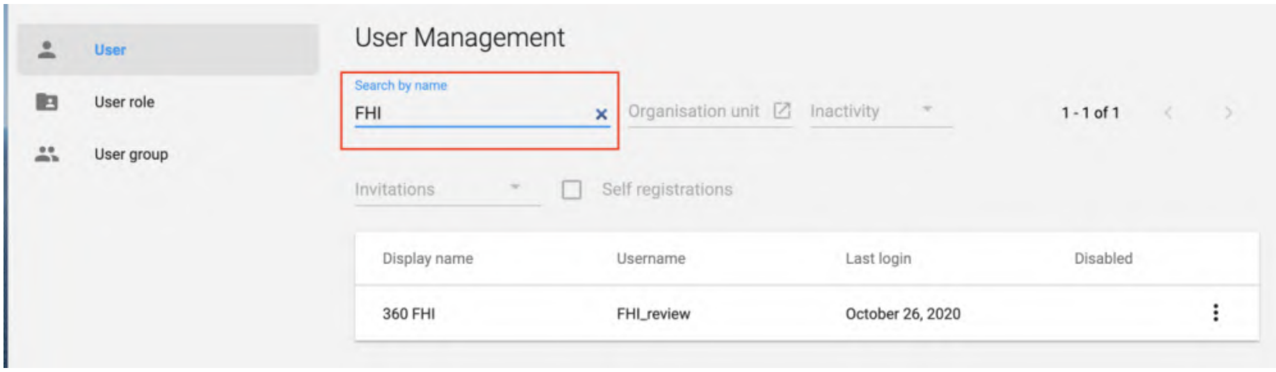
To create or update a user, first open the app menu and search for the users app.



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.*

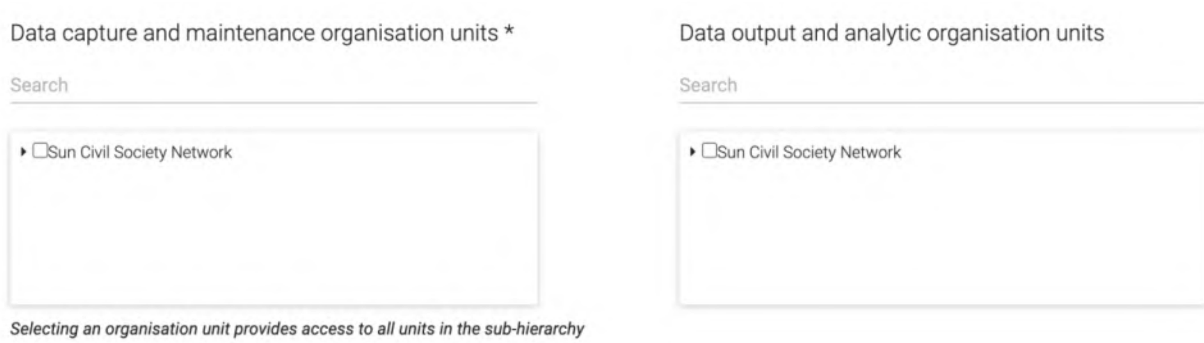
Phone number, whatsApp … Twitter: *Mostly unused by the system.*

__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:

Data capture and maintenance organisation units:



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

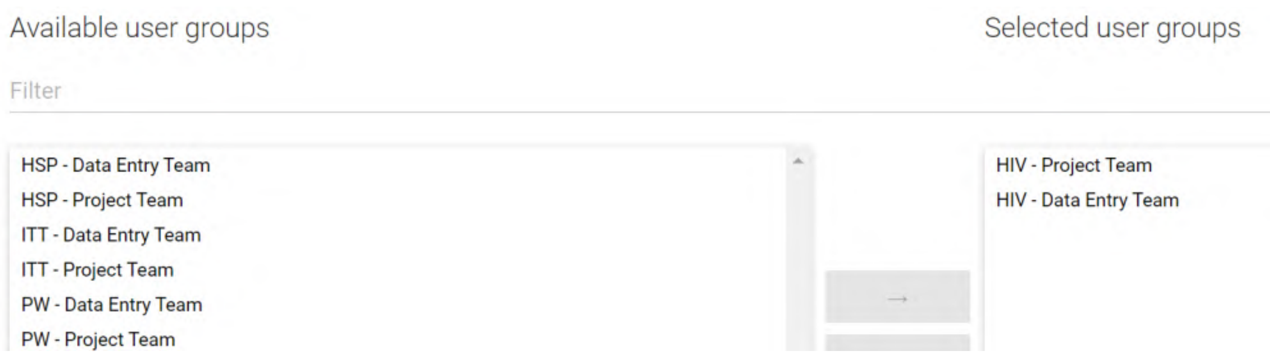
Search organisation units: *This defines which organisation units the user can search for to find contacts within the tracker capture app. For a HIV Program Tracker country user to be able to collaborate on forms with external partners for their country, they need to be able to find the partners in the 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:

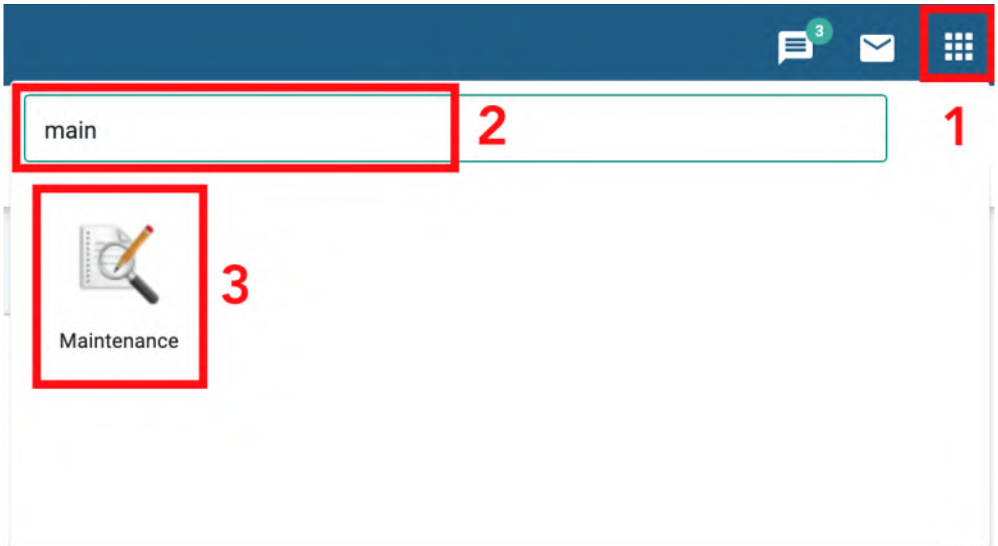
The values for these options are defined in optionSets, which are assigned to the field. In the above example the option set 'Testing location' is assigned to the field 'Testing location'.

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.

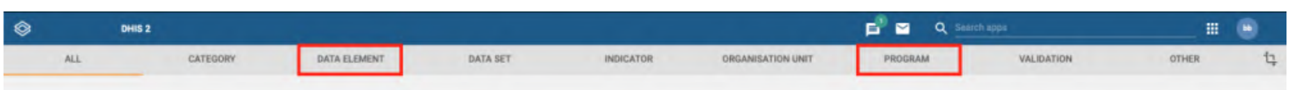
There are two types of fields in DHIS2 which may have option sets on. Fields in the contact management form (enrollment) are called tracked entity attributes and fields in all the other tools (program stages / events) are called data elements. This means we might have to look in two different places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

1.2.1 Update an option set

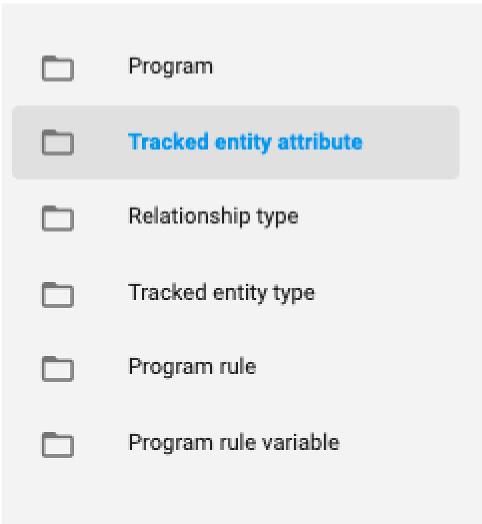
Navigate to the Maintenance app using the Search apps feature.

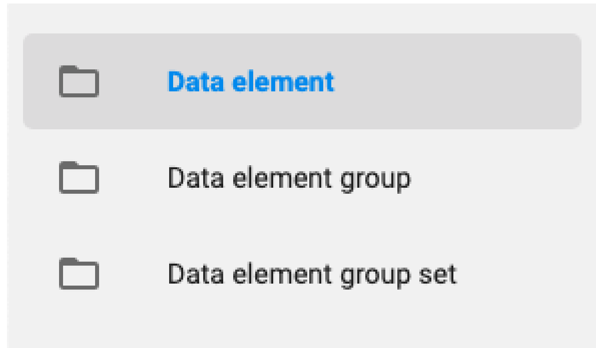


Select Program from the top header for drop down menus in contact management, or Data element for drop down menus in the other tools

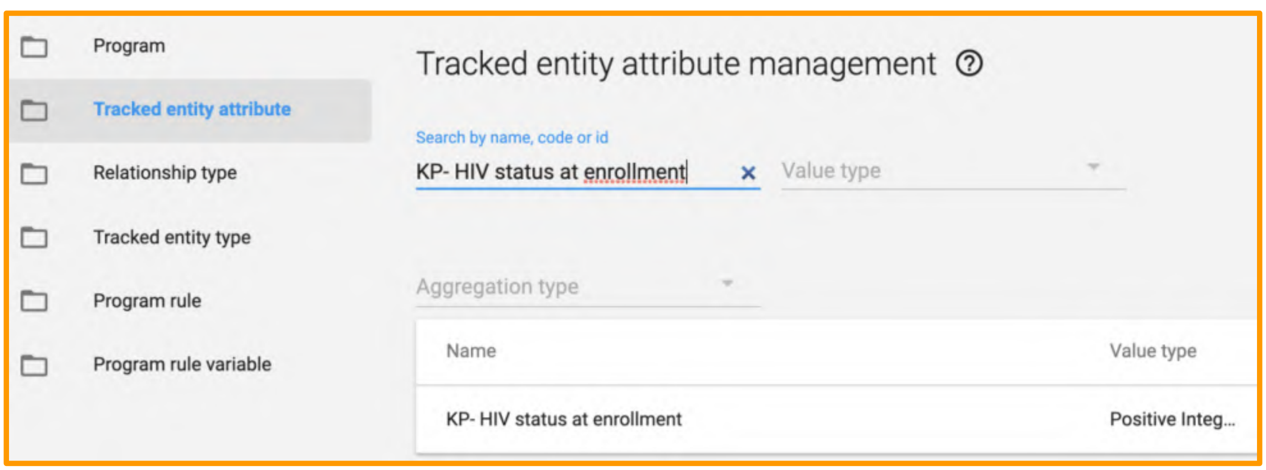


Click the Tracked entity attribute button on the left side, or the Data element button.





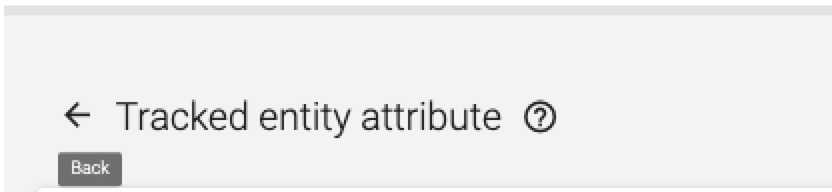
In either case you will now see a table showing a list of fields, you can use the 'Search by...' field to search for the field you are interested in by name, in this example we search for the tracked entity attribute ***HIV - HIV status at enrollment.*** *Once located, click the row to view the field's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



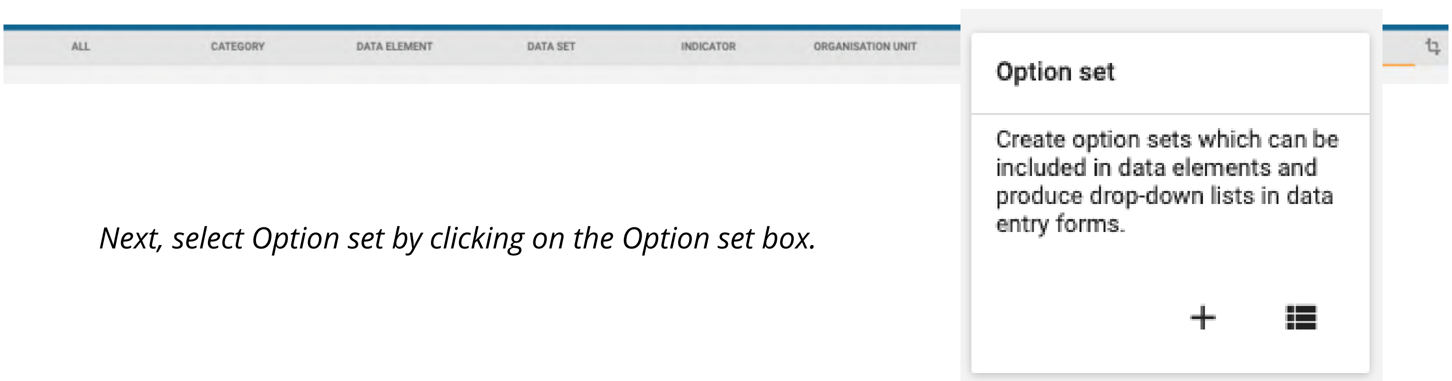
Next scroll down to the Option set line.

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

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

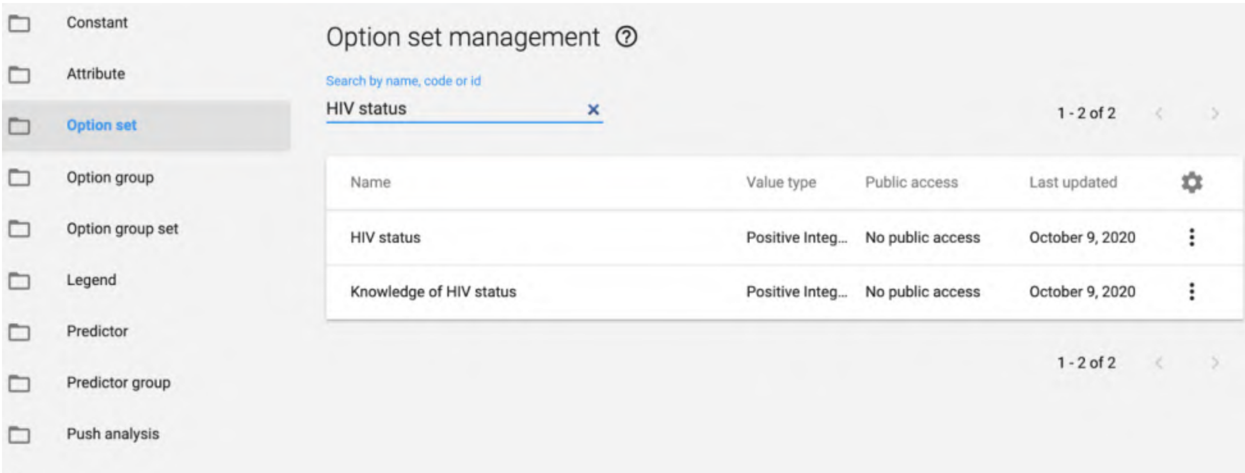


Click on the header titled Other.

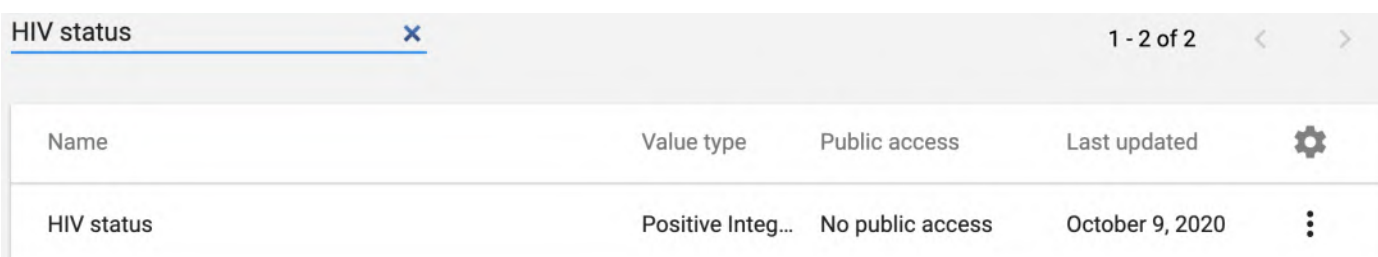


Next, select Option set by clicking on the Option set box.

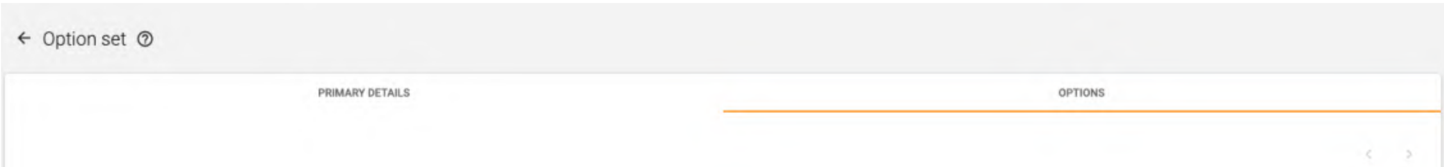
In the Option set management page, paste the option set name you copied into the search bar.



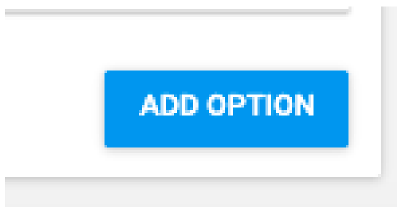
Then, select "HIV status" from the list of option sets.



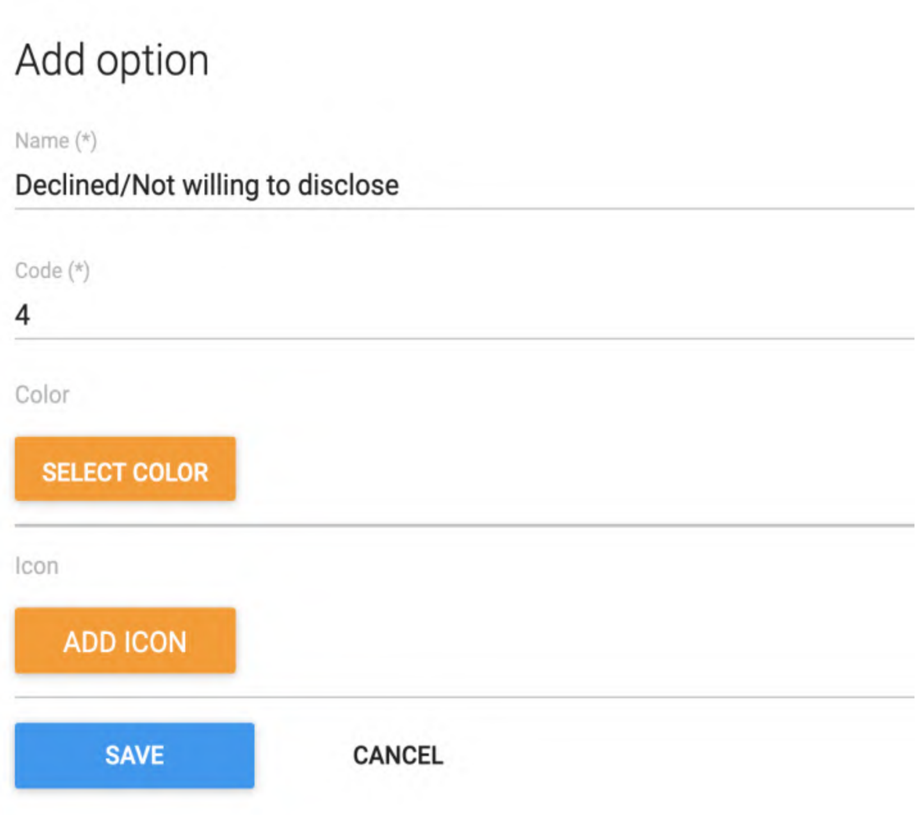
Select Options on the right.



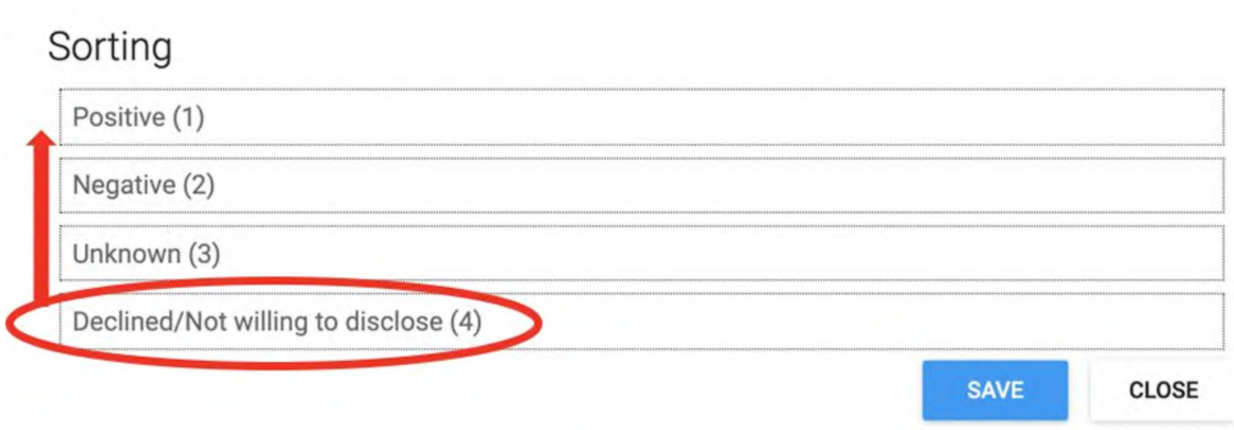
*Scroll down the page and select **Add Option**.*



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



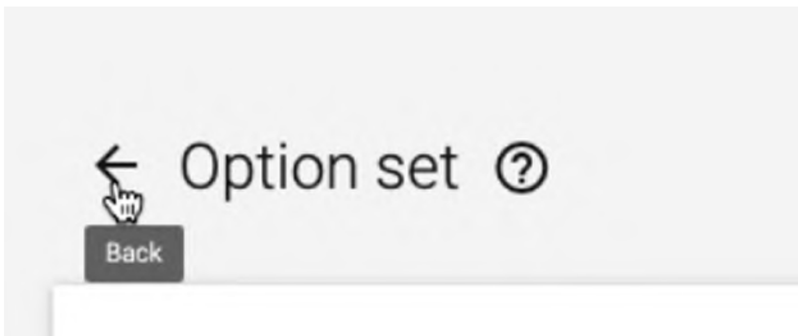
*Now select **Sort Manually**.*



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

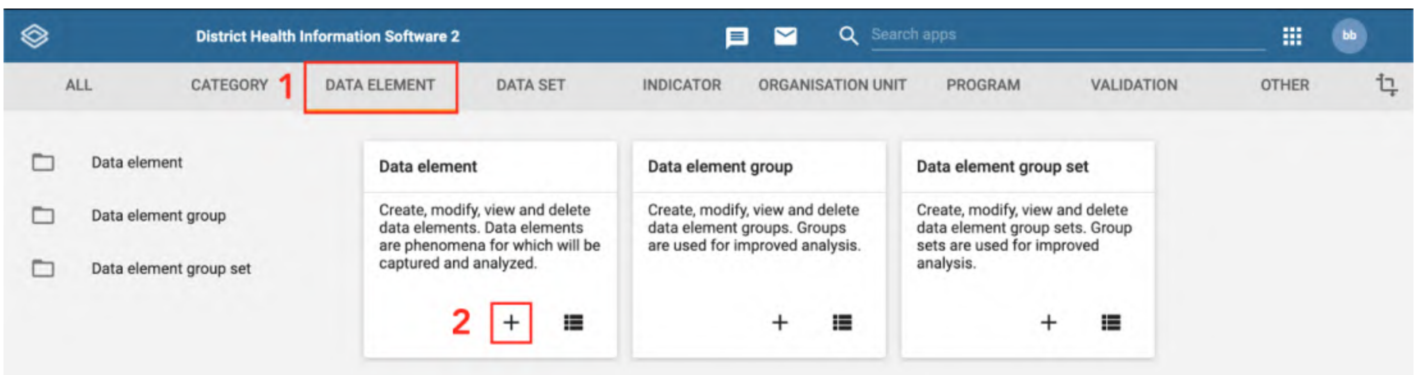
Data elements define all the questions for the Annual survey, impact tracker, request tracker, technical assistance profile and private contact details tools (everything except the contact details (enrollment) form. They are probably the most important piece of configuration in the system. The FHI 360 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 as 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*

HIV Program Tracker	*HIV*
HIV Hot Spot Tracker	*HSP*
Index Testing Tool	*ITT*
Peer Workers	*PW*

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

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

Violence and Abuse Disclosure	*HIV - GBV*
Viral Load	*HIV - VL*
EPOA	*HIV - EPOA*
Cervical Cancer	*HIV - CXCA*
TB Screening	*HIV - TB*

Index Testing Tool

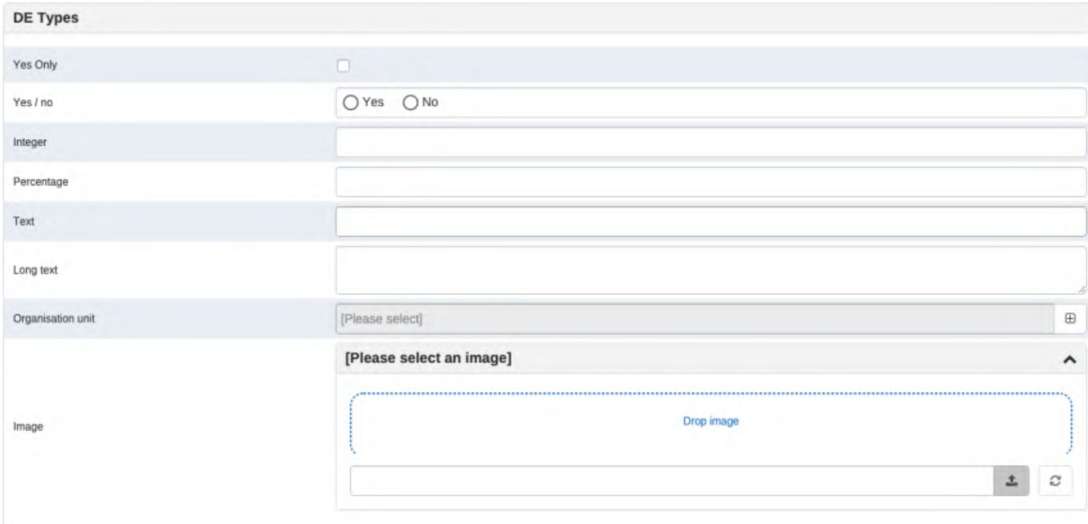
Program stage name	***DE Naming convention***
Contact Tracing and Outcome	*ITT-CTO*

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.*



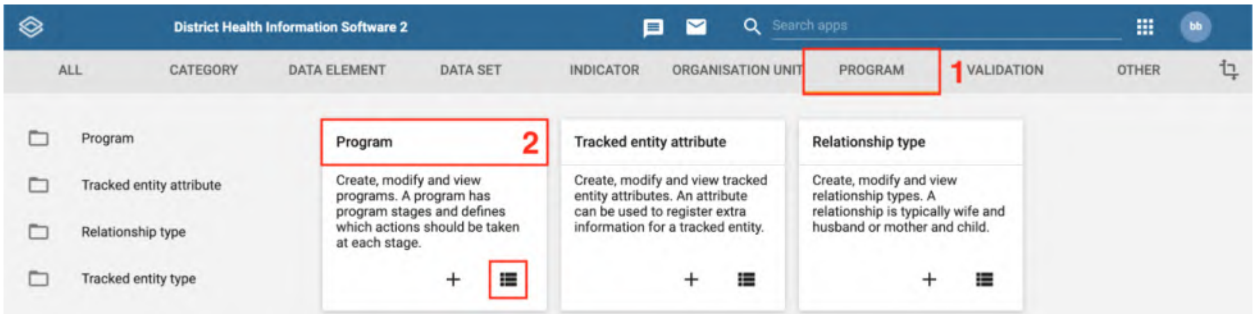
Aggregation type: *This determines how values entered against this field are combined together (aggregated) in the analytics apps. For example if the field has a value of 2 in Region 1c and a value of 4 Region 2. What should the value be for all of the country? Typically for numerical values, sum is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

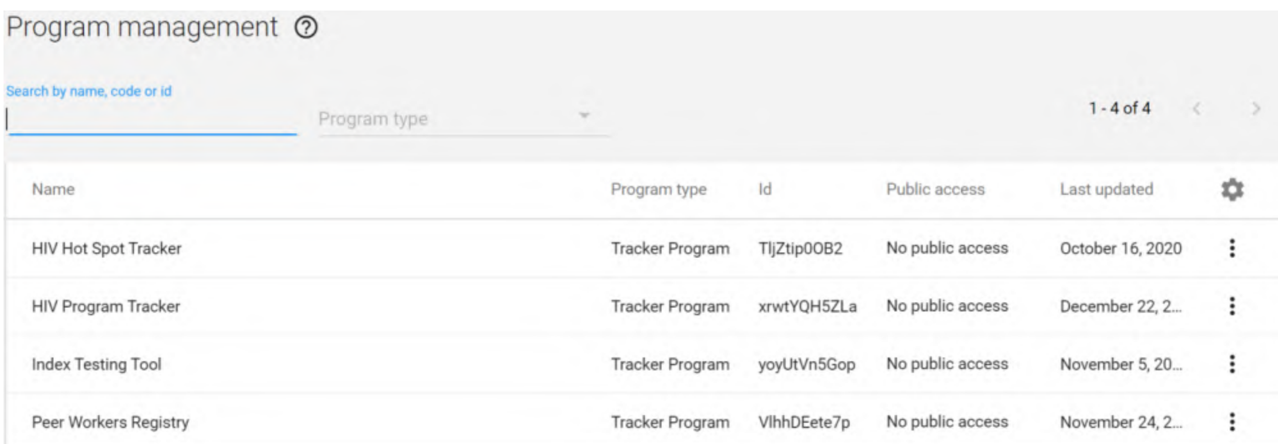
Option set (optional): *This determines if the text field should have a dropdown list of options, rather than allowing the user to enter any value they wish. Option sets must first be made in the option sets part of the maintenance app before they can be added here.*

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.

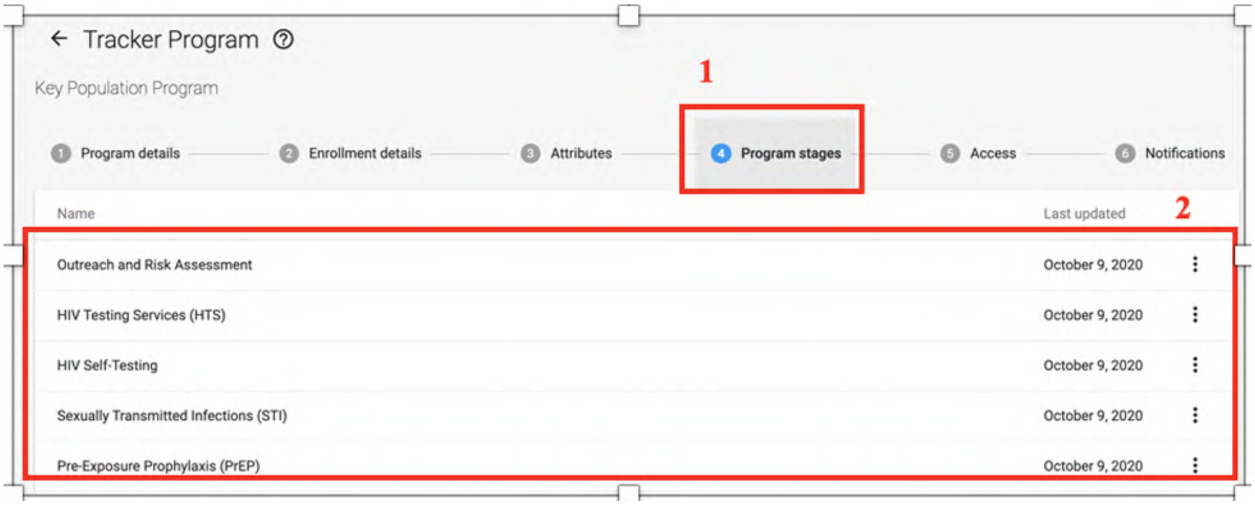




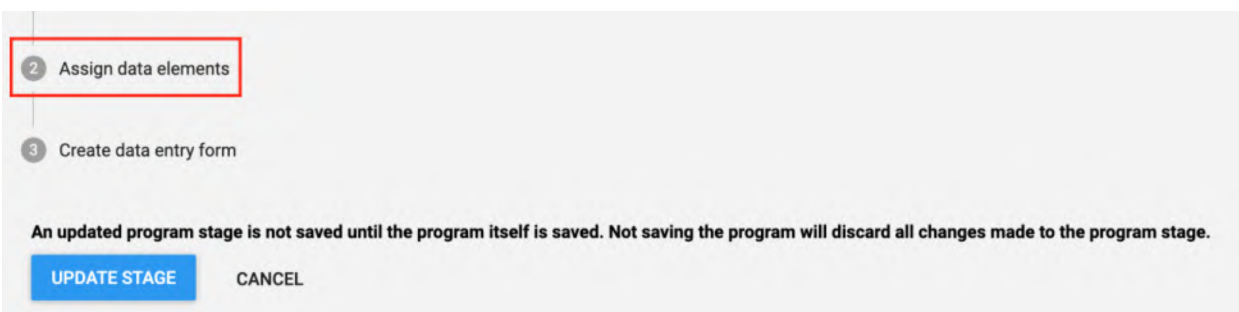
First open the maintenance module, but this time select the program in the top menu and click the list icon of the program test to show the list of programs in the system.

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.



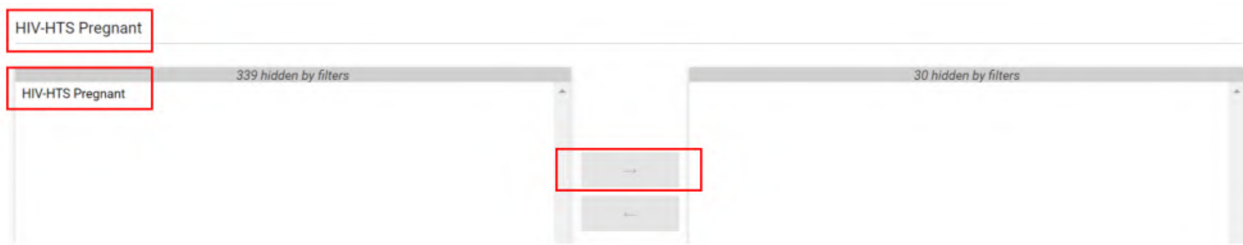
You will then see a page listing some important details about the program stage (tool). Scroll to the bottom until you see the 2 Assign data elements button on the left and click this.



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.

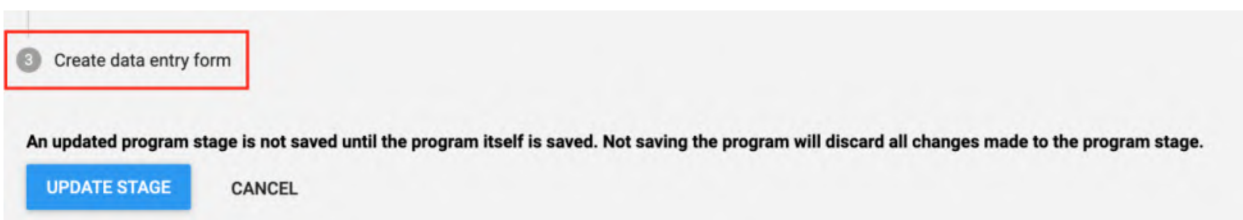
We want to select our new data element from the left and move it to the right to add it to the program.



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.

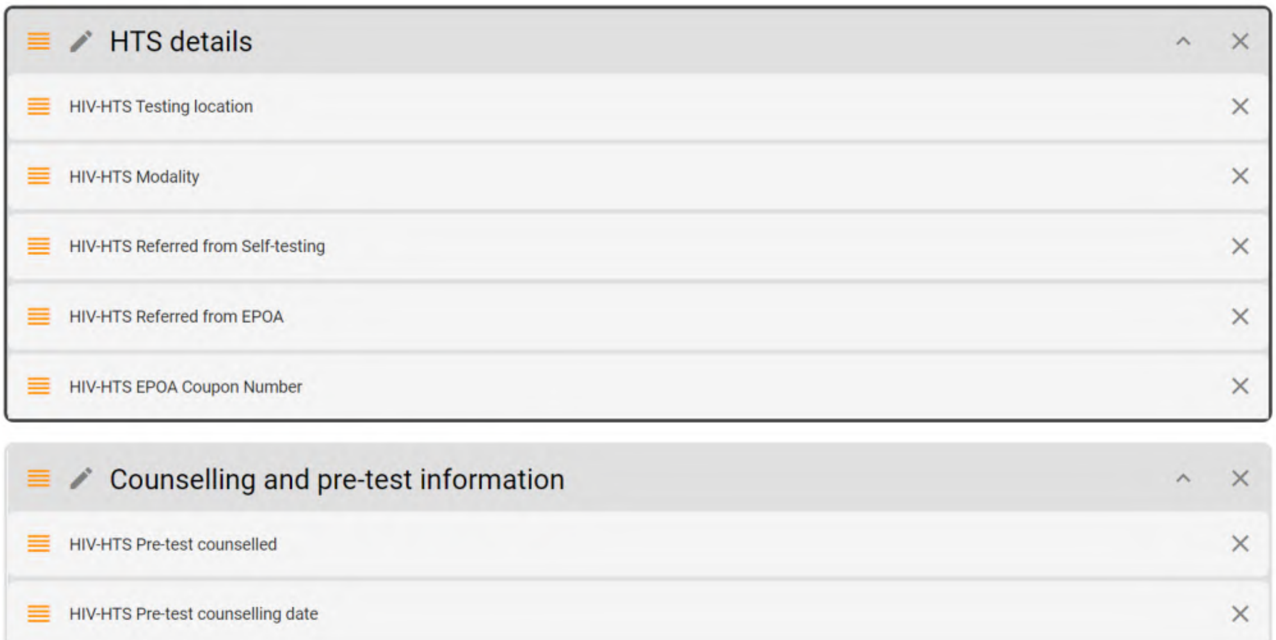
To do this scroll to the bottom of the page and click the create data entry form button to edit the data entry form for this program stage.



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

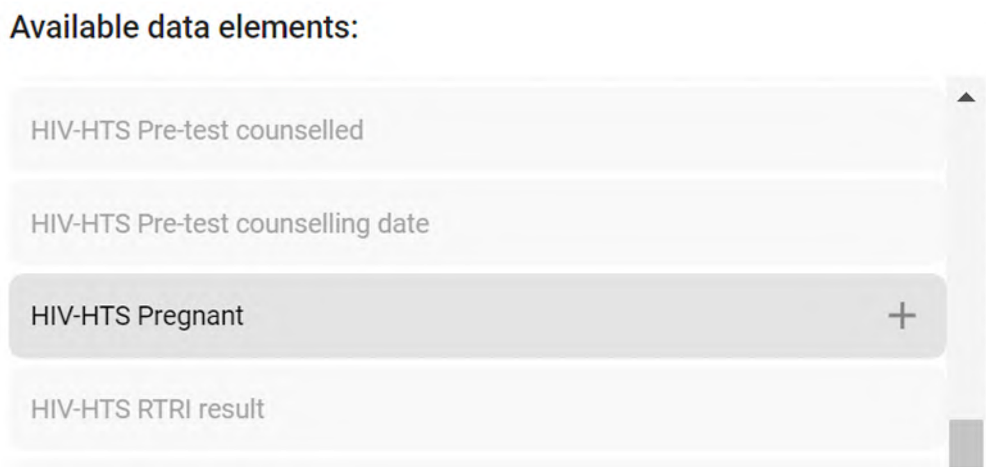
First decide which form section you would like to put the data element in, the form sections are defined by the large text and darker grey box, for example in the request tracker Guidance note is the first section and Section 1. Basic details is the second section.

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.

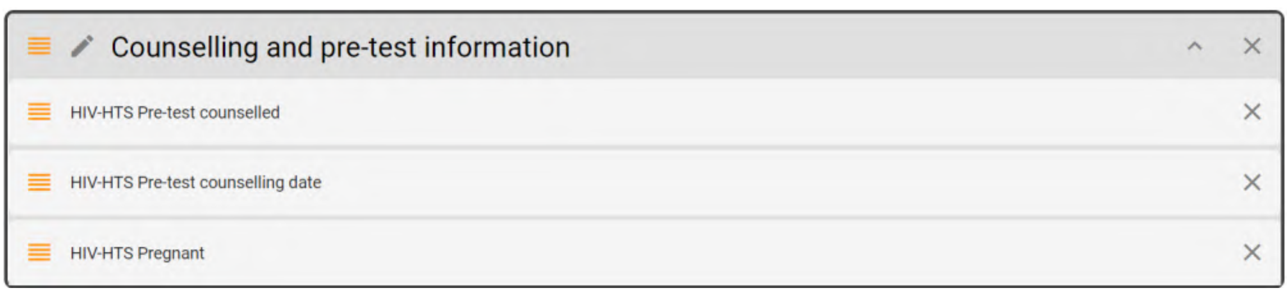


Then use the available data elements menu on the right hand side to find your new data element. Data elements are displayed in alphabetical order and ones already added to the form are light grey, whereas data elements not yet added to the form are darker grey. For example see the image below.

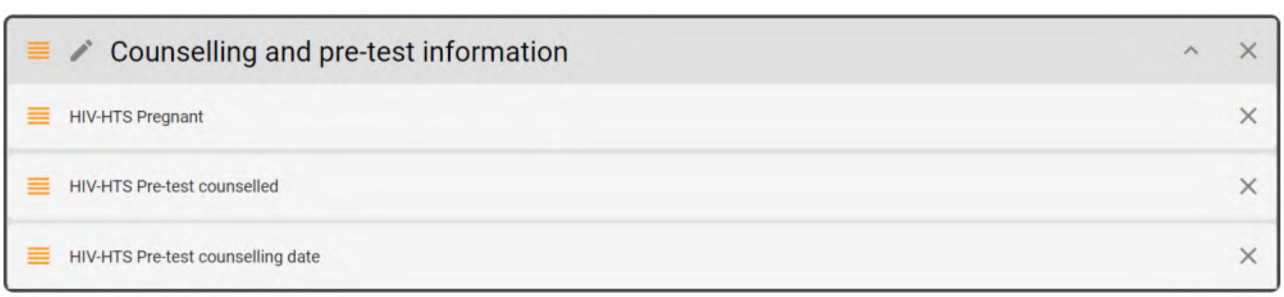
To add the data element to the end of the selected section, simply click it.



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.



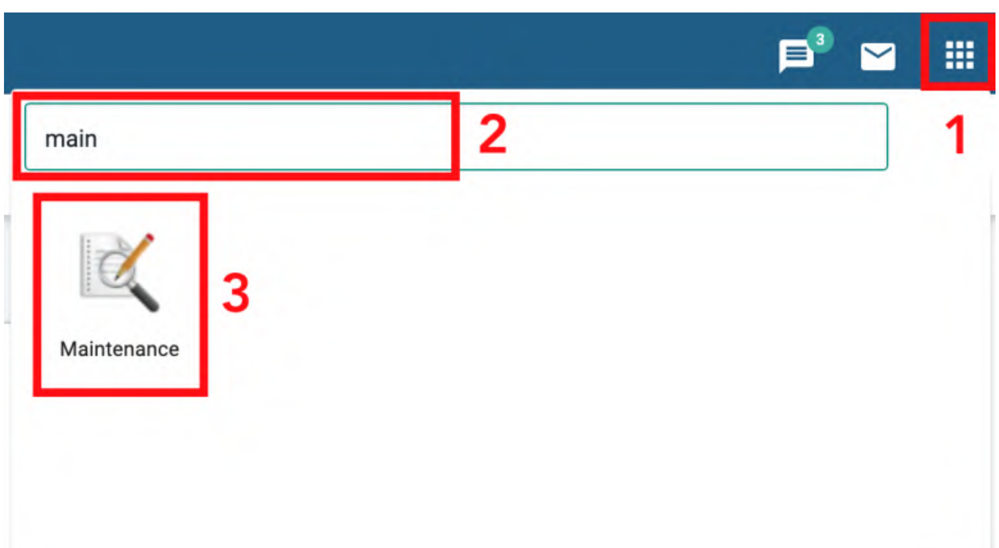
Now the data element has been added to the program and the data entry form the process is complete.

Scroll to the bottom of the page and click

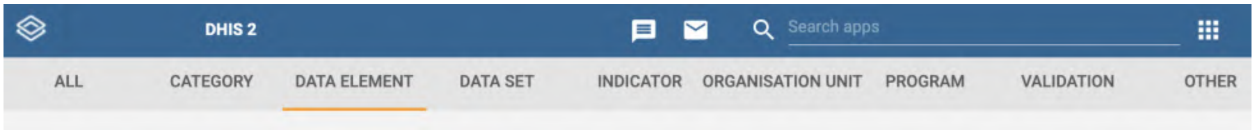
Then click the button at the bottom of the next page to ***Save*** *the changes.*

1.3.3 Update existing data elements

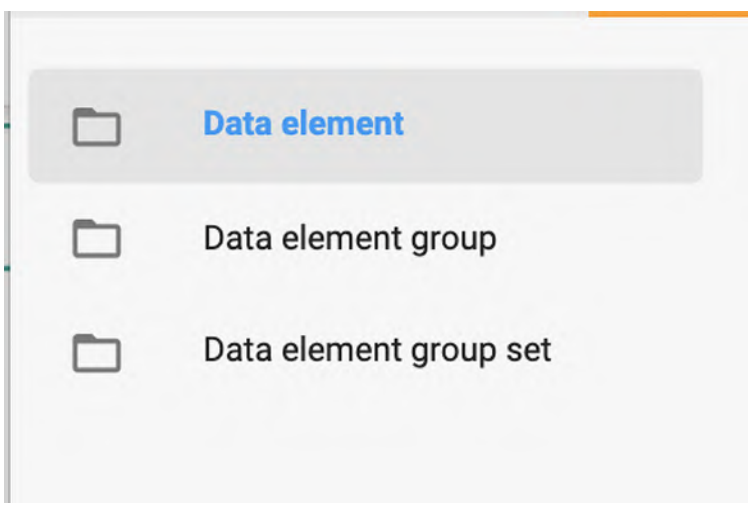
Navigate to the Maintenance app using the Search apps feature.



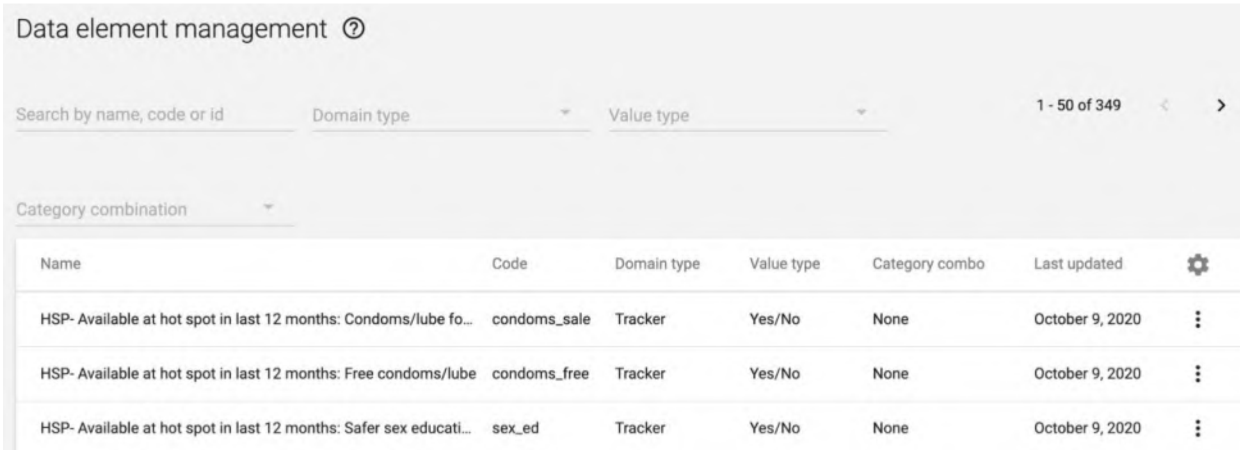
Select the ***Data Element*** *option at the top of the page.*



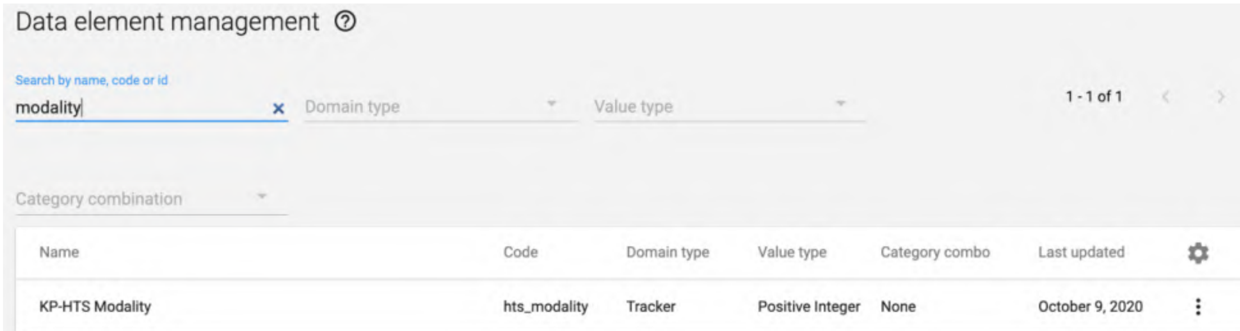
Then select the ***Data Element*** *folder on the left.*



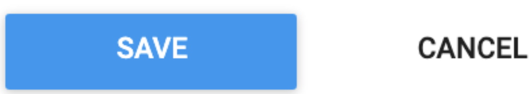
Next, page through the list of data element form names using the paging arrows, or use the Search options available to find the relevant data element.



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



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 ata element part of the guide. Once the changes are complete scroll to the bottom of the page and click save.



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

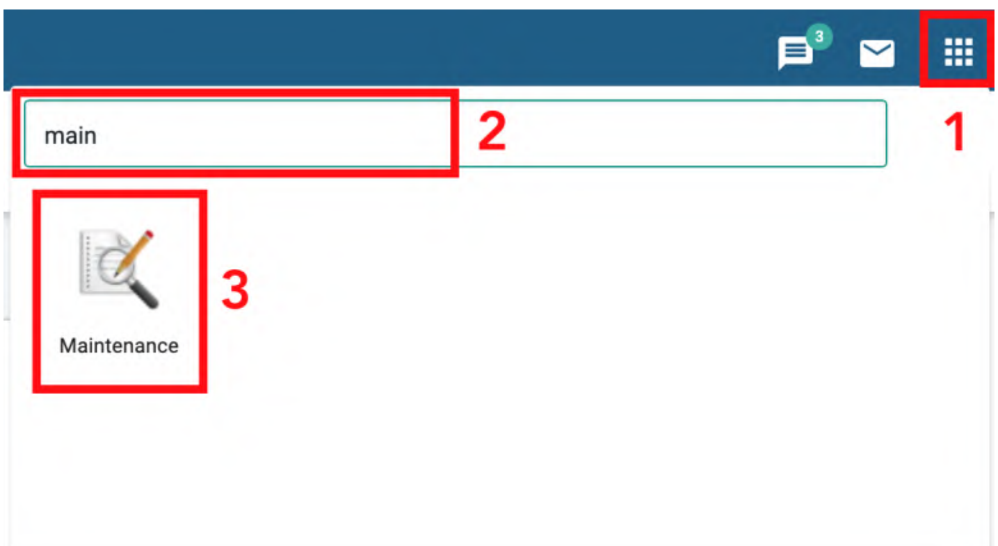
1.5 Tracked entity attributes

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.

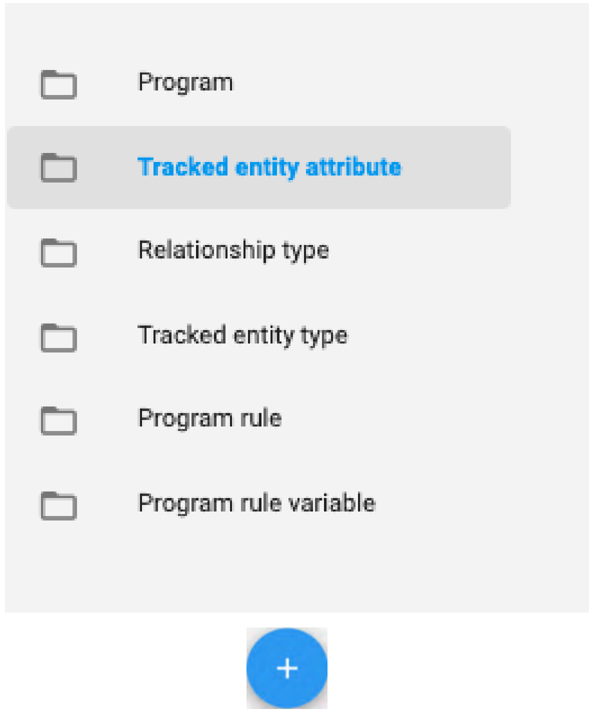
First navigate to the maintenance app.



Select ***Program*** *from the top bar.*

Next, select the Tracked entity attribute on the left.

To create a new tracked entity attribute you can select the blue + button.



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.

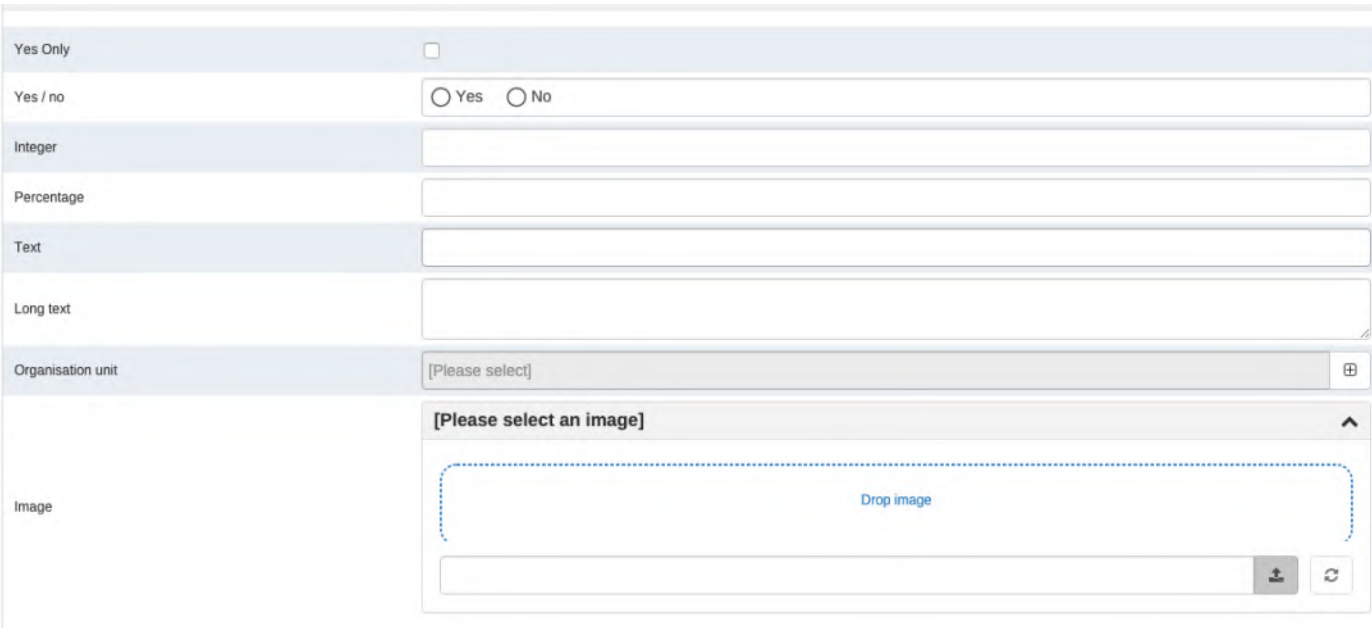
Tracked entity attributes have a number of properties, as described below.

***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.



__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.

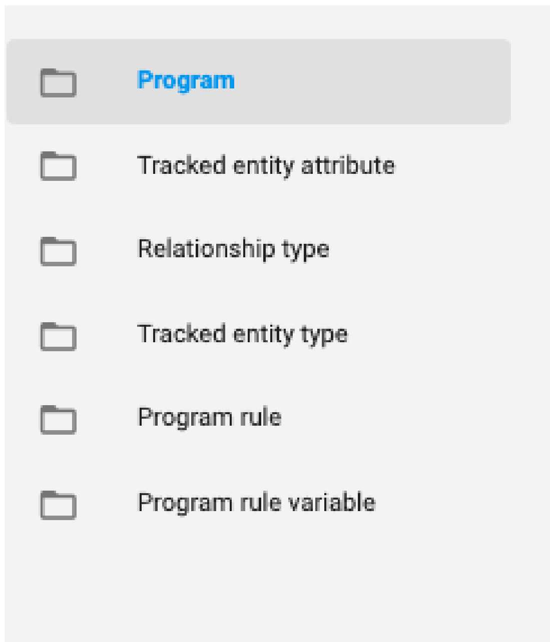
__Option set (optional):__ This determines if the text field should have a dropdown list of options, rather than allowing the user to enter any value they wish. Option sets must first be made in the option sets part of the maintenance app before they can be added here. See the option set section on how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

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

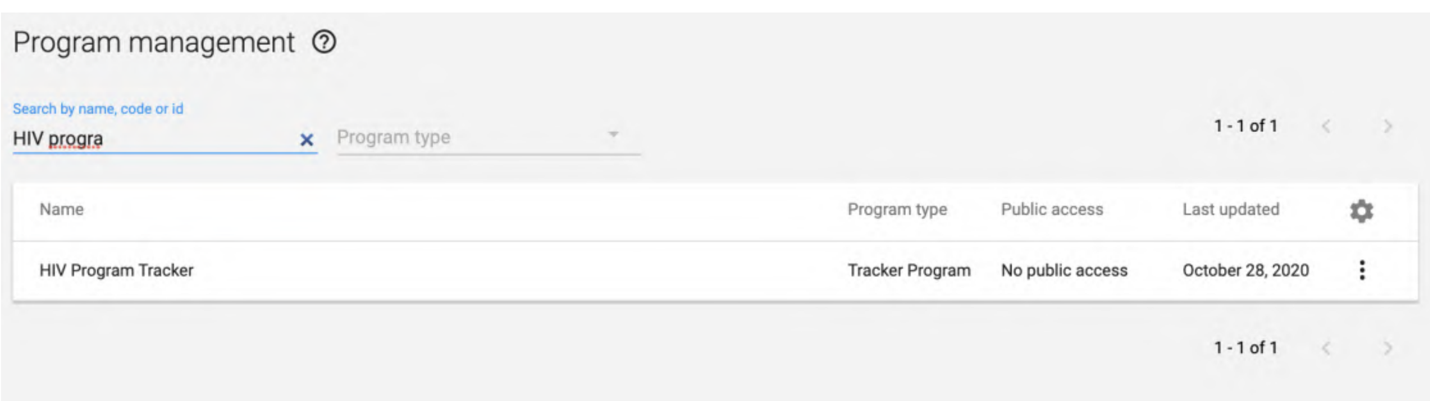
Once these fields are complete, click the save button to create the tracked entity attribute.

1.5.2 Add the TEA to the HIV program tracker

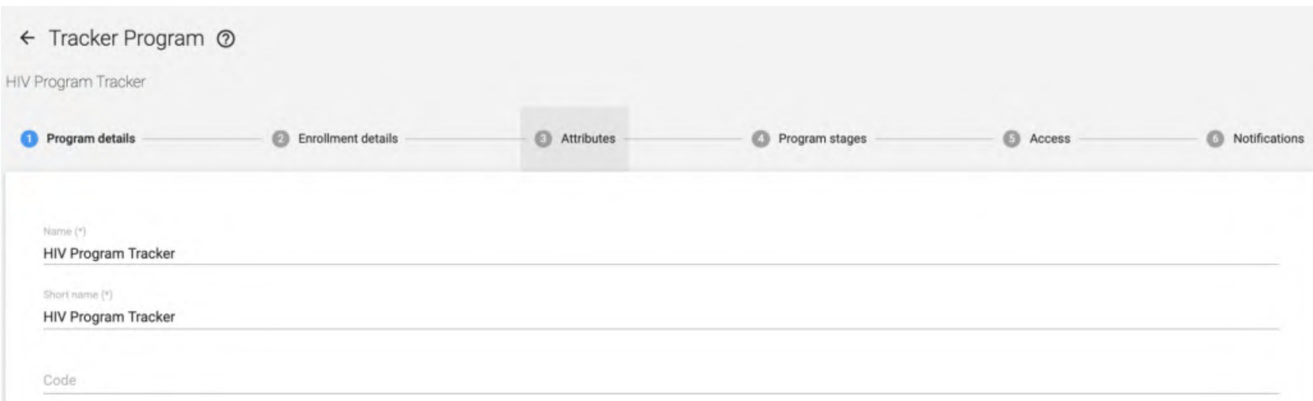
Now click on the Program folder on the left.



Select the HIV Program Tracker.

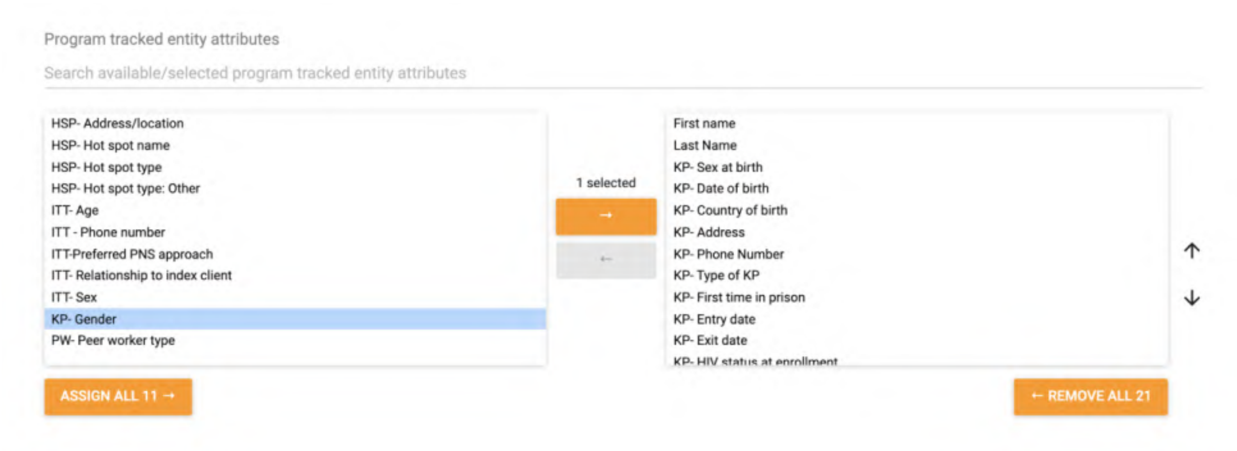


Next, select section 3, ***Attributes****, then scroll down the page to find a list of the program's tracked entity attributes.*

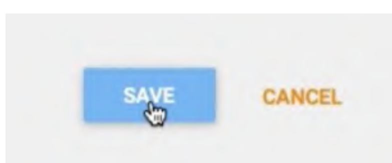


Use the search available field to search for the TEA created.

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



Now click Save.



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).

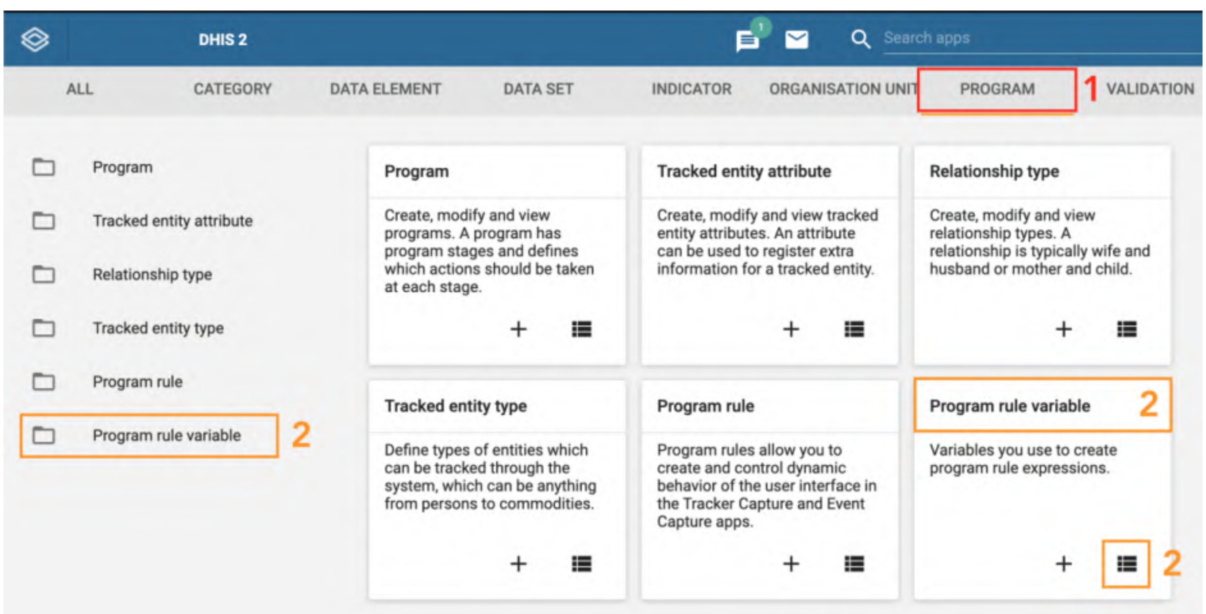
So before you create a program rule, for example to add some hide logic, you need to know what field(s) will make the rule run or not. Then create program rule variables for these.

For example suppose we have 4 fields:

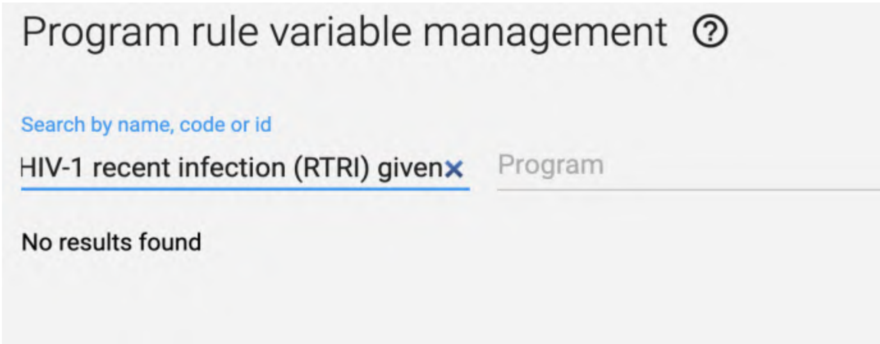
- *Was a rapid test for HIV-1 recent infection (RTRI) given?*
- *Was a rapid test for HIV-1 recent infection (RTRI) result*

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) isWas 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

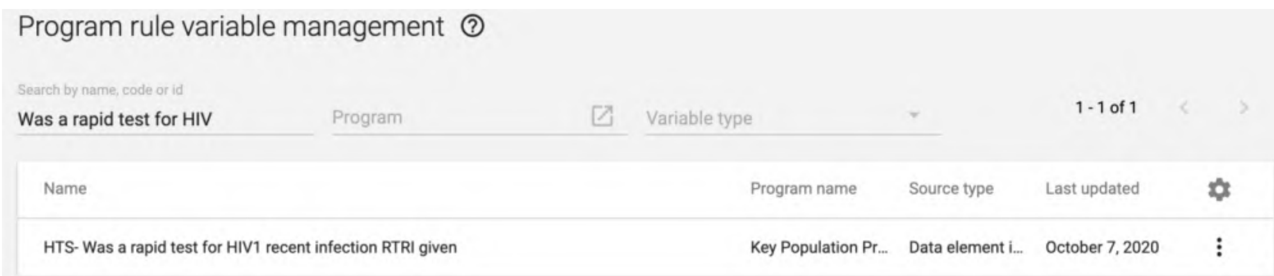


white labelled box.



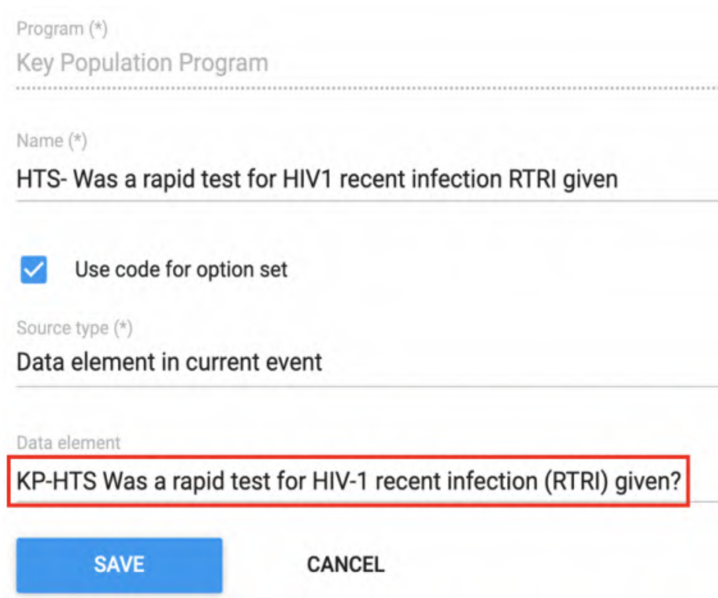
Next search for the name of the field in the 'Search by name code or id' field.

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:



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.*

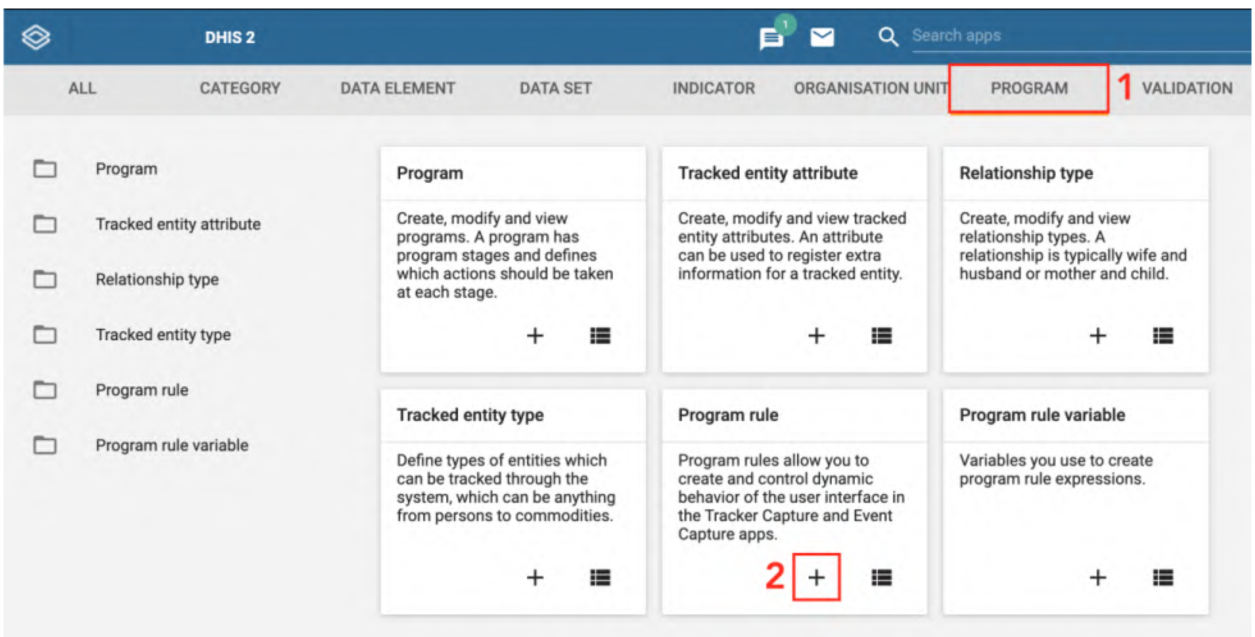
Source type: *As mentioned earlier this allows an extra layer of functionality for the program rule variable as you can values from forms other than the current one. 99% of the time you will want the value from the current form though, so you select 'data element in current event'*

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

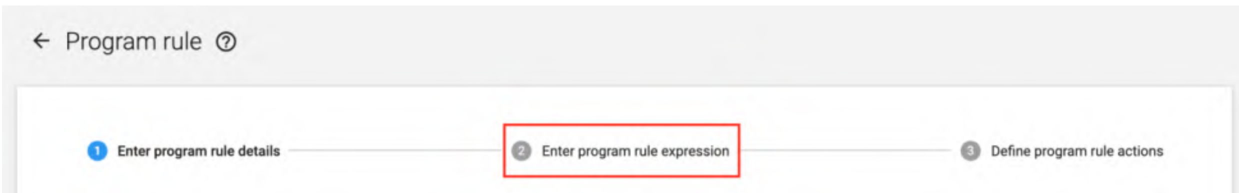
Select the program and give the rule a name, this should follow the format:

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

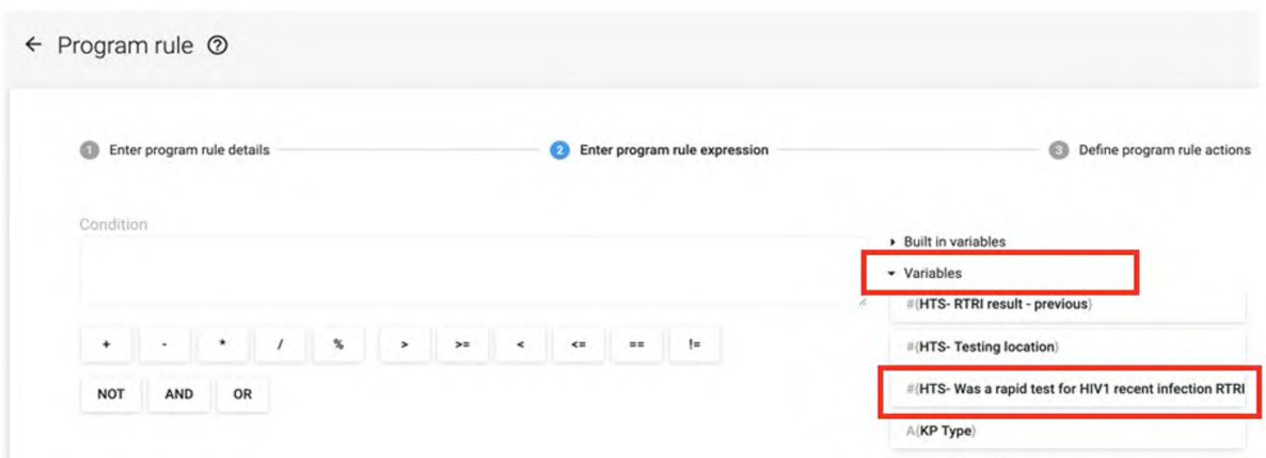
For example the HTS event rule which hides the RTRI questions unless Yes is selected:

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.

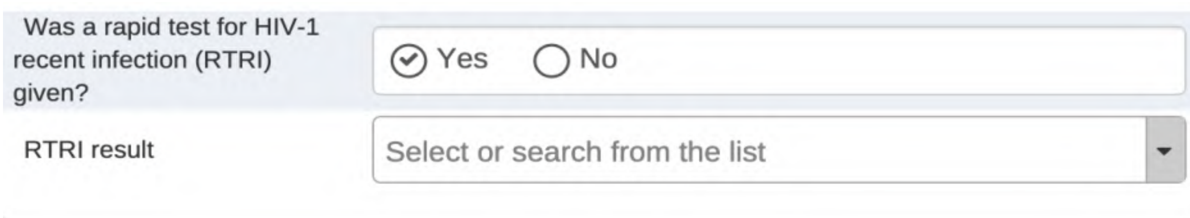


Here we enter a condition to decide if the rule should be run or not. In our example, we want to hide the RTRI questions unless they select 'yes' for the control question HTS-RTRI given First let's select the program rule variable created earlier to get the value from our control question. To do this 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:



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

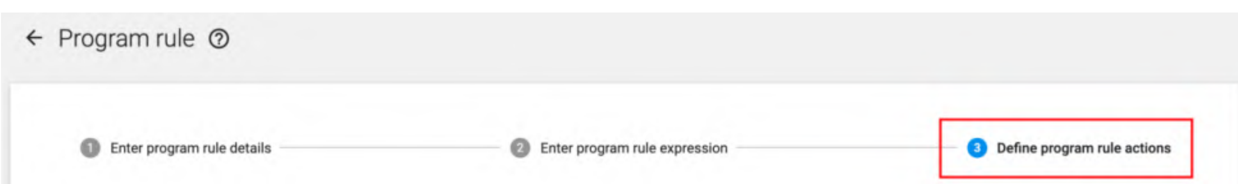
The means we want our condition to implement the logic: If the value selected is not yes, then run the rule to hide the fields.

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 out 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.*

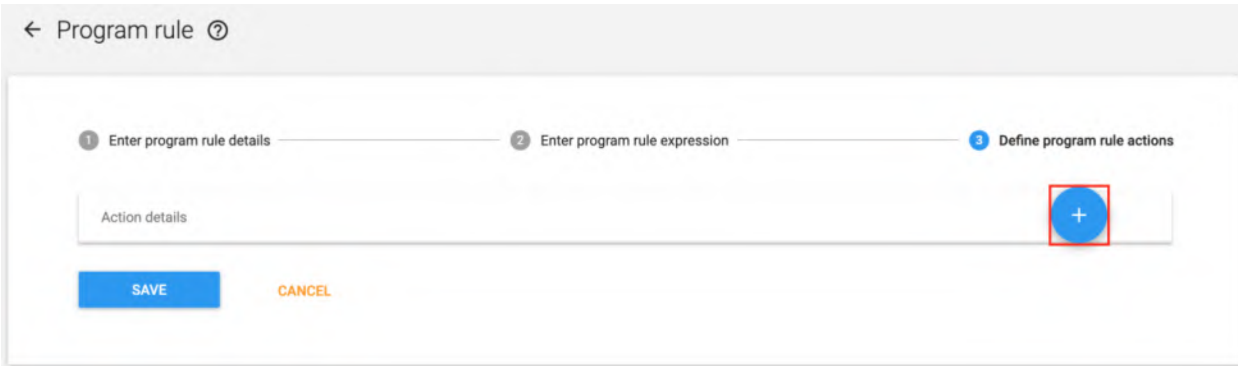


So far we have defined when the rule will run, now we define what it does when it does run. These are called program rule actions, and a program rule can have multiple actions.

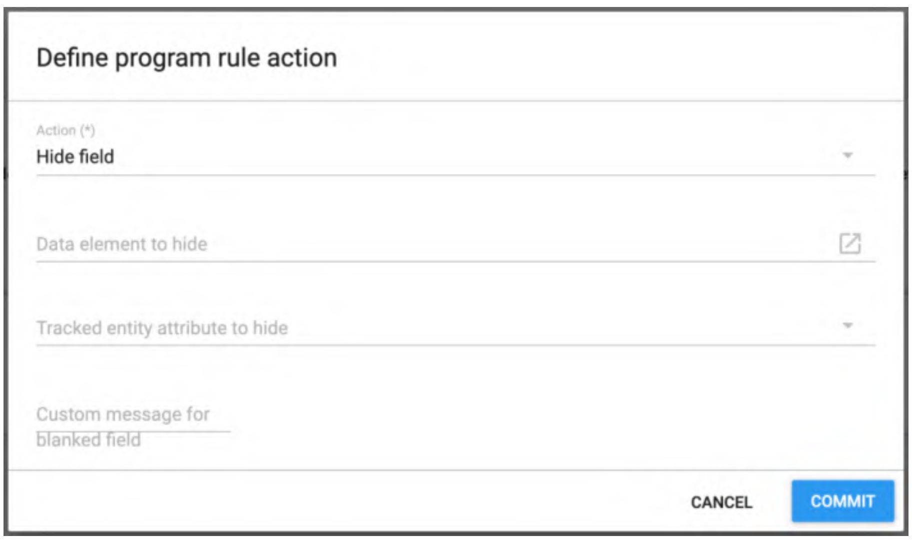
In the example we want to hide

- *'HIV - HTS RTRI result'*

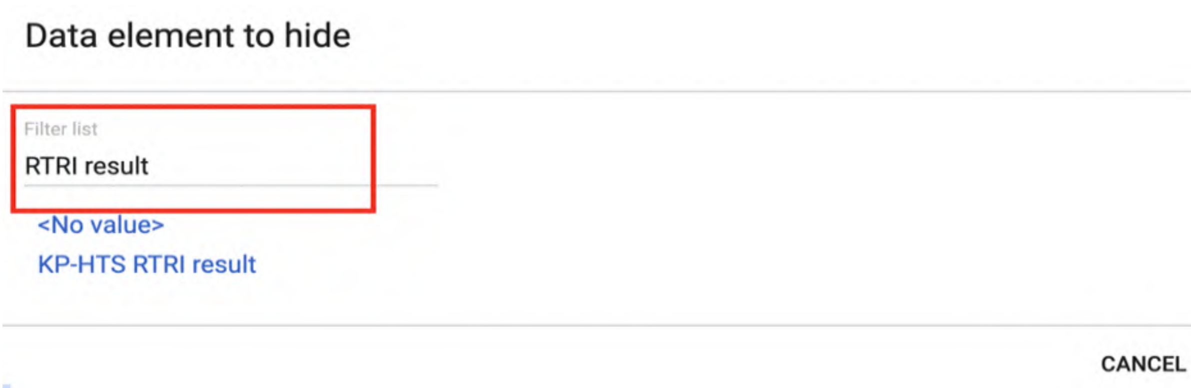
To do this we create a new action for each field we want to hide. To create a new action, click the blue + button:



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.



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

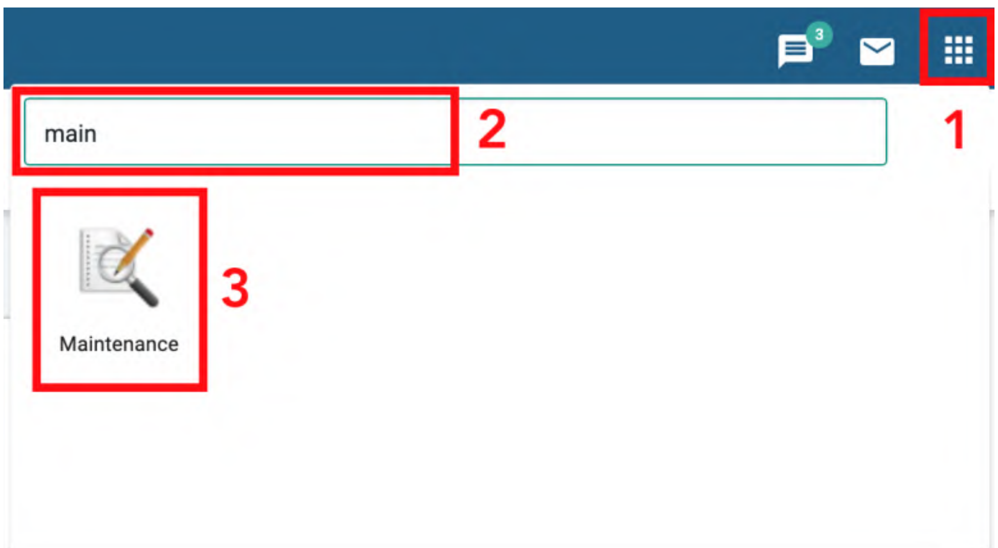
Program indicators allow a wide variety of calculations to be performed on the data entered into the various tools in the FHI 360 system. One common calculation is to count the number of forms where a certain condition is met.

1.7.1 Create a Program Indicator

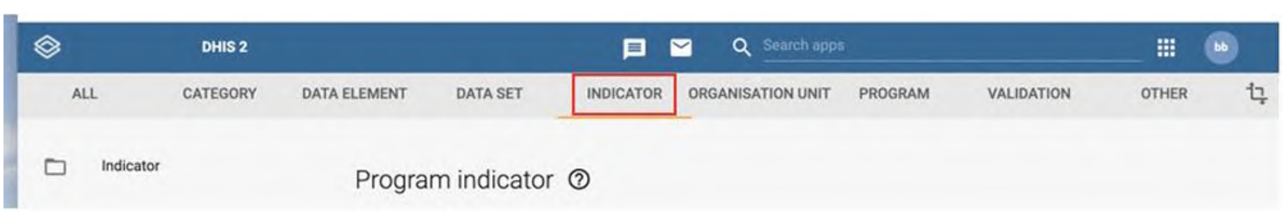
This guide covers how to create a program indicator that will count the number of events that is a number of requests in this case when a certain field value is selected. To get started

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

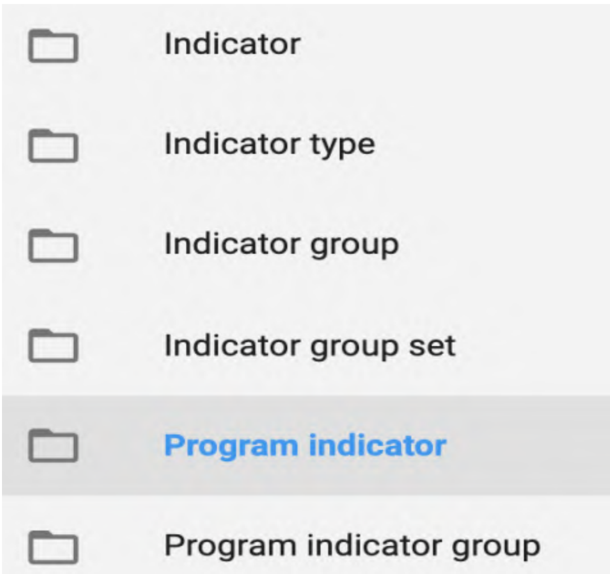
First navigate to the maintenance app.



Select Indicator from the top bar.



Next, select Program indicator on the left.

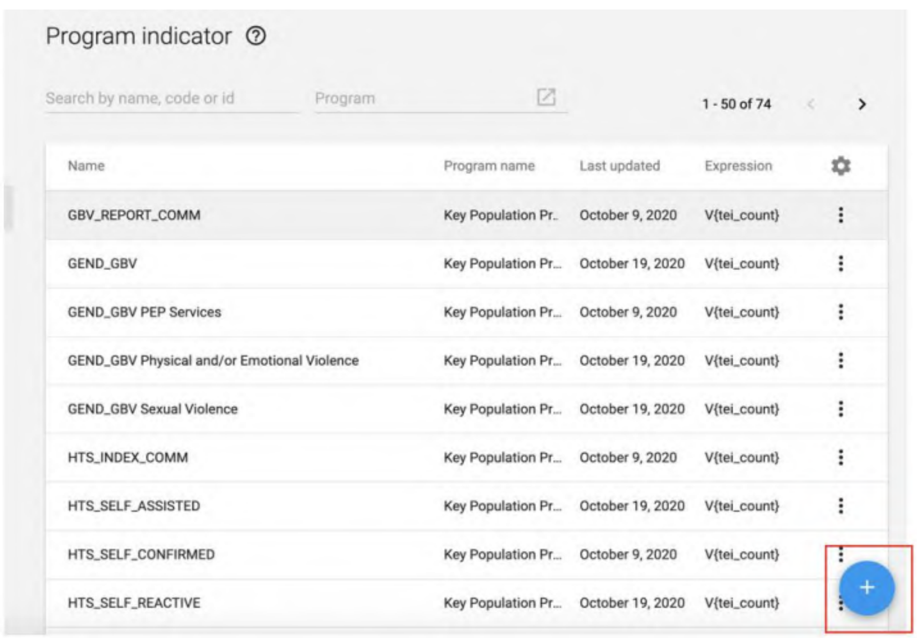


Below as descriptions of the important fields to fill out when creating a new program indicator. Any other fields not mentioned can be safely ignored.

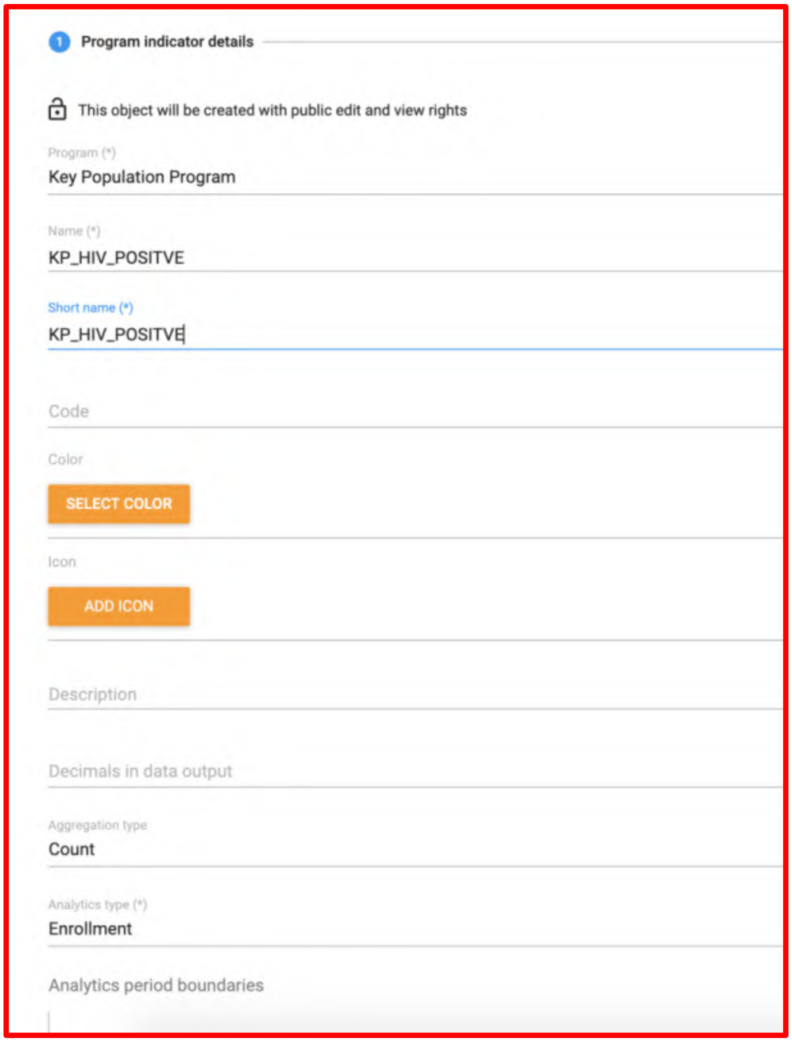
Program	*Select the appropriate program example "HIV Program Tracker "*
Name	*Domain abbreviation_name abbreviation in capital letter for example KP_HIV_Positive*
Short name	*Same as name Program name abbreviation_name abbreviation in capital letter*
Aggregation type	*Determines how the program indicator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

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

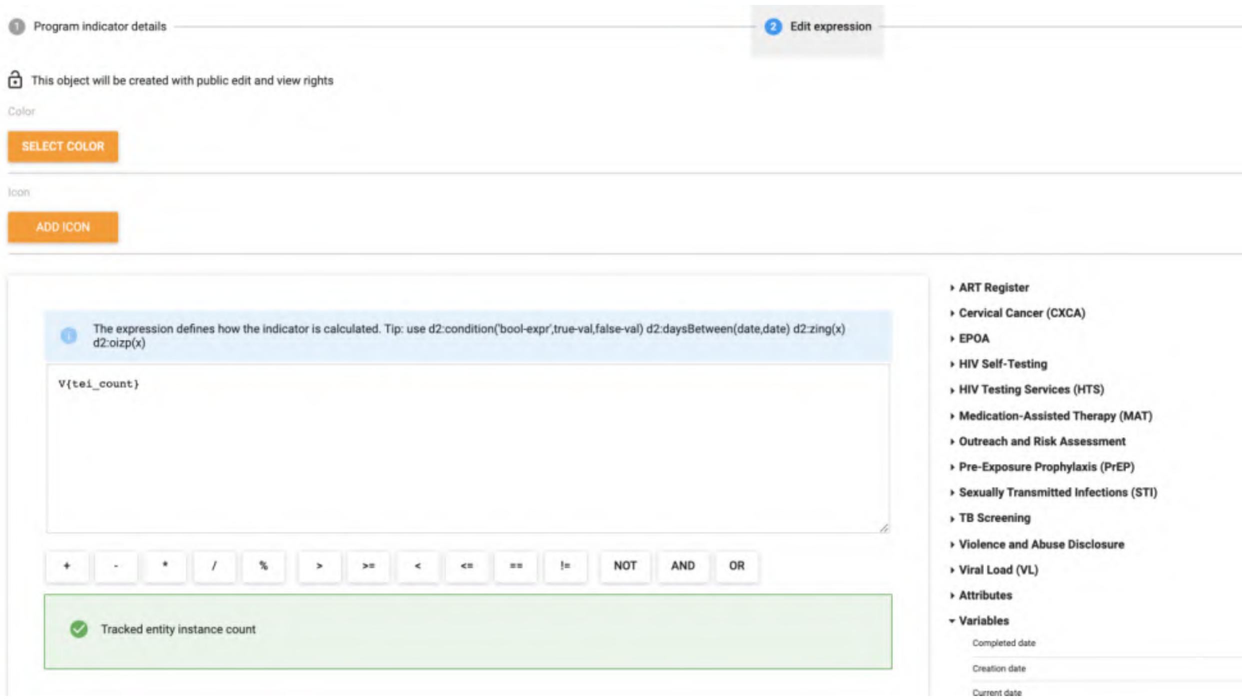
To add a new program indicator, click the + symbol in the program indicator section.



Fill out the field as appropriate.



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.

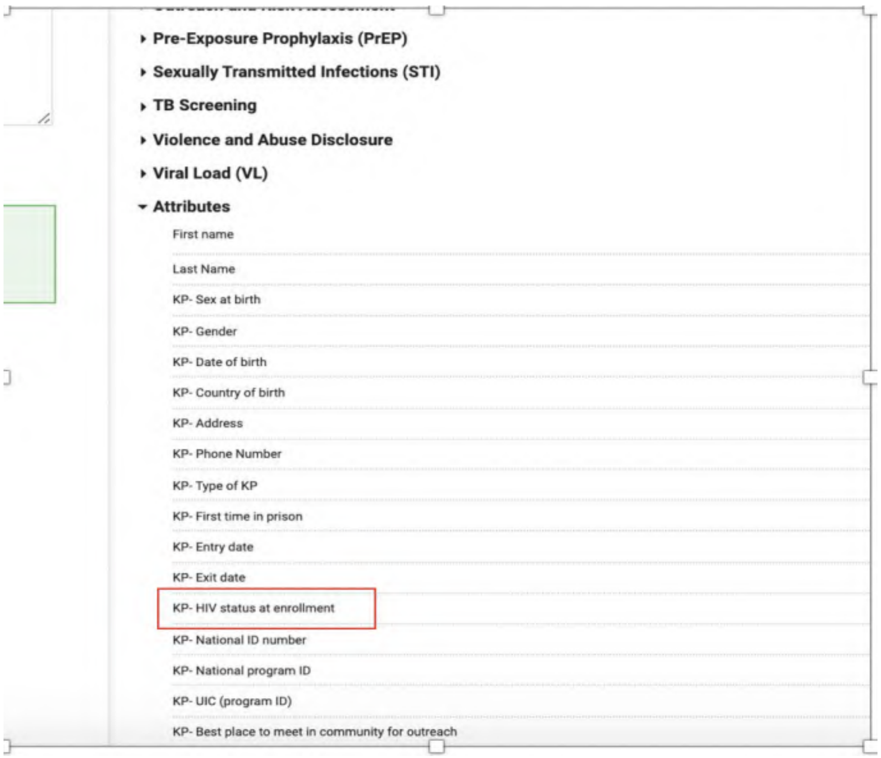


Filters determine the field that will be included in the evaluation. Available fields can be found on the left hand side. The fields are separated into different program stages.

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

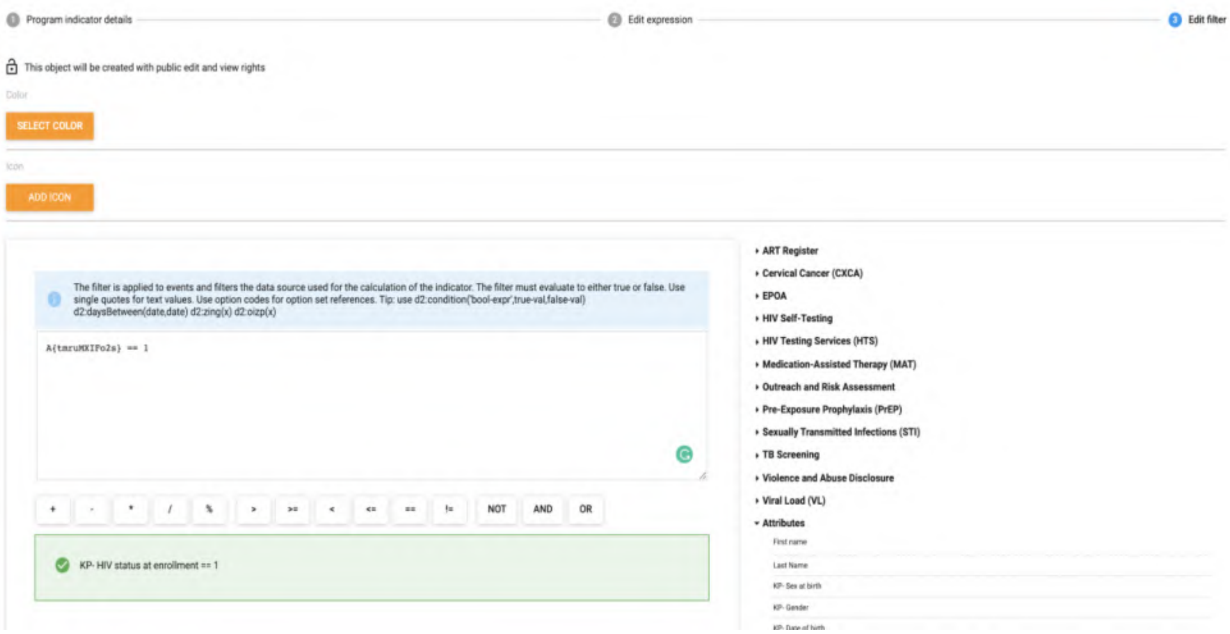
This example is an attribute,

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

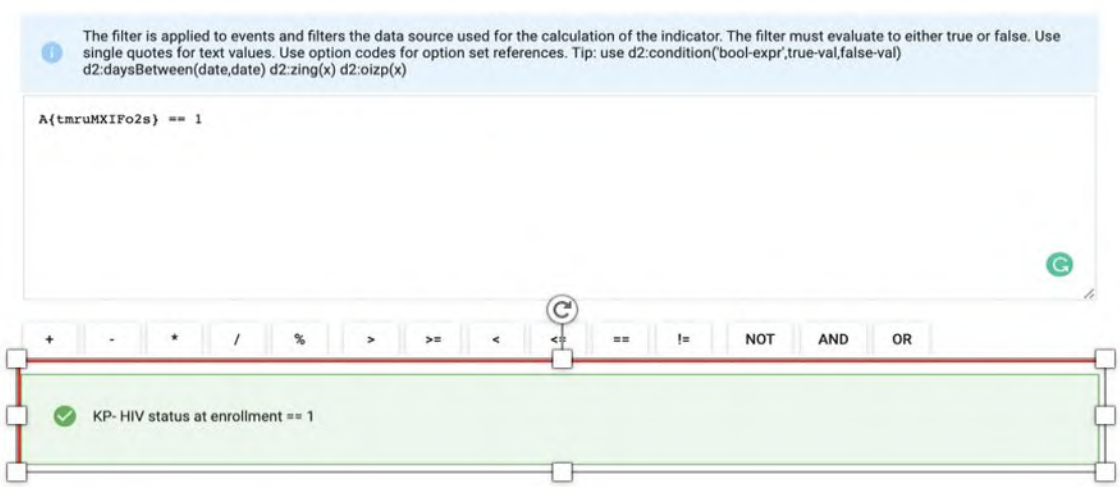


Click on the field, a special characters representing the field are added to the program indicator filter section.

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



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



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

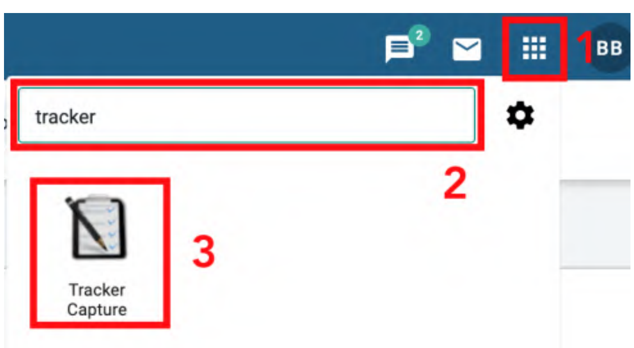
This section will guide you in recording information for new HIV Clients or editing data for existing ones.

2.1.1.a Create a new HIV Program record

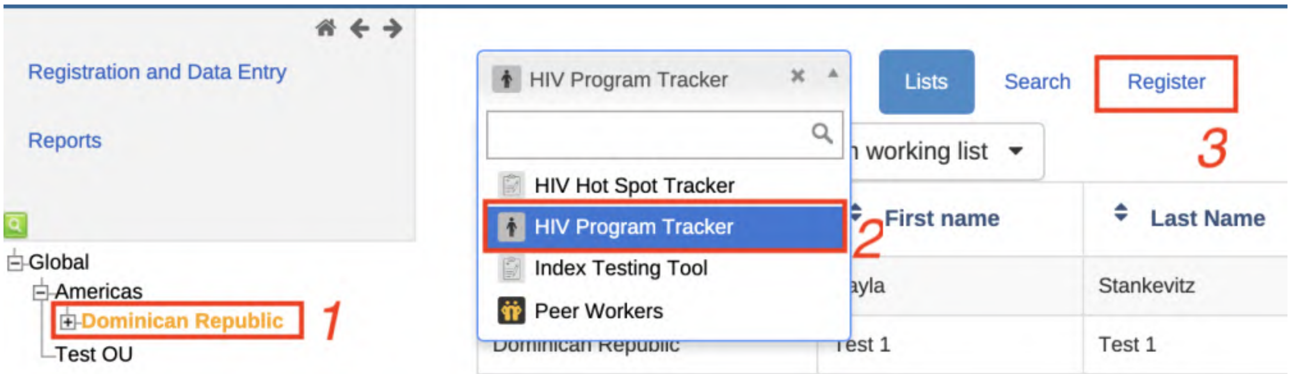
Key records are added into the DHIS2 system to keep track of personal data and capture information on the different services included in the HIV package.

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.*



2. *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.*



3. *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.*

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

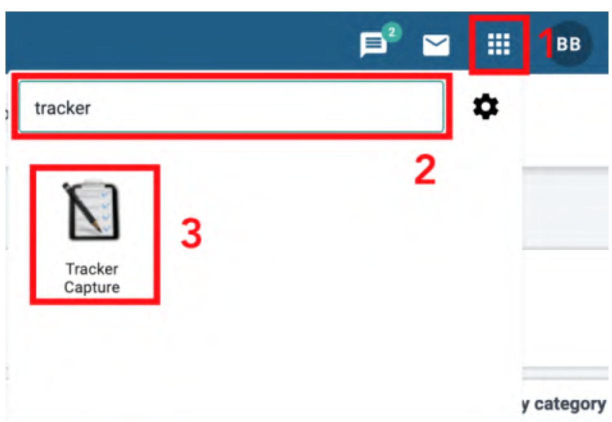
You will then arrive on the HIV Program Tracker Dashboard (TEI Dashboard).

2.1.1.b Find an existing HIV Program Record

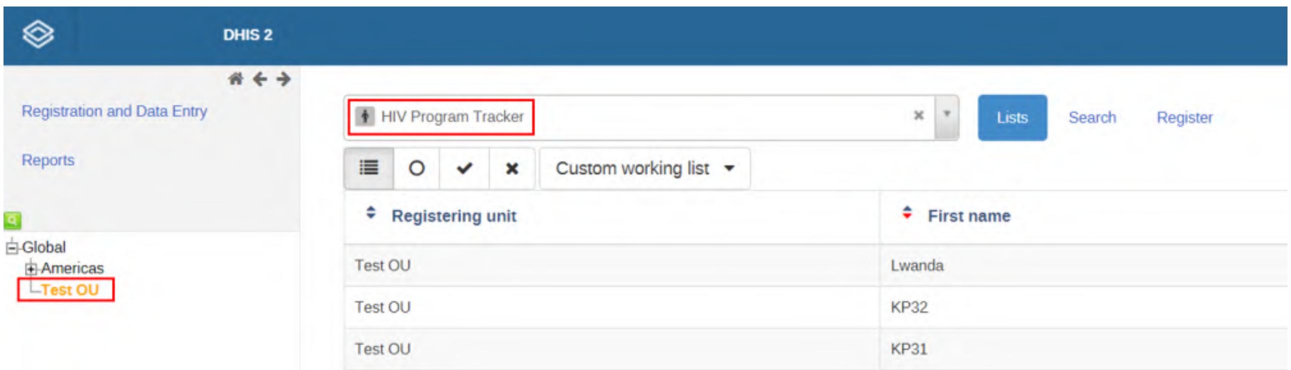
If you are a user who would like to find an existing HIV Program Tracker profile to update it or just view form data, this is the part of the guide you need to get started.

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.

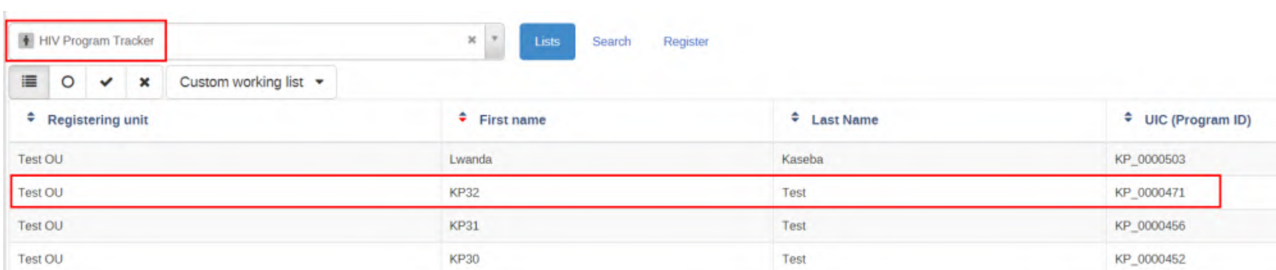
1. *Open the tracker capture app from the app menu.*



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



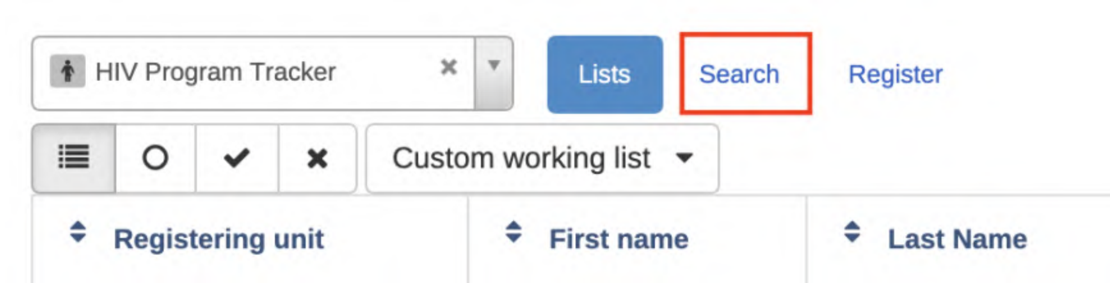
3. *Click the row containing the HIV Client you would like to open*



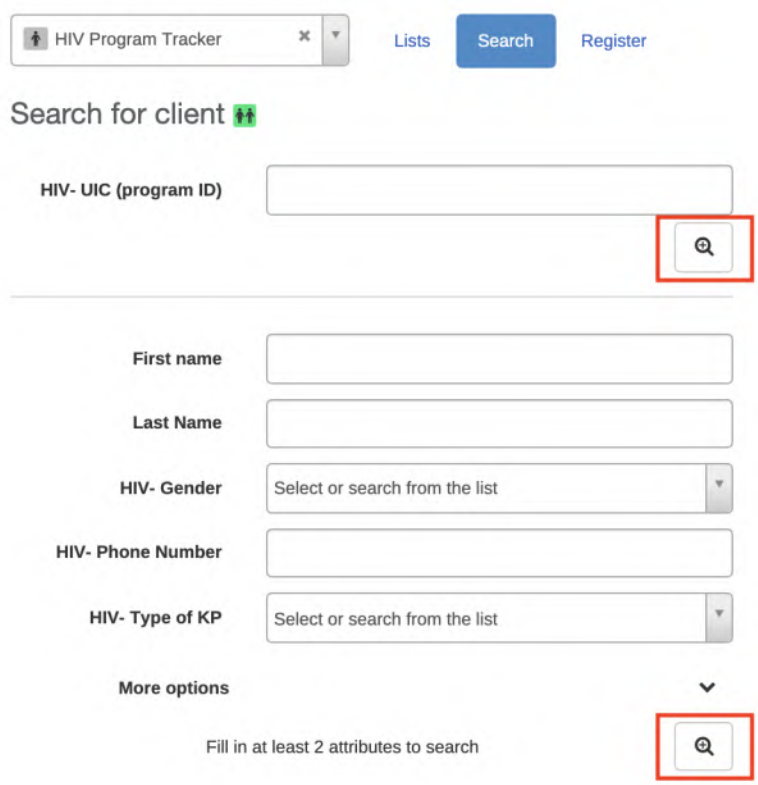
You have now successfully selected the HIV Client.

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:*

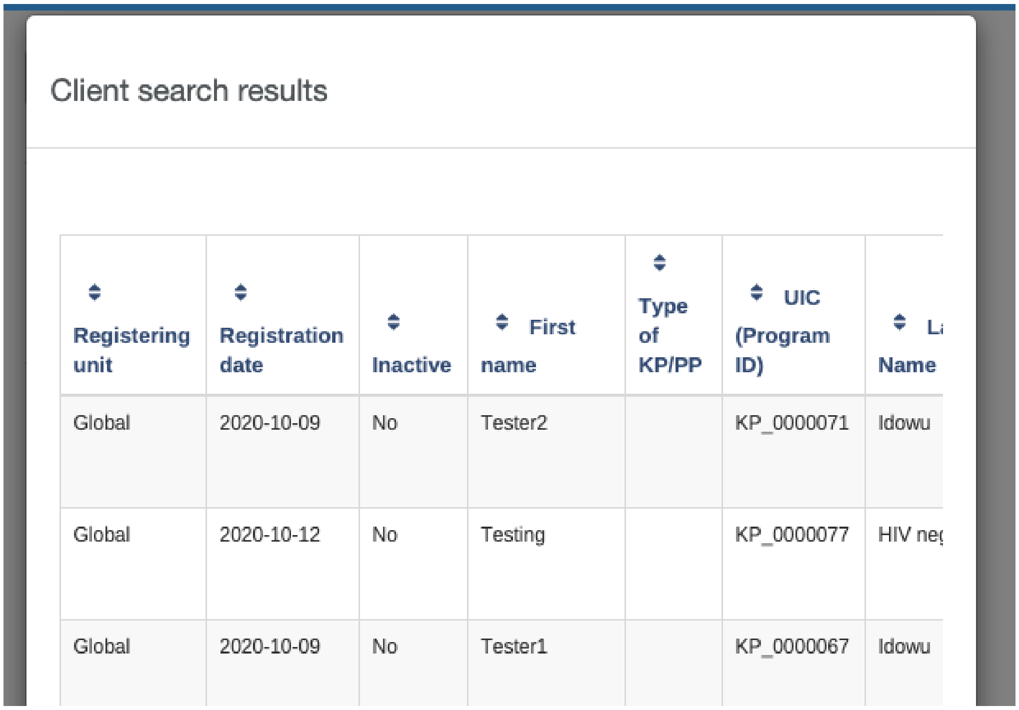
1. *Click the search button at the top of the screen in the tracker capture app.*



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.*



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.*

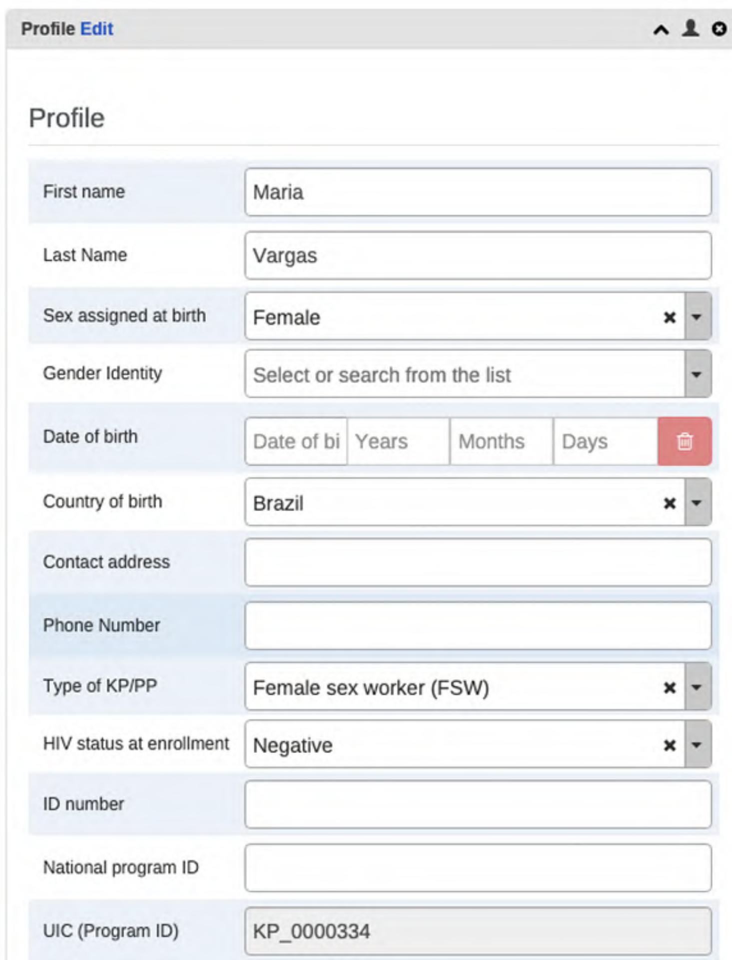


2.1.3 Edit an existing HIV Program Tracker record

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.*



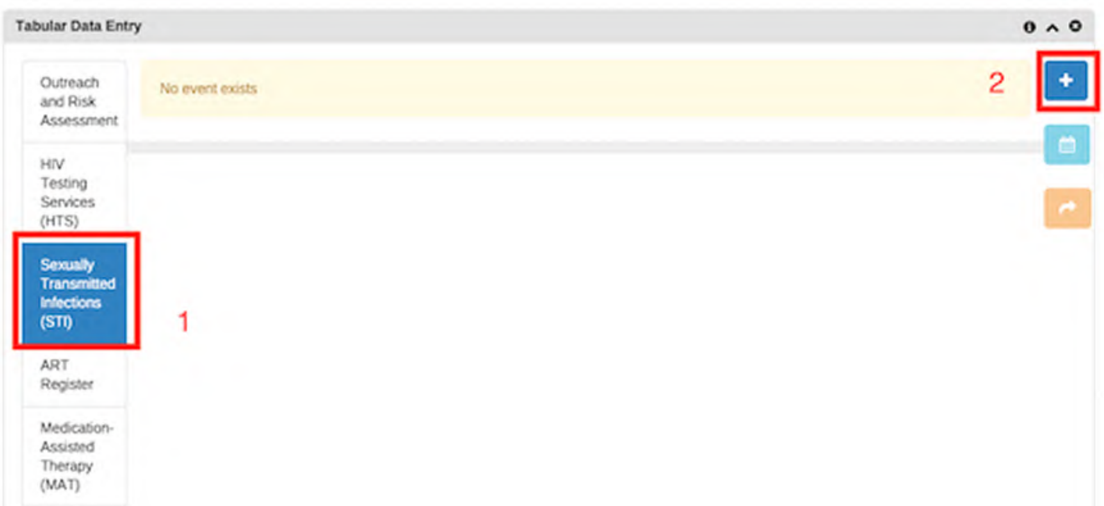
4. *Click **Save**.*

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.

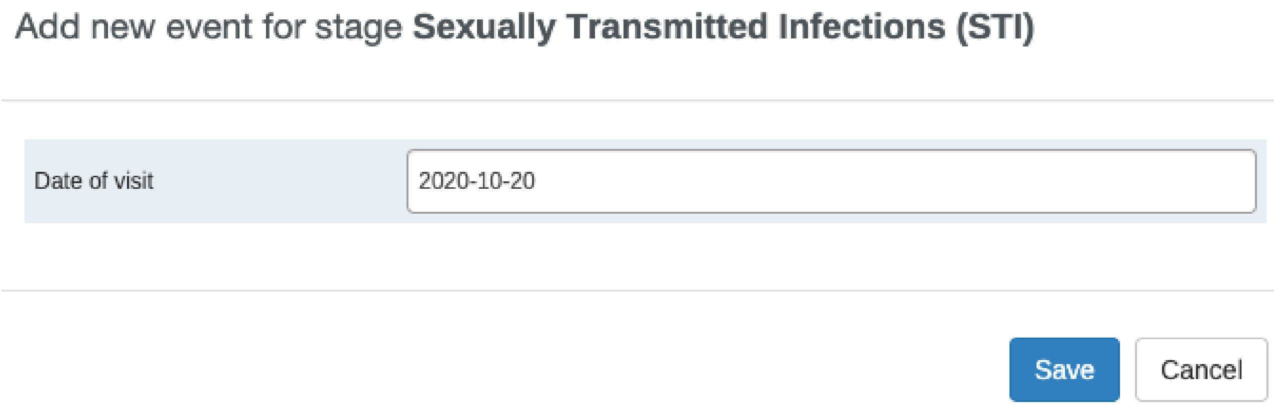
To record events for each one of the services included in the HIV Program, please follow these steps:

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*

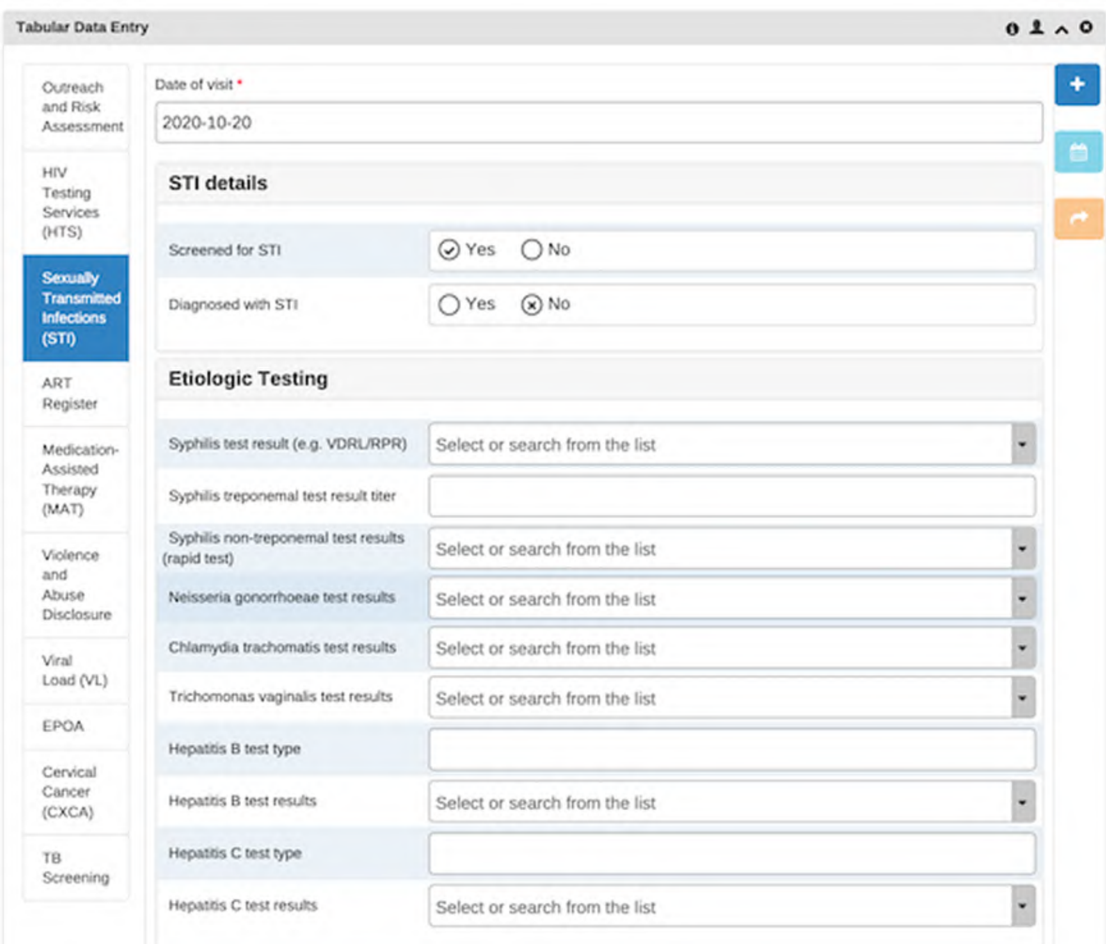


dashboard, select the relevant program stage and then click on the + button to create a new event for the selected service.

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



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



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.*

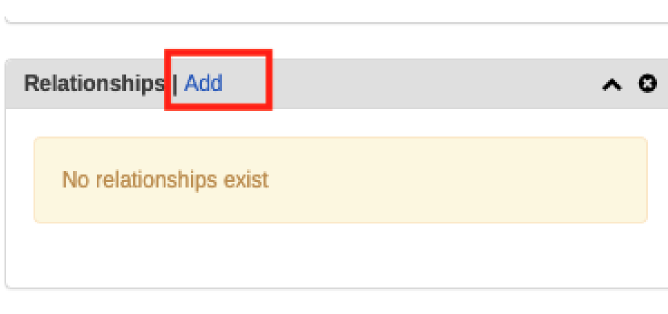
2.2 Add Relationships

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

HIV Client to PW relationship

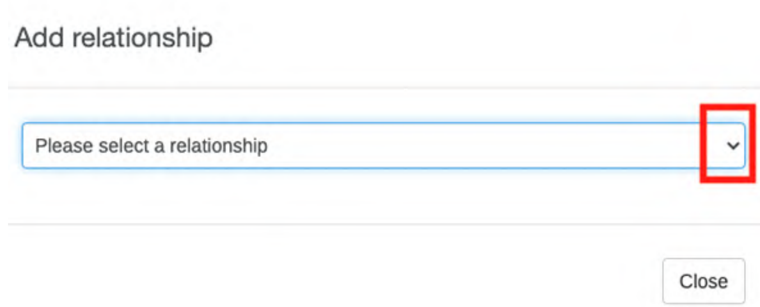
In this section we will describe how to define a relationship between 'HIV Client' (HIV Program Tracker) and Peer Worker (PW).

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

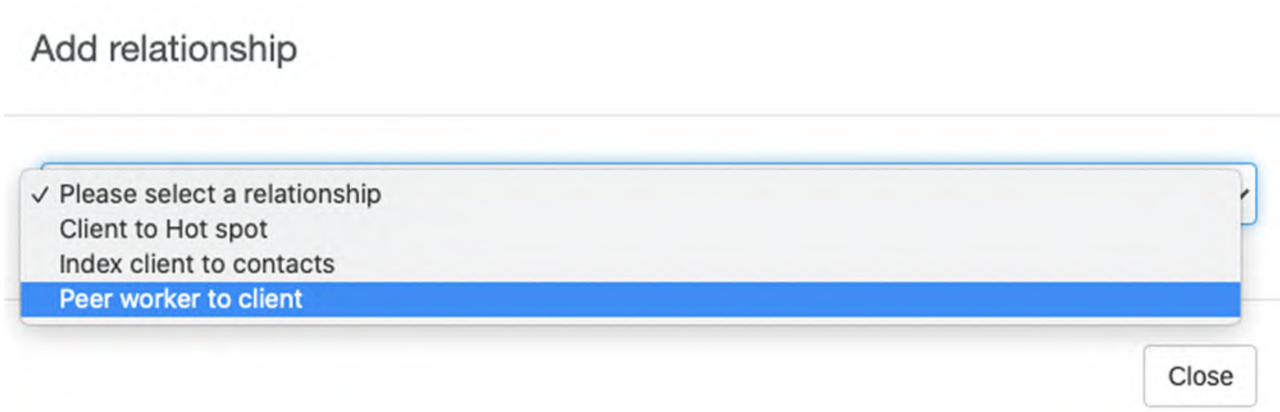


.

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

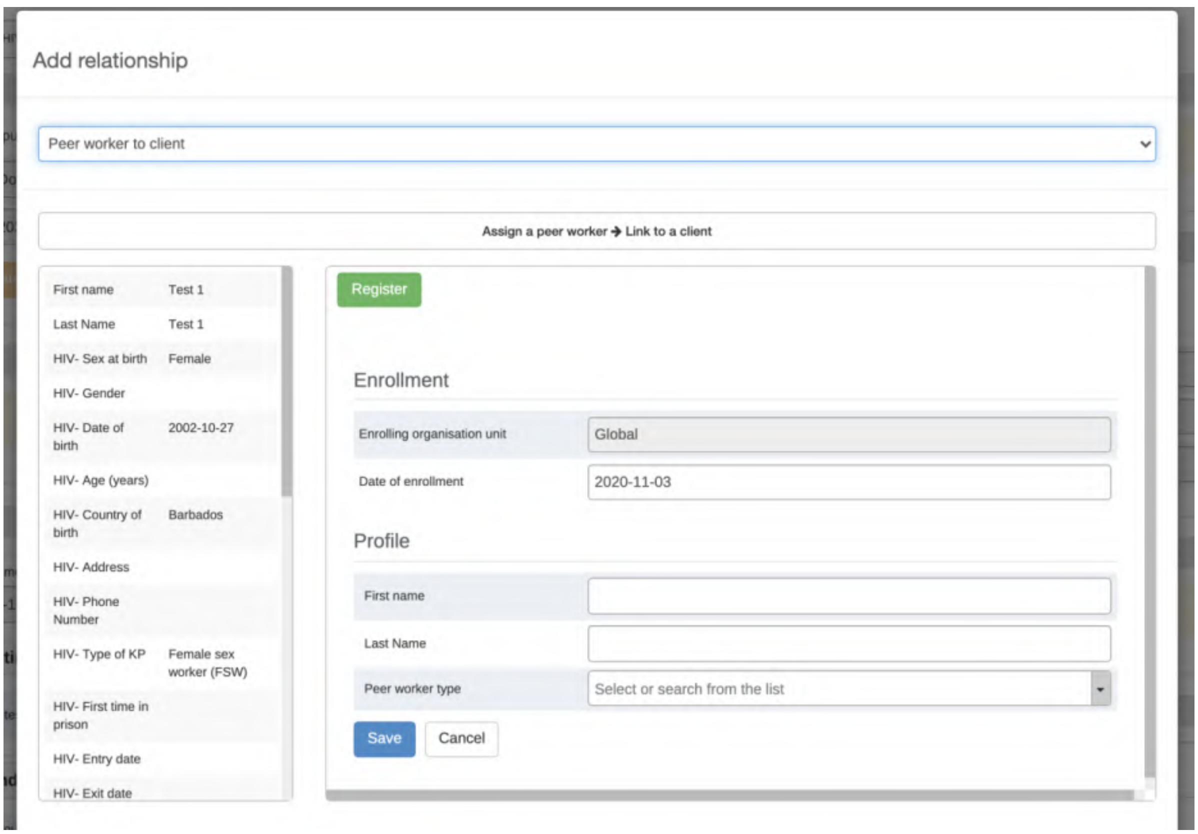


3. *Below is the list of all relationships from HIV Clients to programs such as 'Client to Hot spot,' 'Index clients to contacts' and 'Peer worker to client.'*

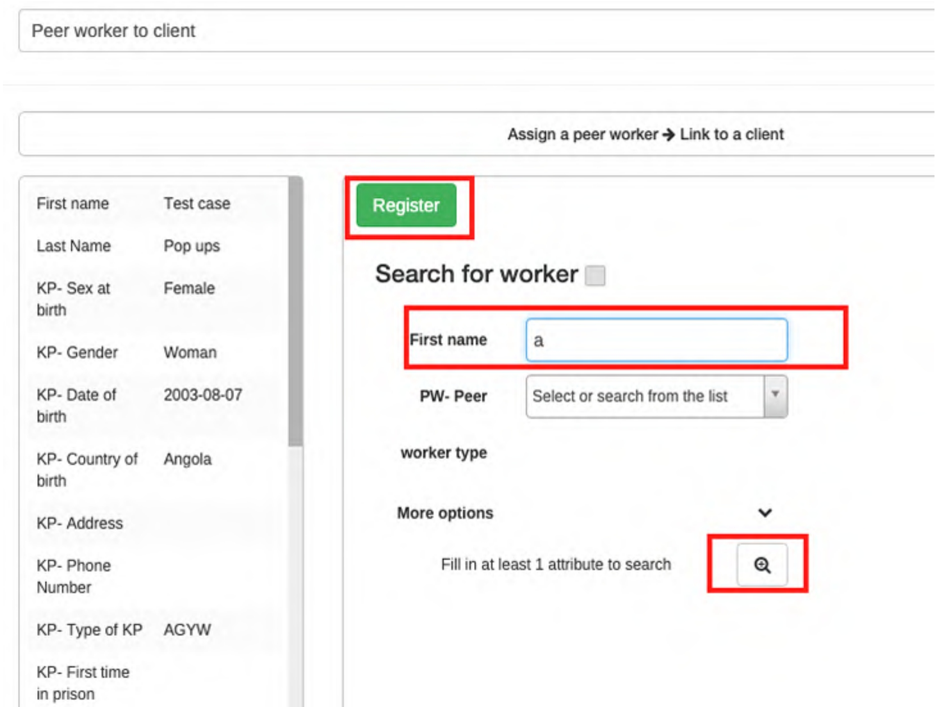


4. *Once the relationship is selected, in the new page we can:*

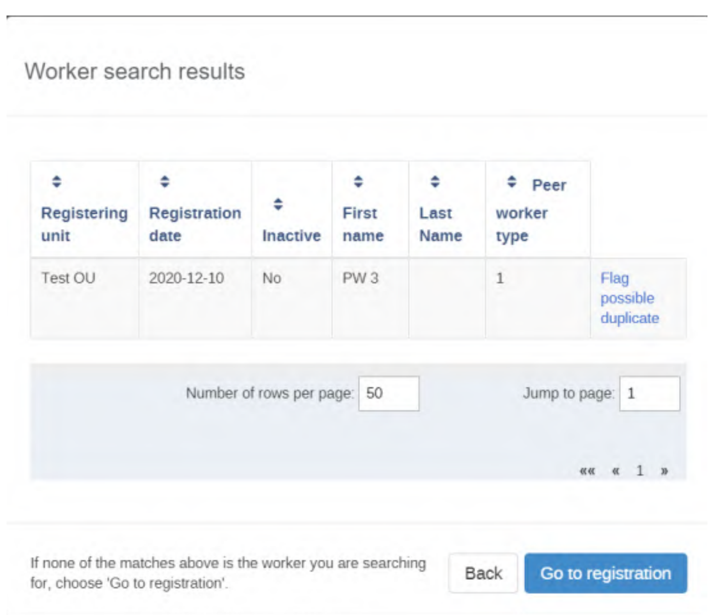
    a. *Create a new Peer Worker by clicking on **Register**; fill all the required fields and click on **Save**.*



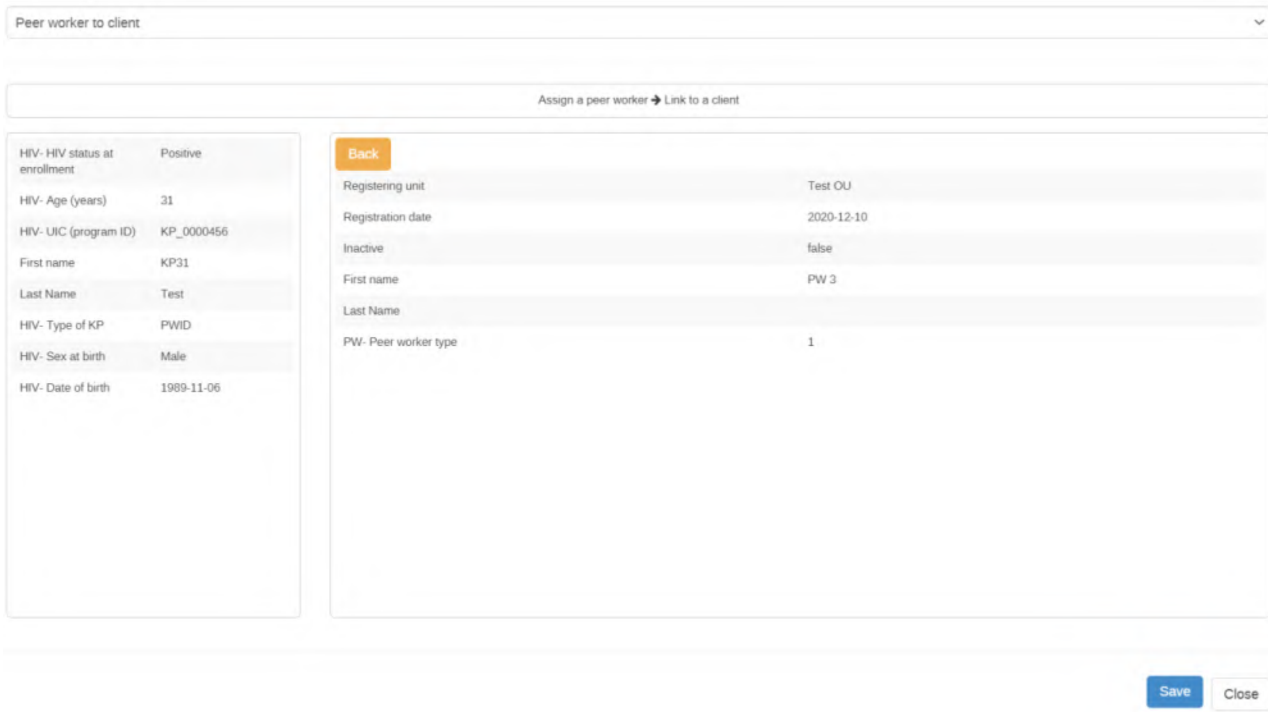
b. *Search for the existing Peer Worker by filling one of the attributes and select the search button.*



c. *A list of registered PW will be displayed.*



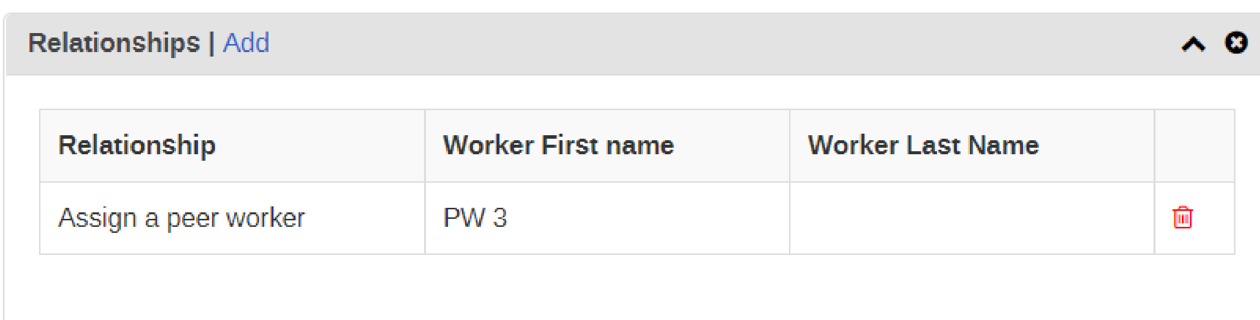
d. *Select the desired one and then click on **Save**.*



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.*

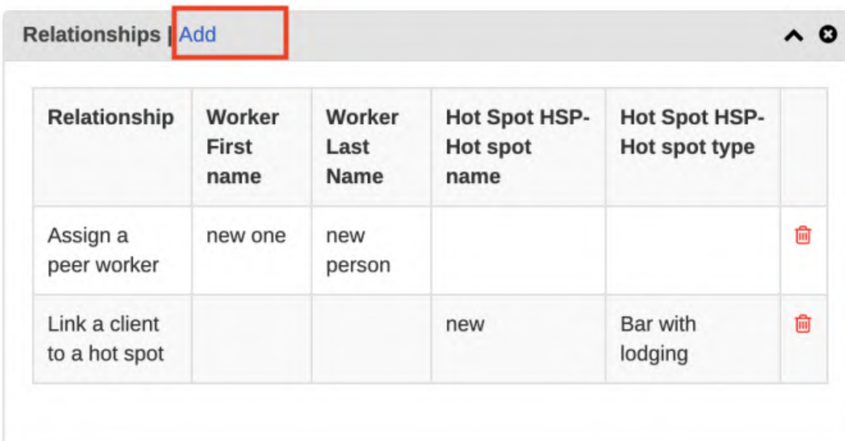


2.2.3 Add relationship to Index testing (Index client to contacts)

HIV Client to Index testing Relationship

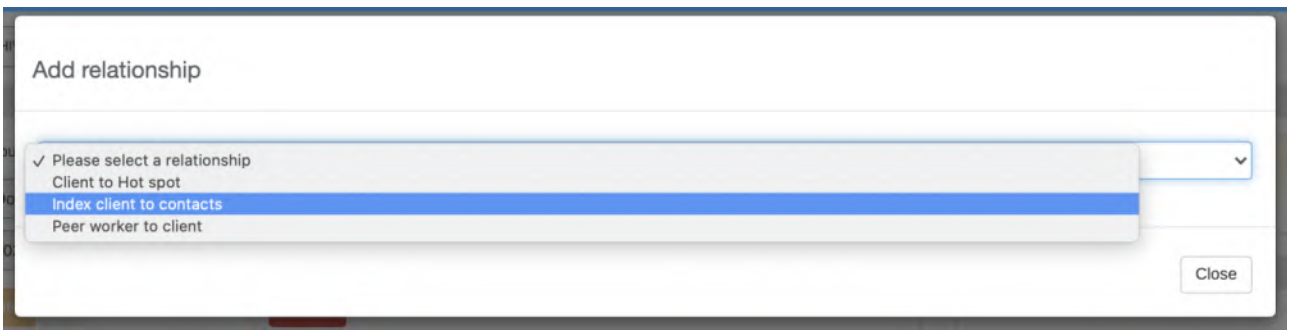
In this section we will describe how to define a relationship between HIV Clients and Index testing. We use this to link a client to contacts

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



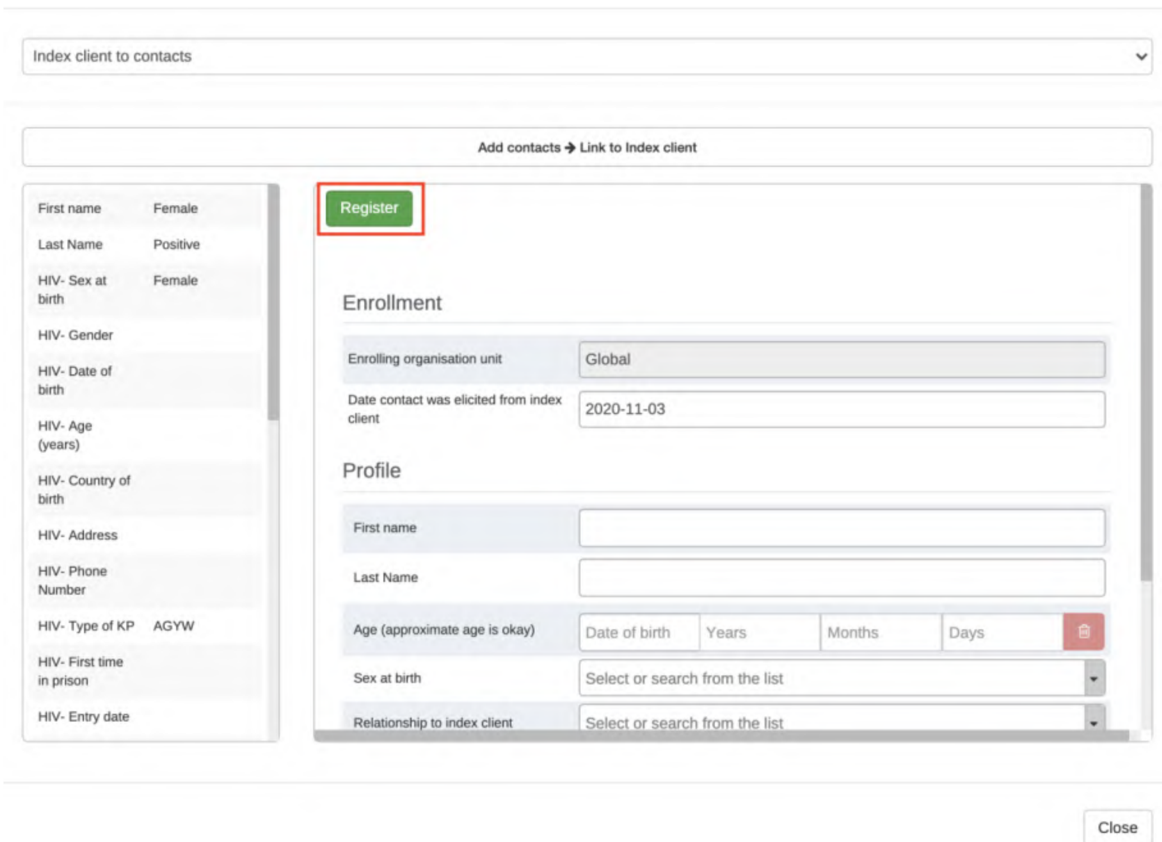
2. *A drop down menu will appear, displaying all of the available relationships when the downward arrow is clicked.*

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.*

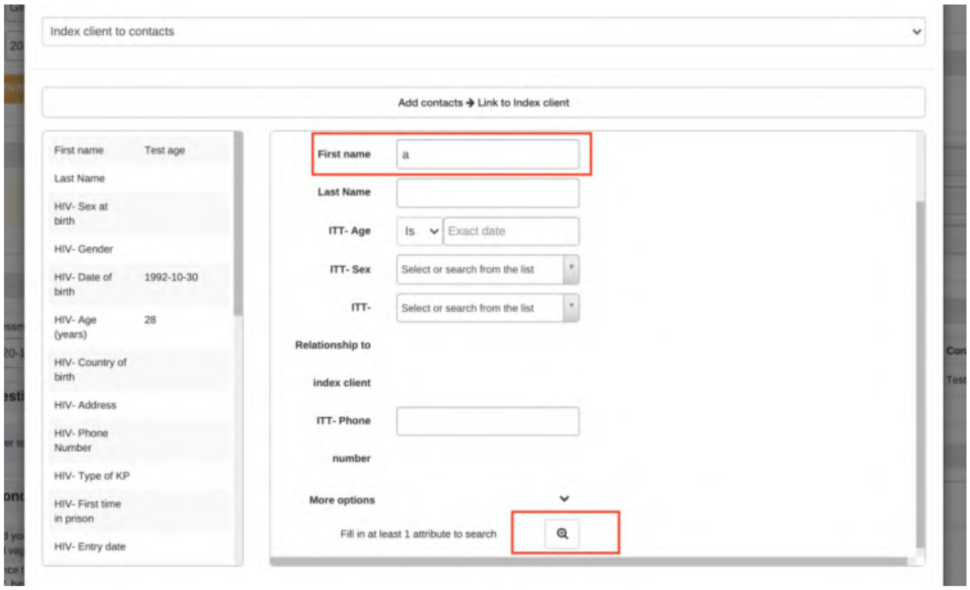


4. *Once the relationship is selected, in the new page we can:*

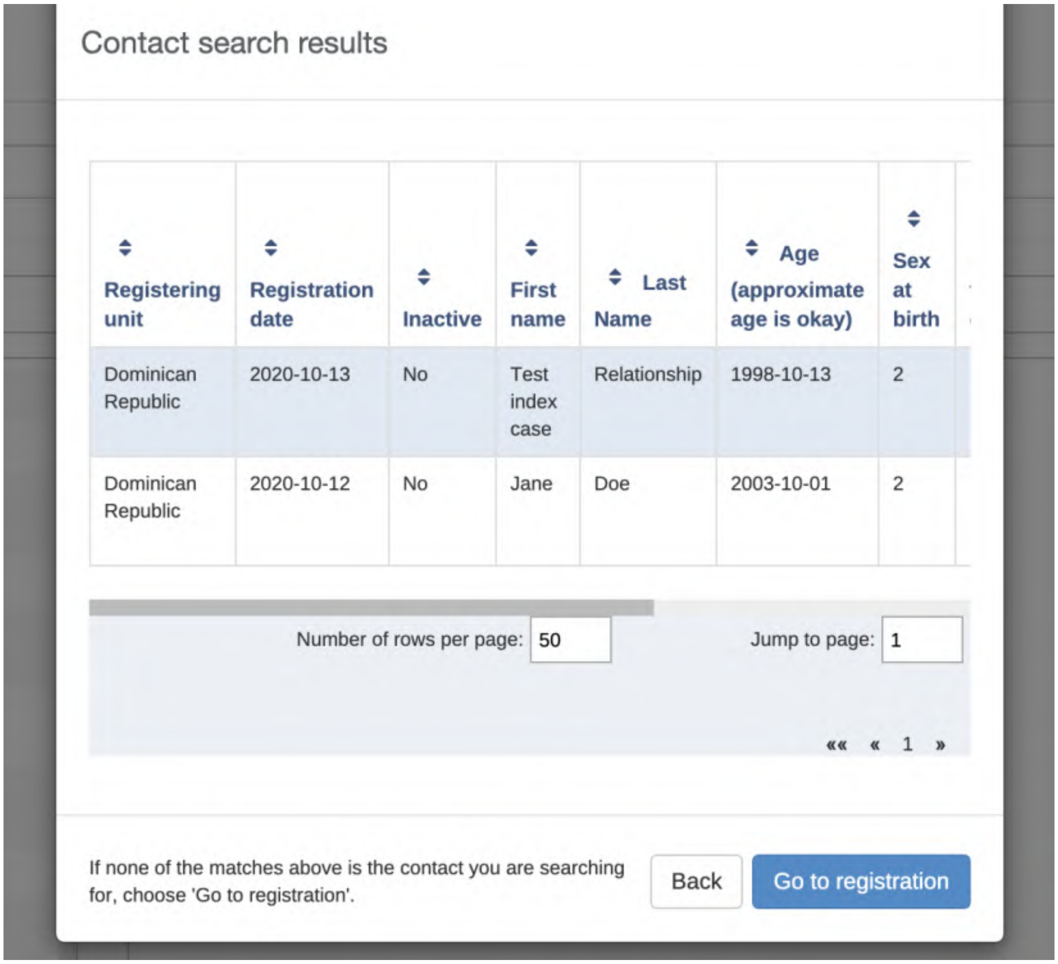
   a. Create a new Contact by clicking on 'Register'. Then fill all the required fields and click on ***Save****.*


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

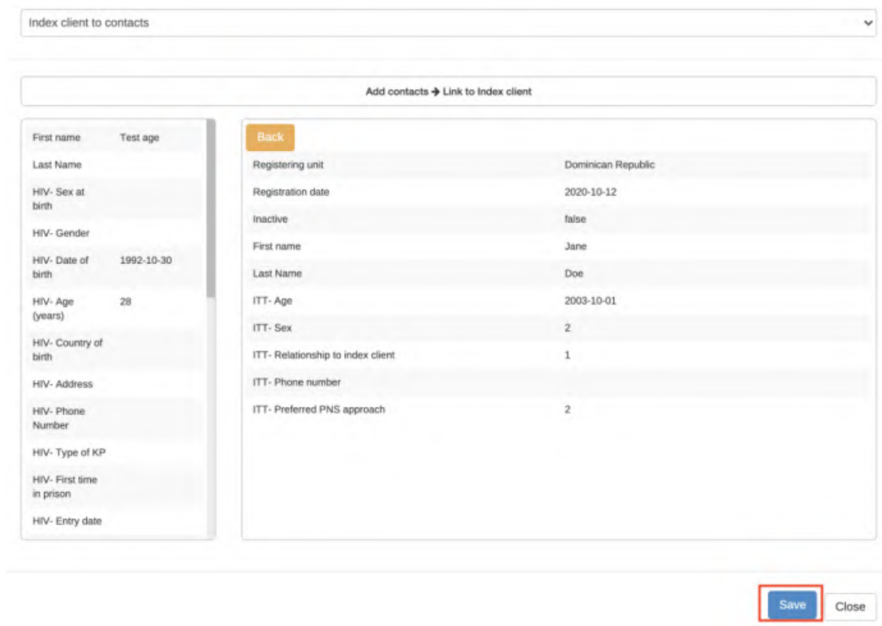
a. *Search for the existing contact events by using the First name, age, ect... and select the search button.*



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



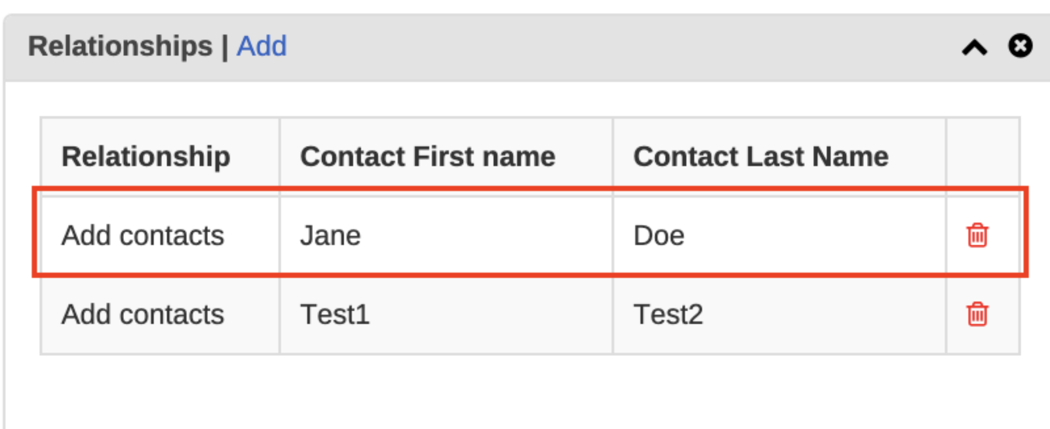
c. *Select the desired one and then click on **Save**.*



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

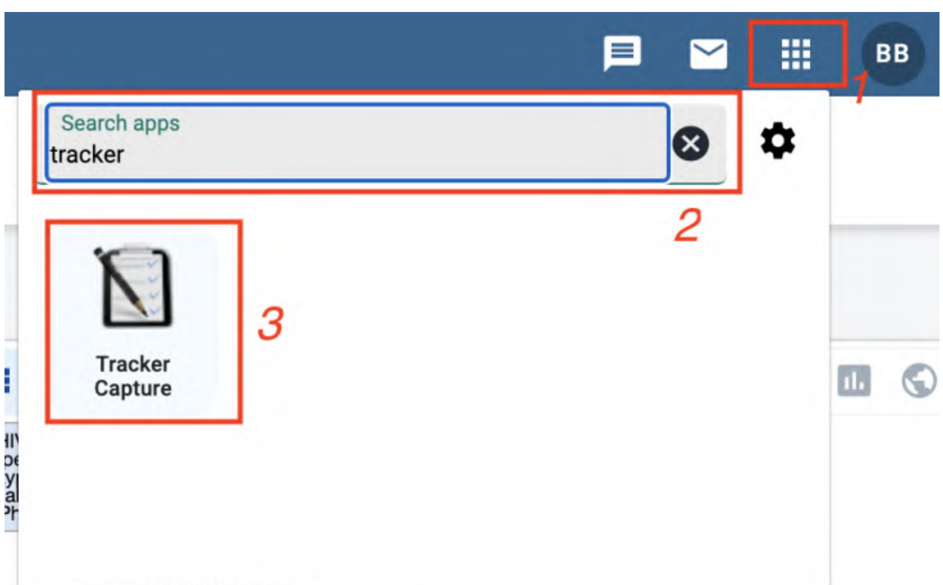
The HIV Hot Spot Tracker is used to record profile data on HIV hot spots. This tool allows us to capture information on the workers supporting particular hot spots and on the HIV Client individuals who work at or visit these hot spots.

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.

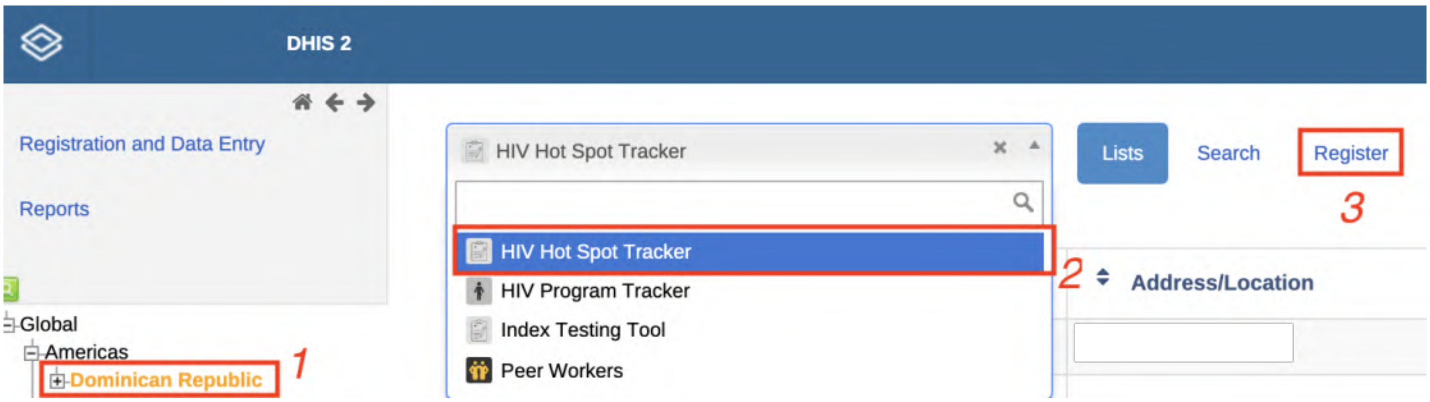
2.3.1 Create a new Hot Spot

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

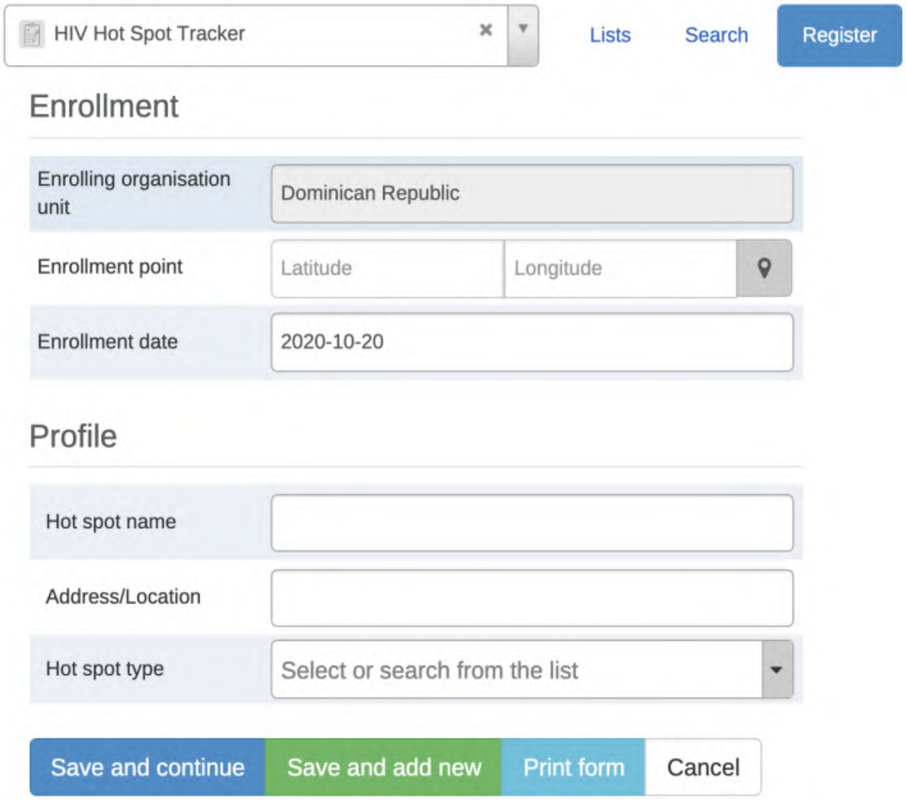
1. *In the top bar, select the app menu at the top right of the screen (the grid symbol). Then search for the tracker capture app and click on the icon to open it.*



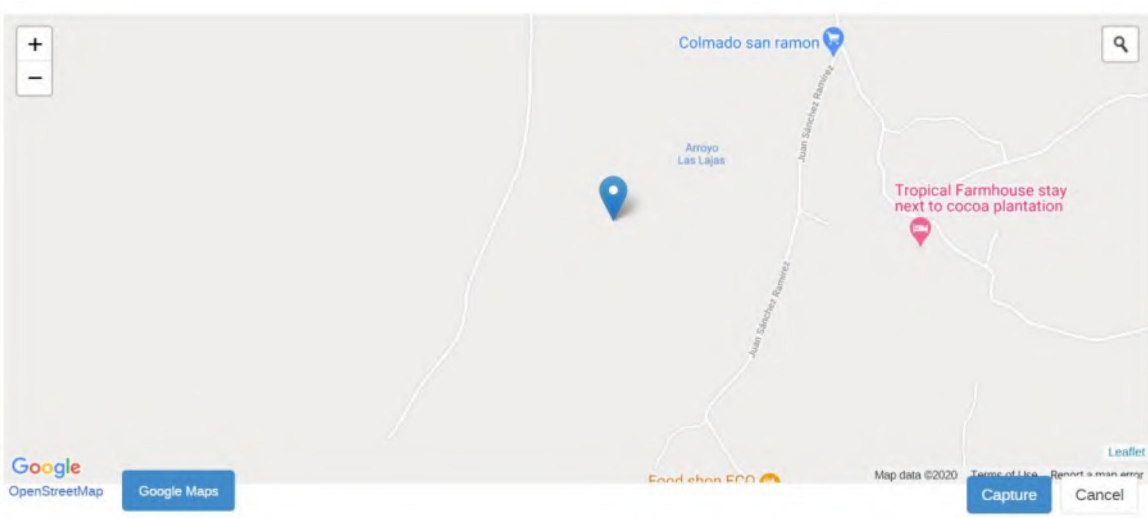
2. *Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit you would like to create the hot spot. Then, select 'HIV Hot Spot Tracker Program' from the programs list and click on the* ***Register*** *button at the top of the page.*



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)*



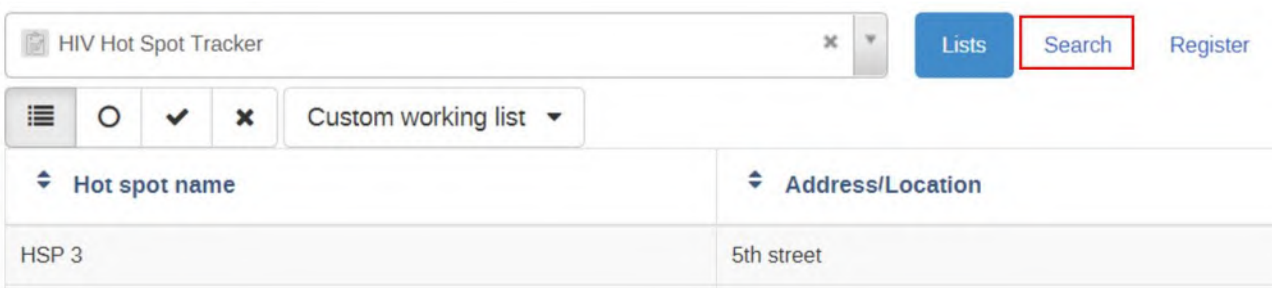
4. *Search the location on the map and capture the coordinates of the hot spot y clicking on* ***Capture***



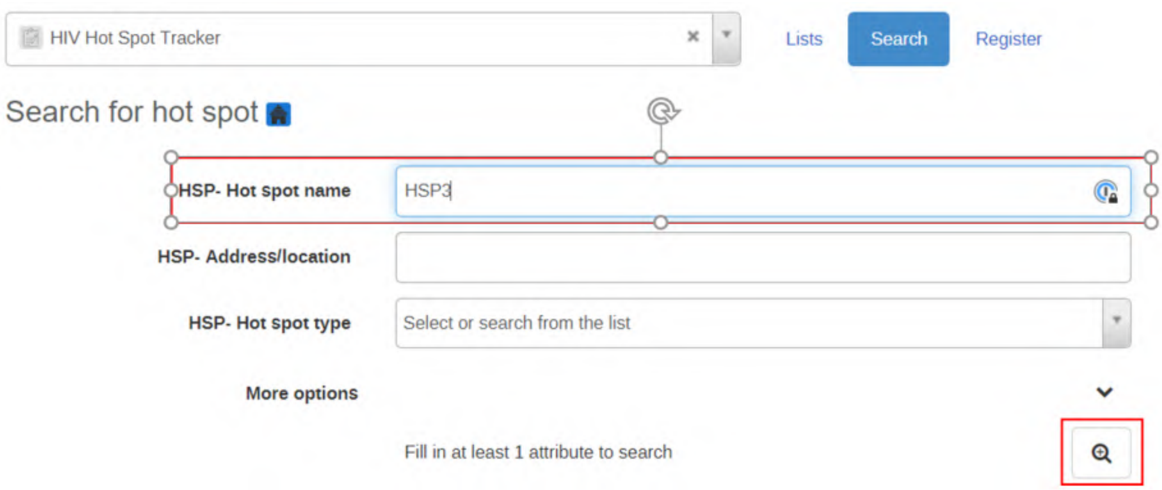
5. *Fill out the form and then select **Save and Continue**.*

2.3.2 Search for a Hot Spot

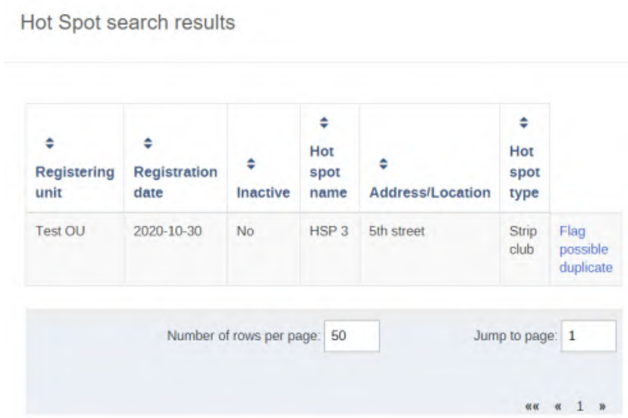
You can search for a specific Hotspot by clicking on the Search button



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

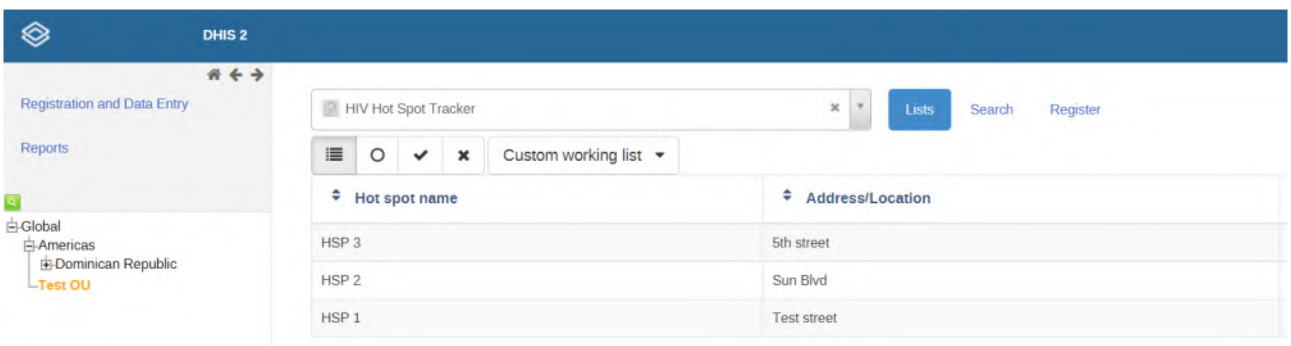


You will get a list of existing hotspots. Select the chosen one.

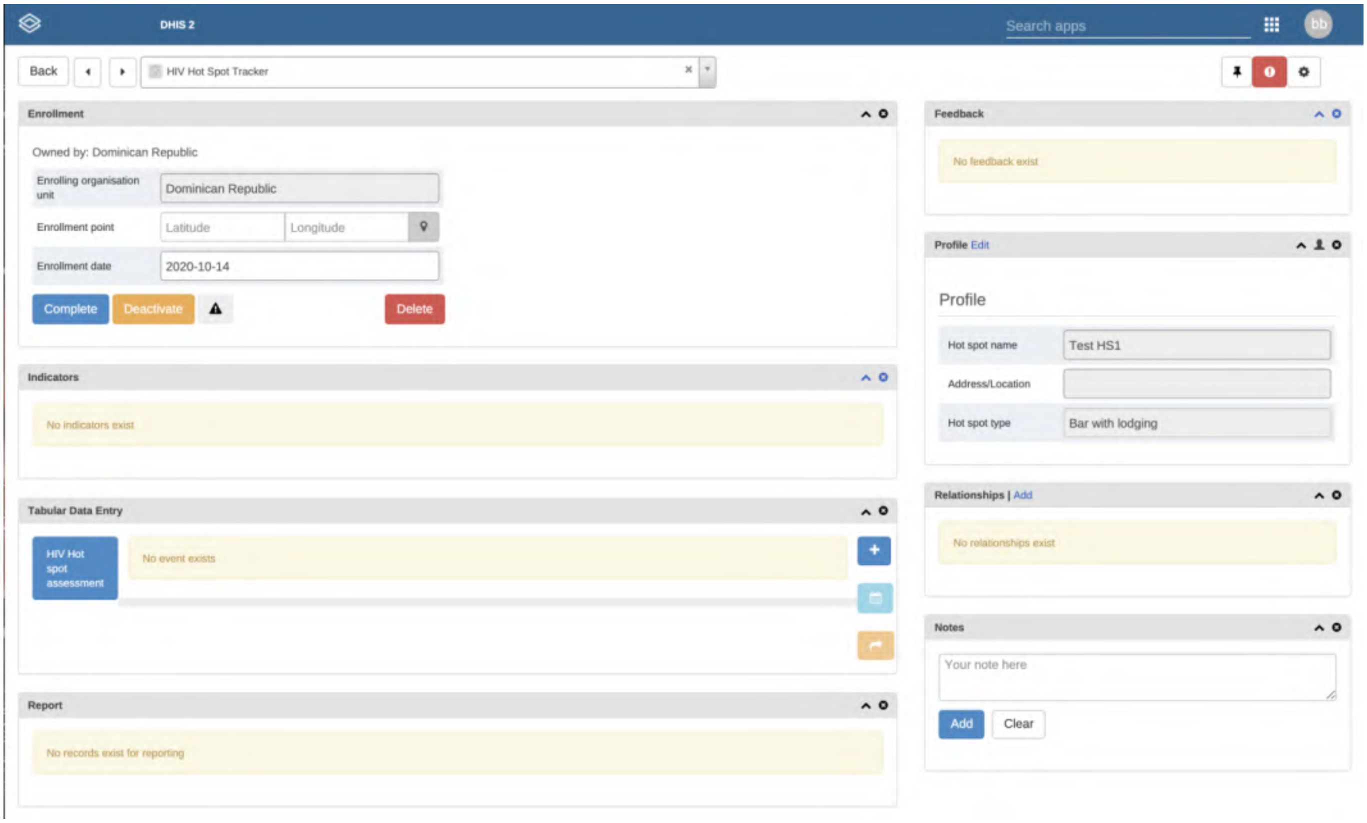


2.3.3 Update a Hot Spot event

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

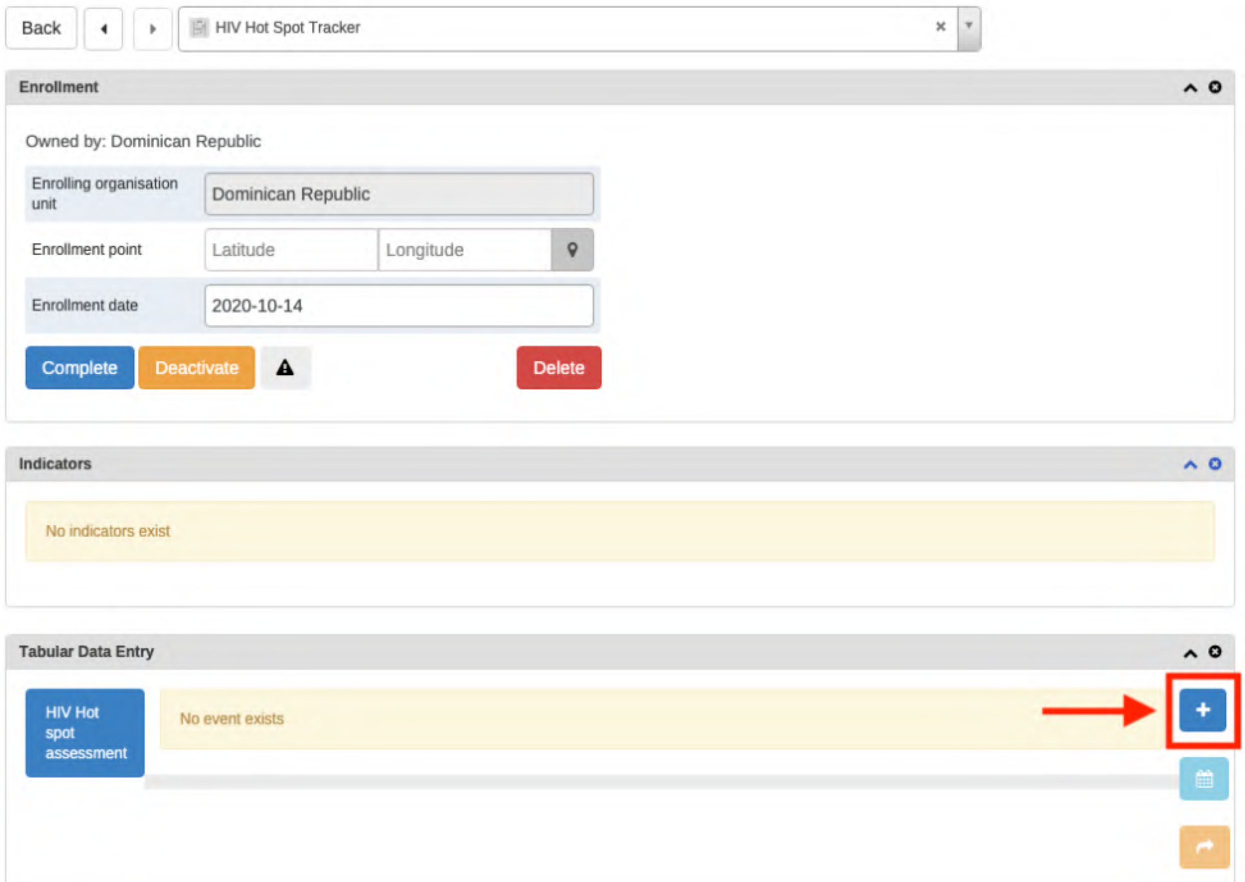


2. *Open the Hot Spot Tracker dashboard page in the tracker capture app.*



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.*



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

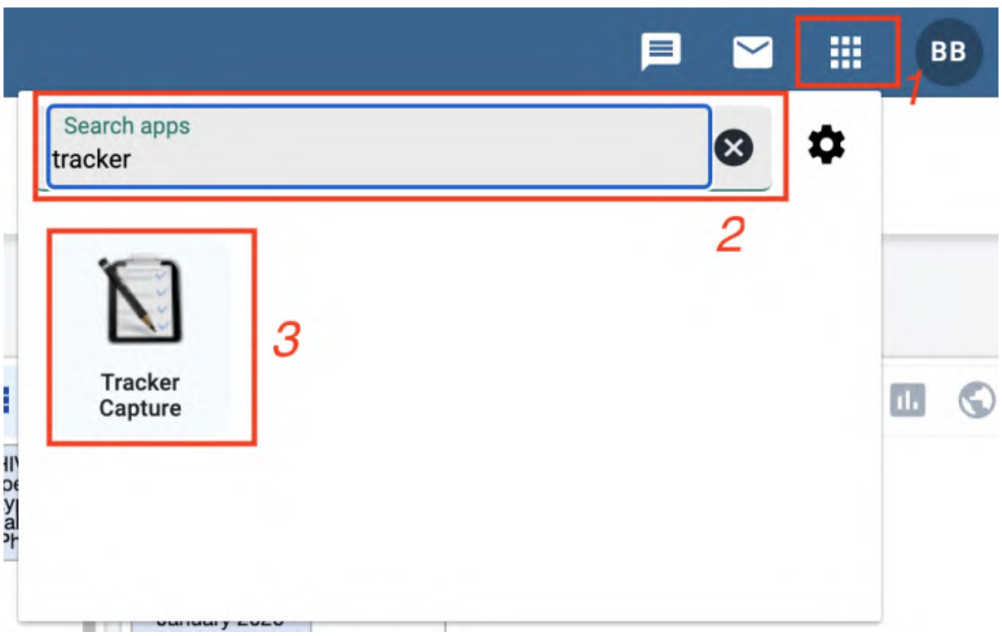
2.4 Peer Workers Registry

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.

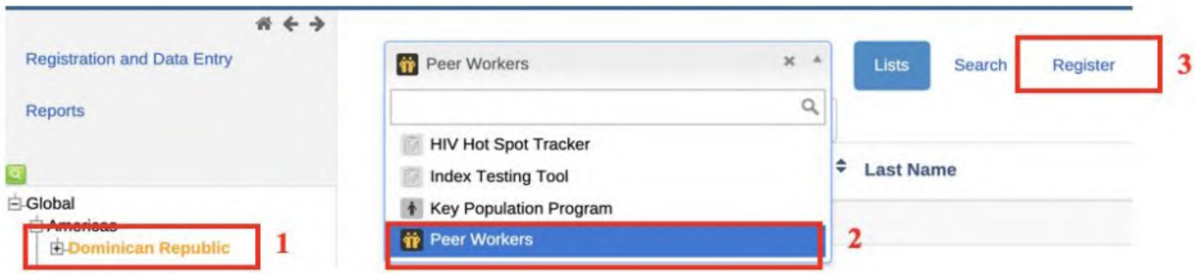
2.4.1 Create or update a Peer Worker

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

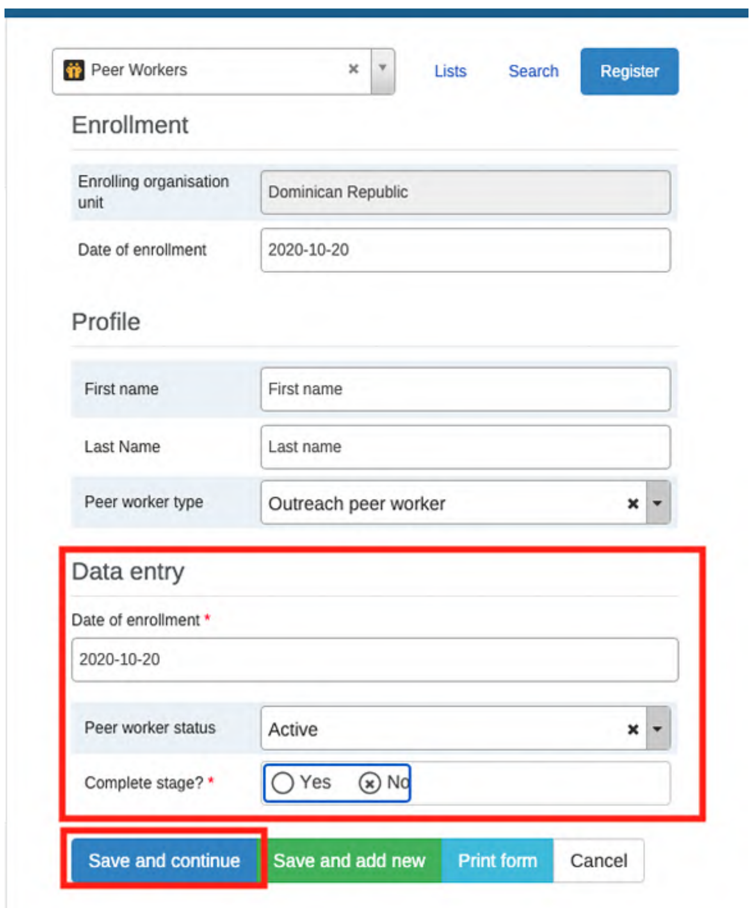
1. *In the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.*



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.*



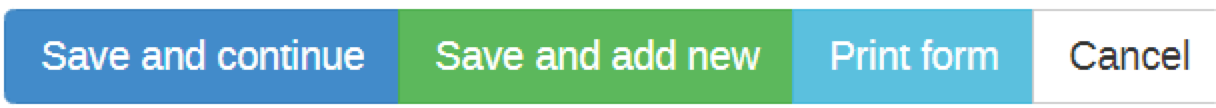
4. *Fill out the form being sure to provide answers to the mandatory questions, which are represented by the asterisk *, and then select:*

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.*

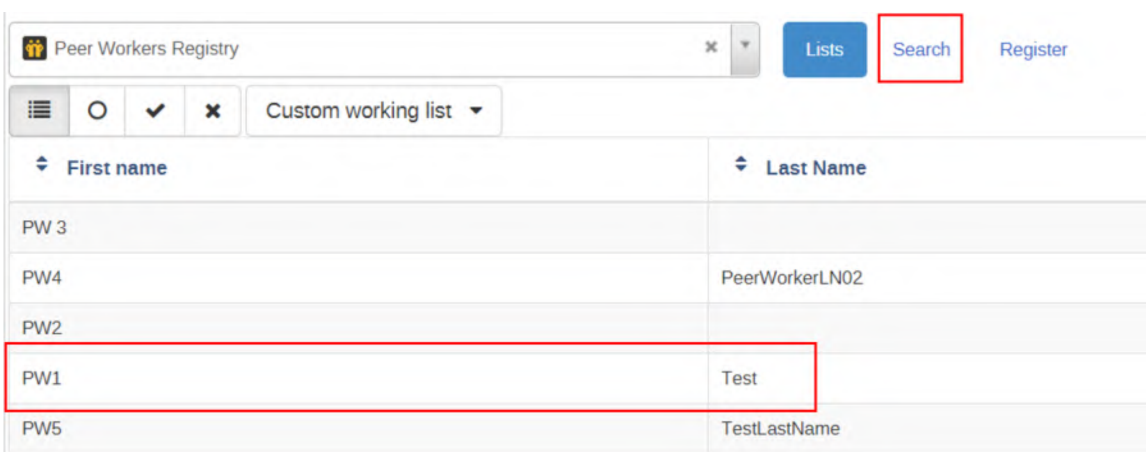
c. *'Print form' will display a printing format for all information in the current registration form.*

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.

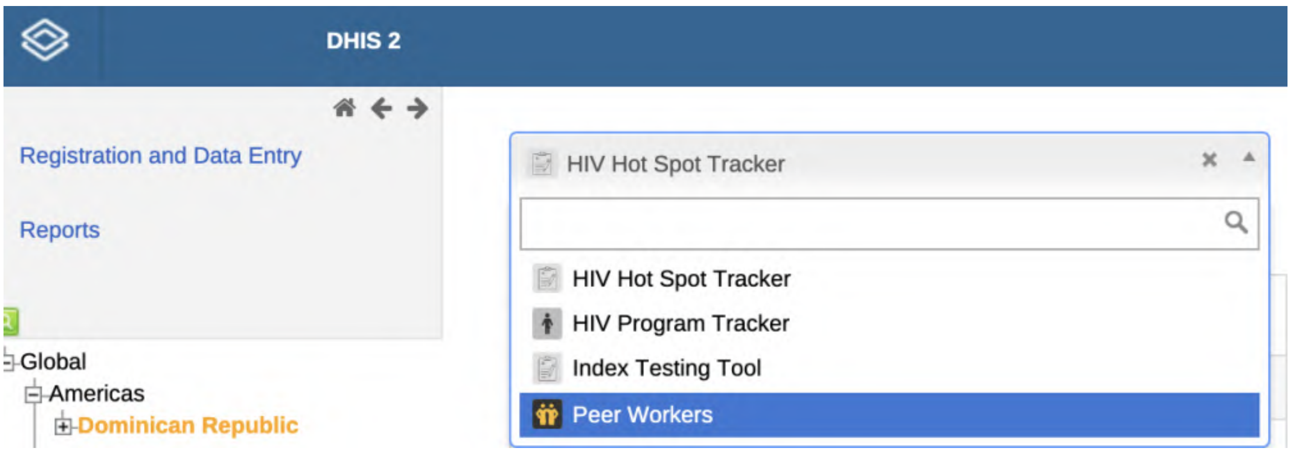


2.4.3 Create or update a PW event

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.*

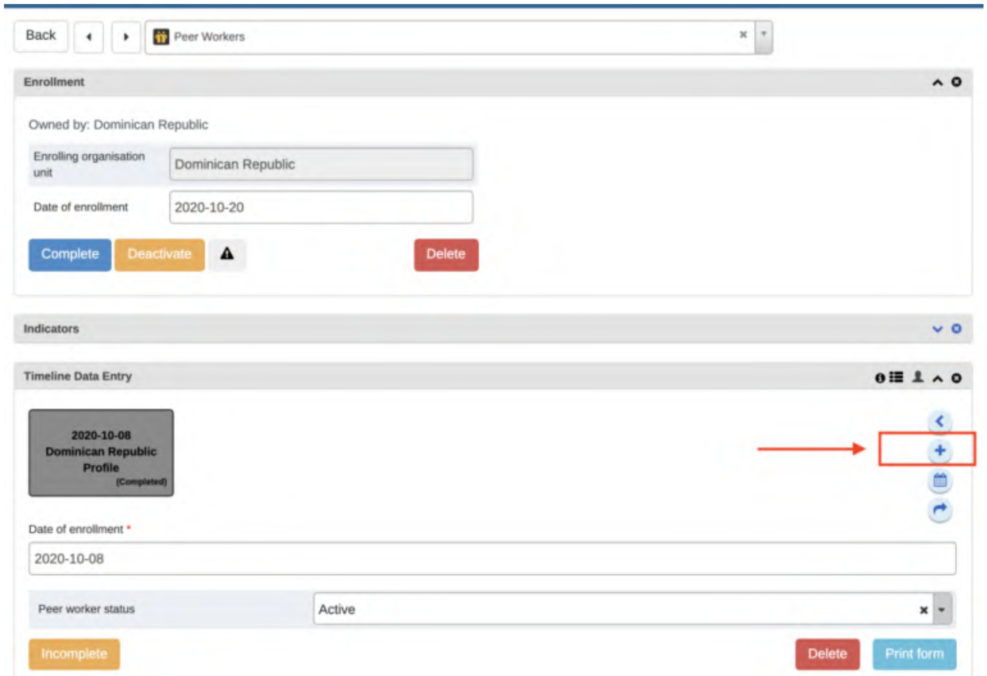
b. *Then select the Org unit of your choice and the 'Peer Workers' program.*



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.*

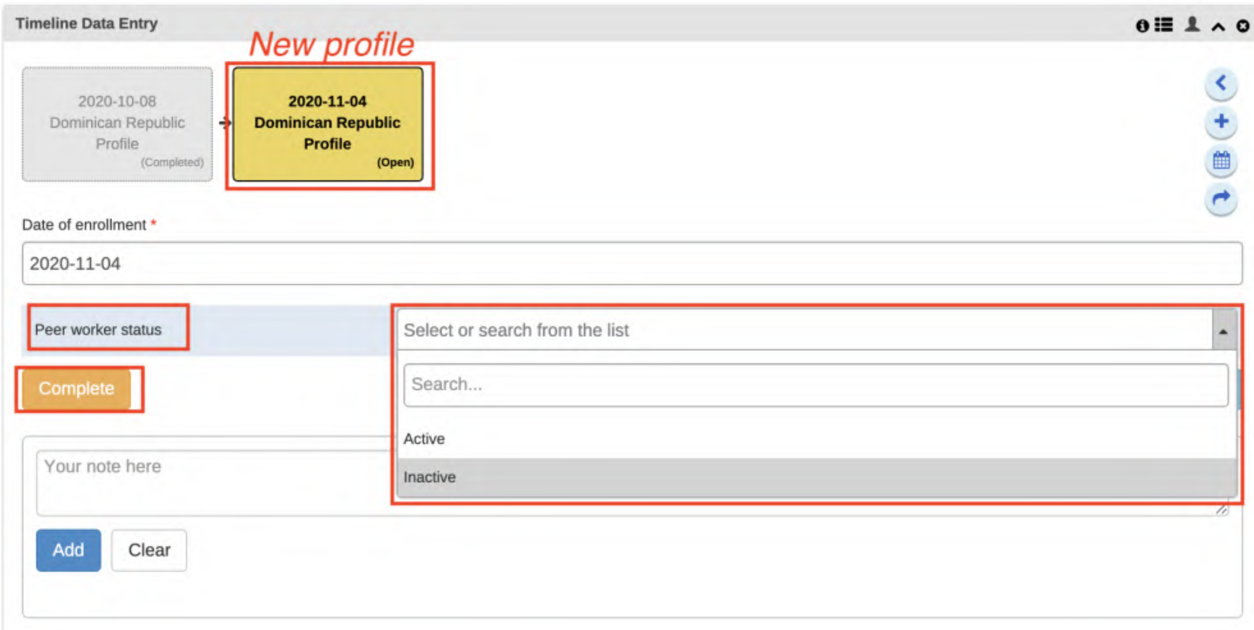
2. ***Updating PW status:***

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*



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

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



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.

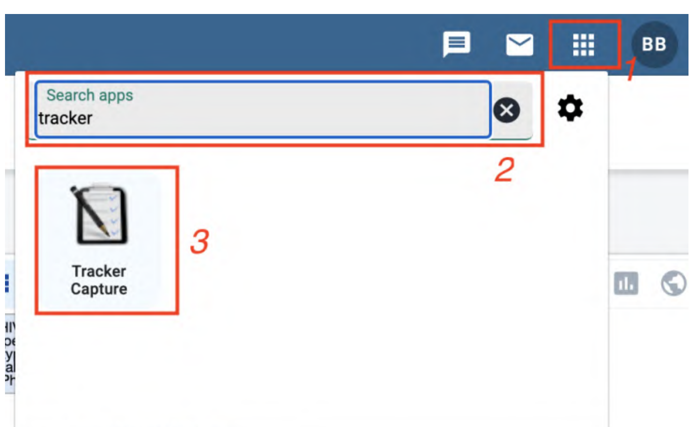
There is one Program stage :

- *Contact Tracing and Outcome.*

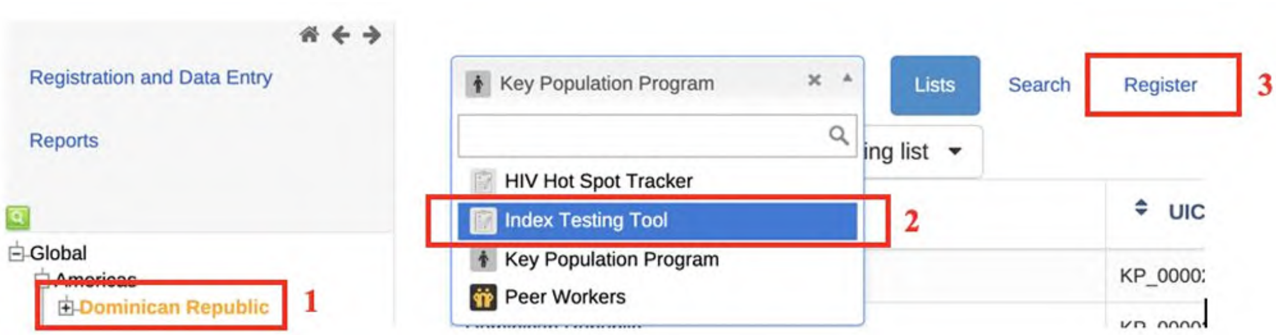
2.5.1Create an IT contact

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

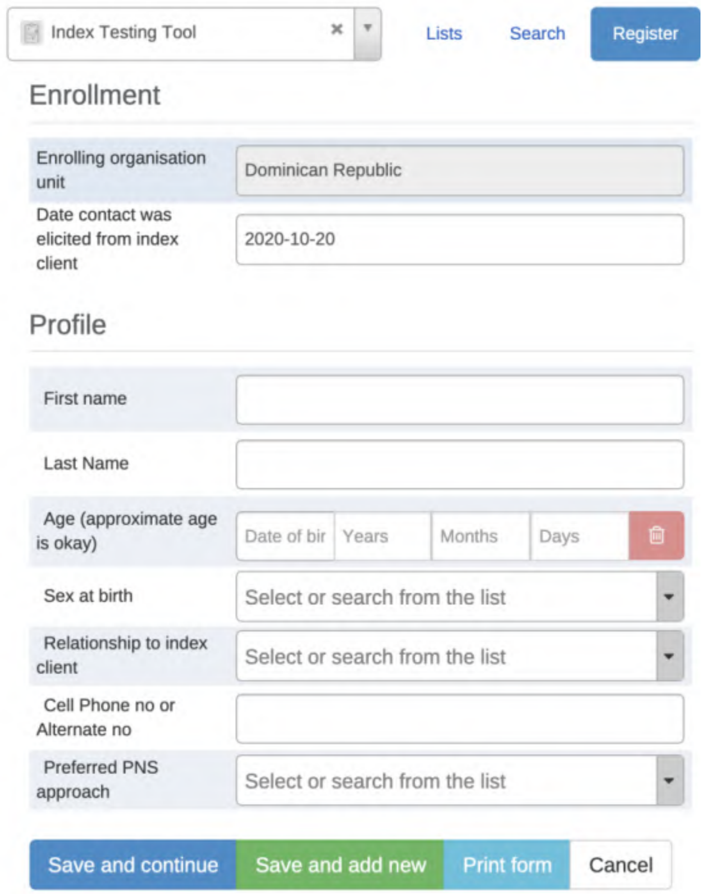
1. *Navigate to the Tracker Capture app*
    a. *To do so, in the top menu bar, select the app menu at the top right of the screen, then search for the Tracker Capture app and click on the icon to open it.*



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.*

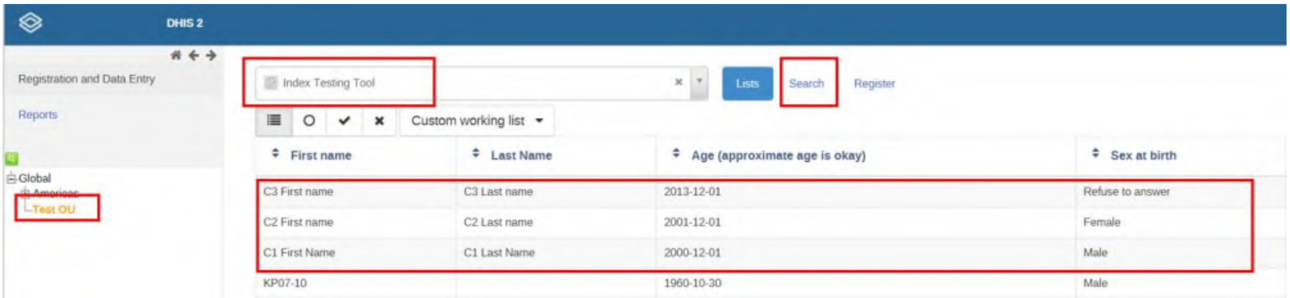


4. *Fill out the form and then select **Save and Continue**.*

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.

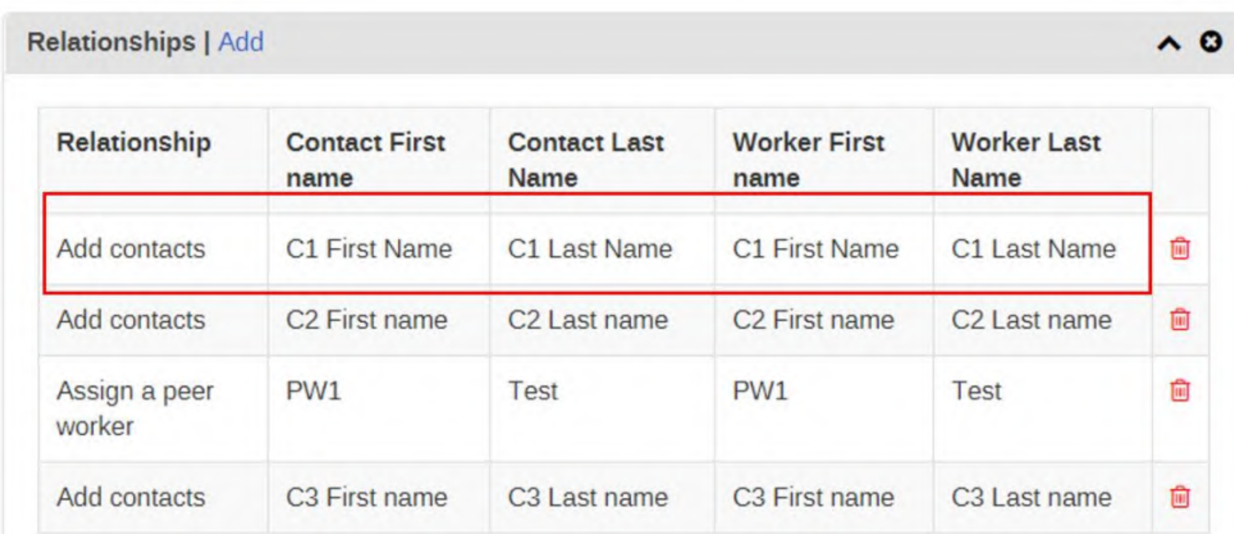


2.5.3 Create / Update an ITT event

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.

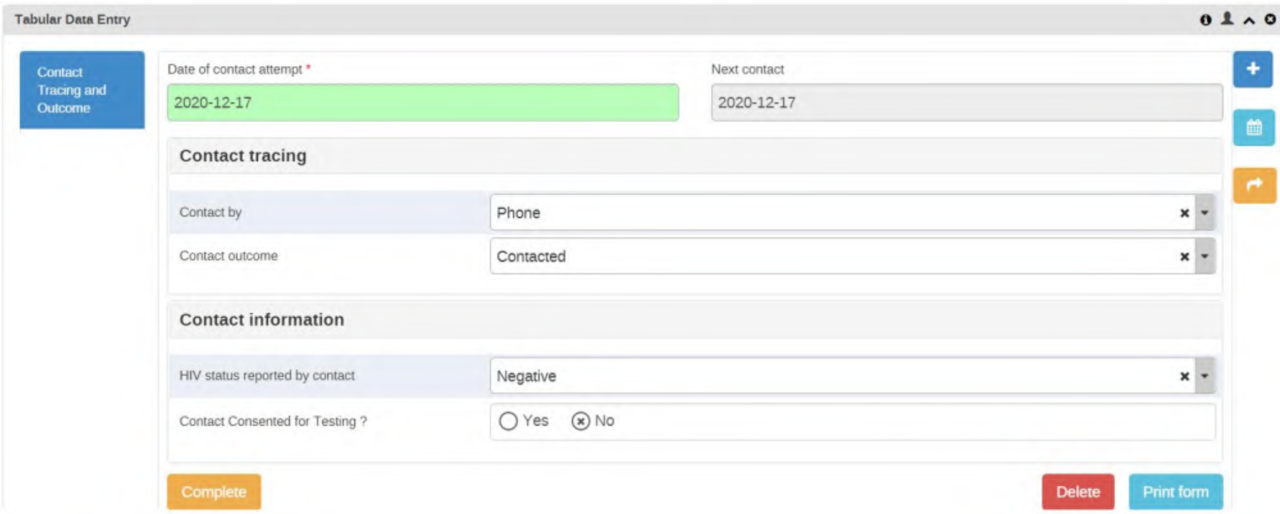
1. *Open the 'Index Testing Tool' dashboard page from the tracker capture app and choose the relevant Index event from the list or search for it.*

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.


Relationships | Add

Relationship	Contact First name	Contact Last Name	Worker First name	Worker Last Name
Add contacts	C1 First Name	C1 Last Name	C1 First Name	C1 Last Name
Add contacts	C2 First name	C2 Last name	C2 First name	C2 Last name
Assign a peer worker	PW1	Test	PW1	Test
Add contacts	C3 First name	C3 Last name	C3 First name	C3 Last name

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

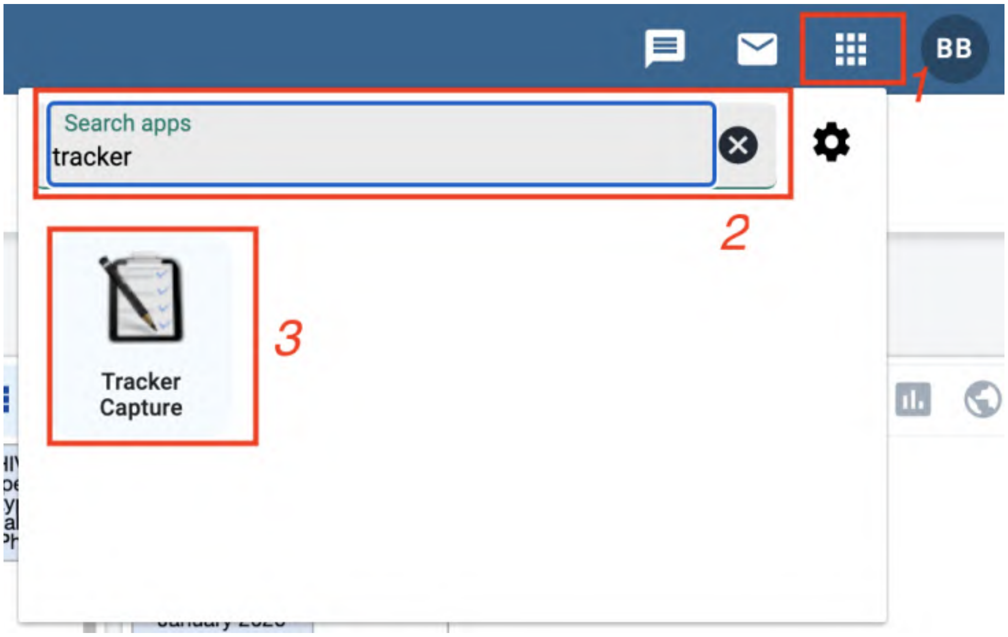


3. ***Create a new ITT Event**: Use the blue + button to create a new IT event. Please note it may take a few minutes to record the assessment form for the first time.*

4. *Update an **IT Event**: If an IT record already exists, the most recent one will open automatically for you to edit.*

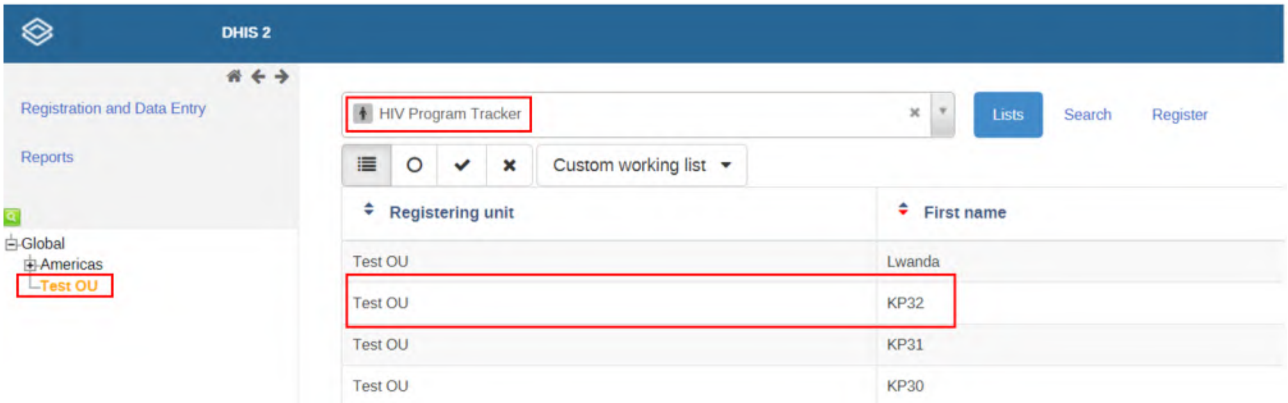
2.6 Remove data - Delete an event

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.



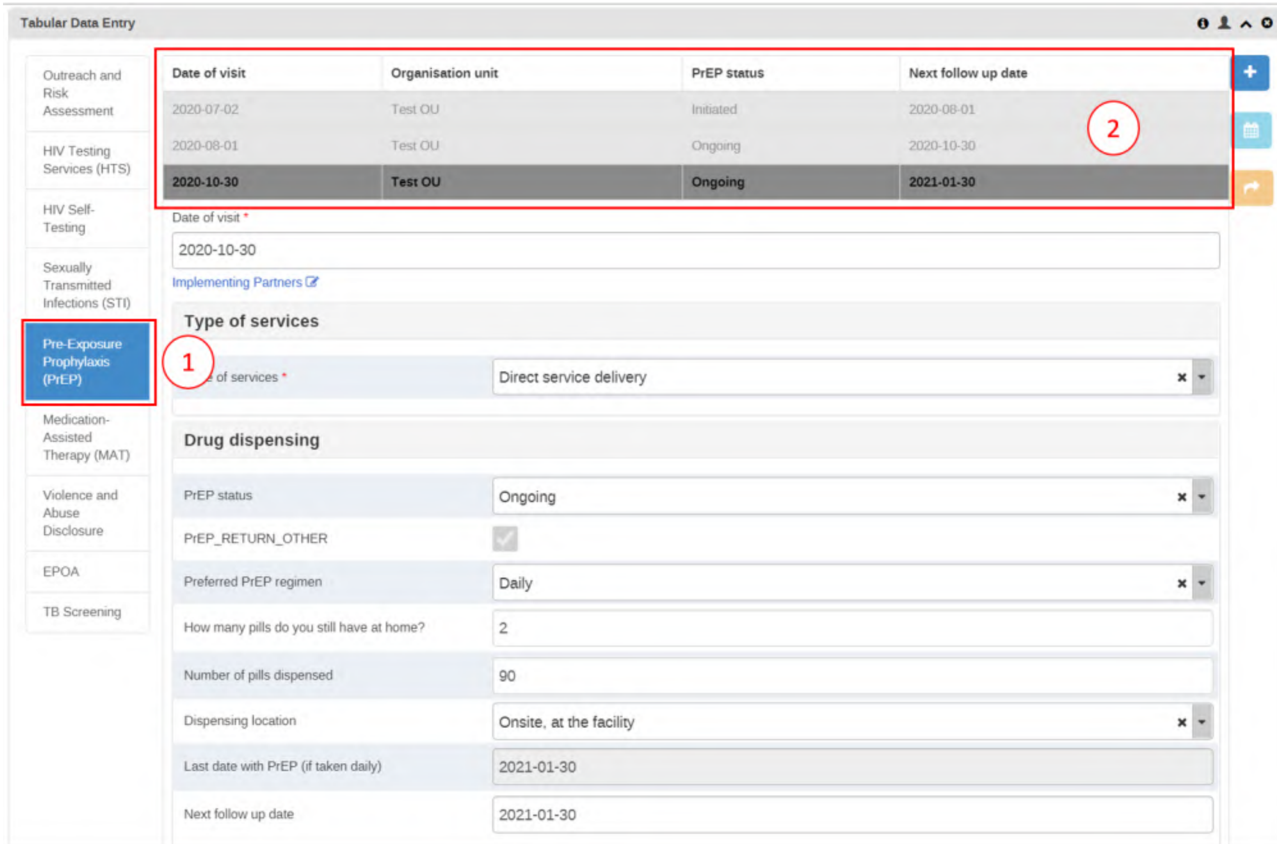
a. *Next, using the Organization Unit Hierarchy on the left, select the appropriate org unit. Then on the right, the relevant program for the event from the programs list. Then select the relevant client from the list of items that appear.*

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



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)*



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.

Use with caution!

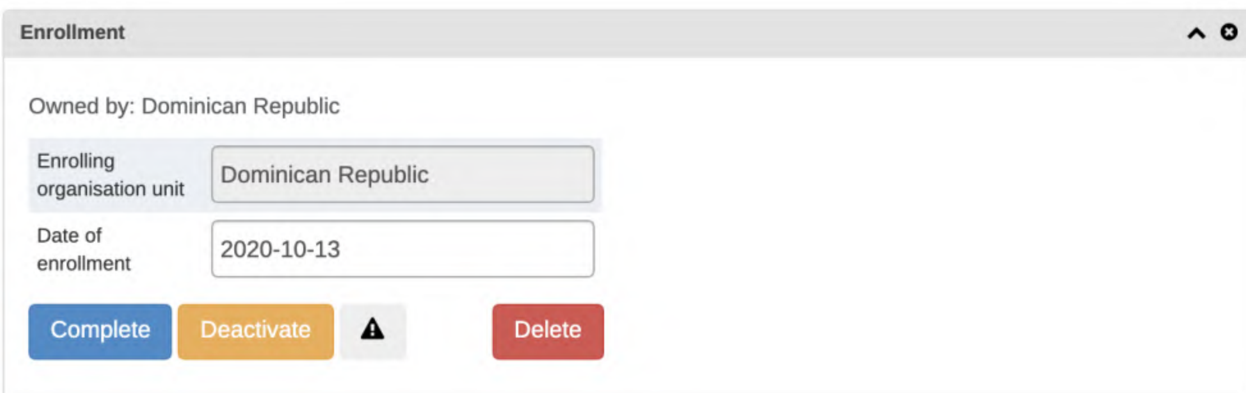
Delete a client (event enrollment)

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

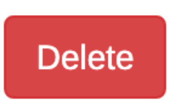
This can only be done if they have no events at all, this is a safety measure to prevent accidentally deleting a client.

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:*

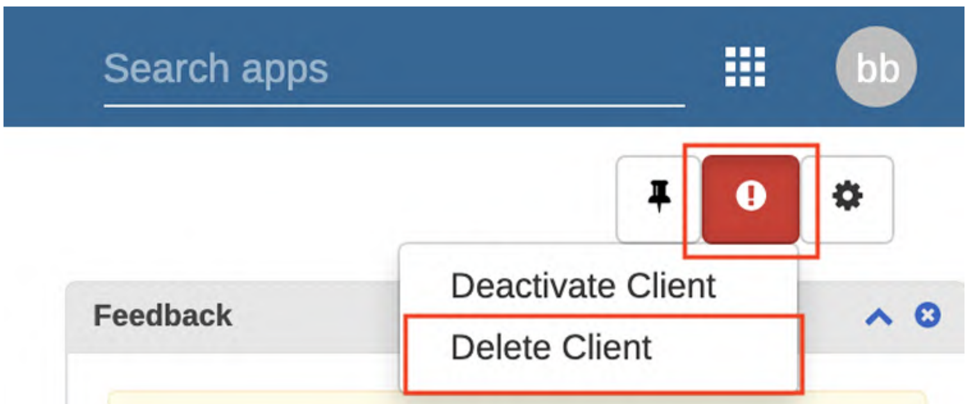


3. *Click the delete button here to permanently delete the enrollment of this client from the relevant program.*



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.

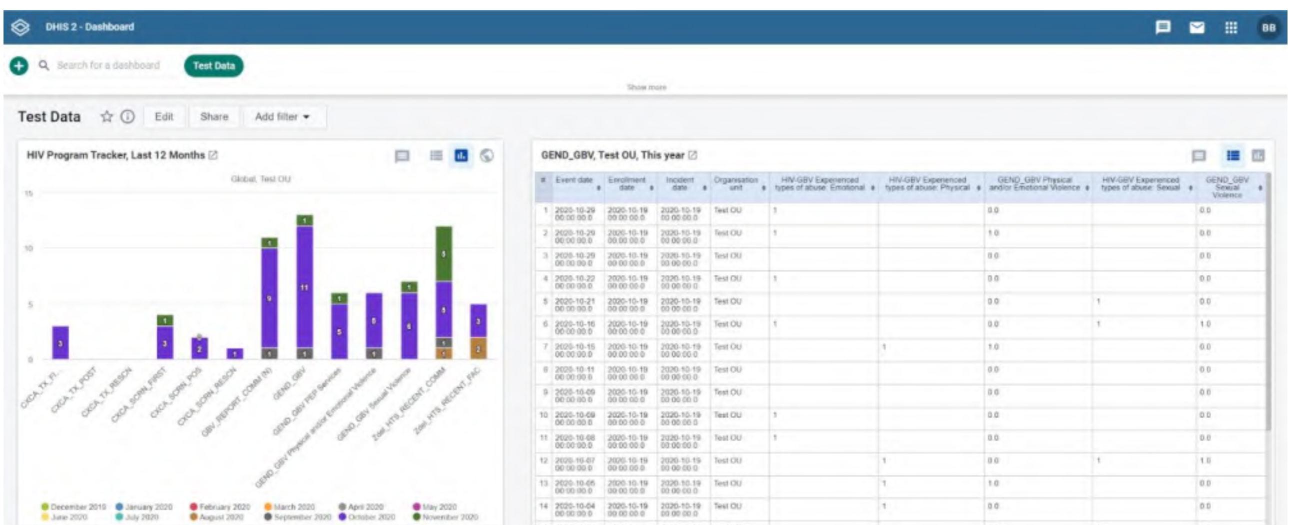
A note on sharing when creating new graphs/tables

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.

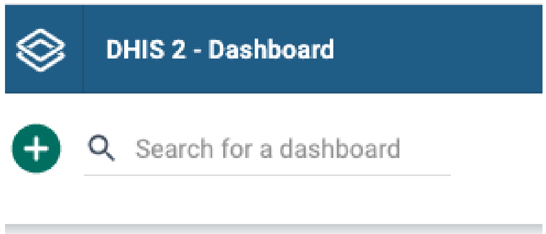


As a user in the FHI 360 system, you will have access to a number of dashboards that have been prepared. However, you are also welcome to make your own dashboards; these will be private by default. On your own dashboards you are free to customise everything on it, for example which charts it should have, 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*

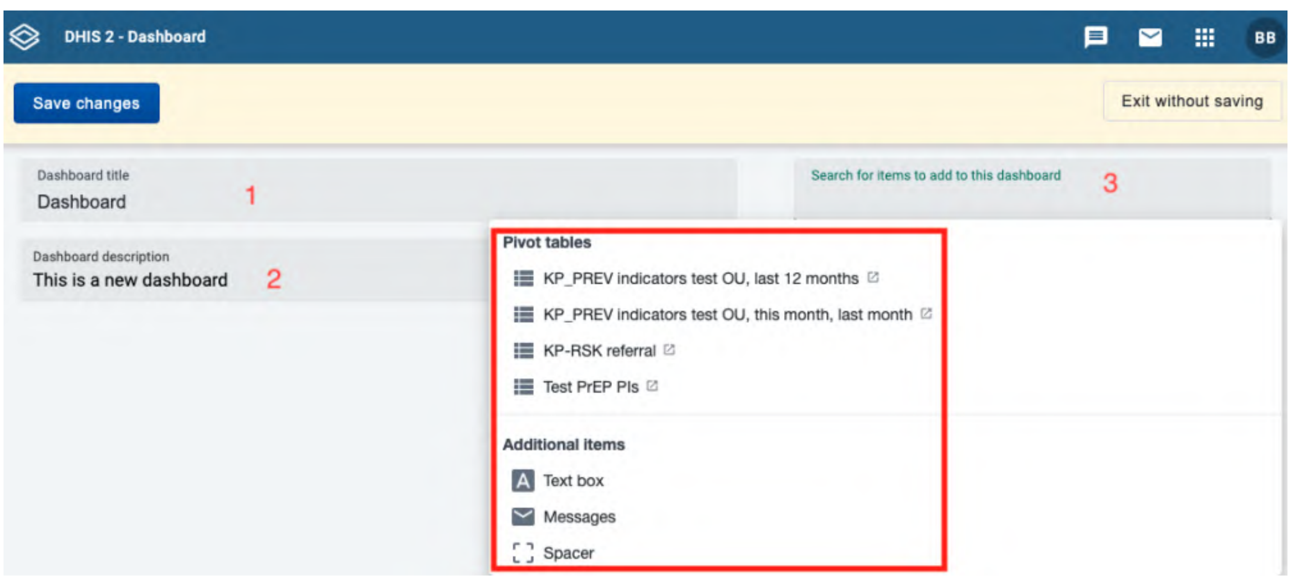


2. *In the new page, provide the new dashboard with the following details:*

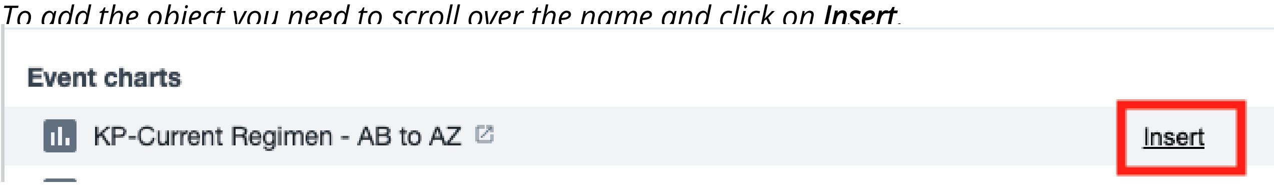
    1) ***Title*** *- this should be a name that reflects the dashboard's components.*

    2) ***Description*** *- only if necessary; this will provide more information about the dashboard.*

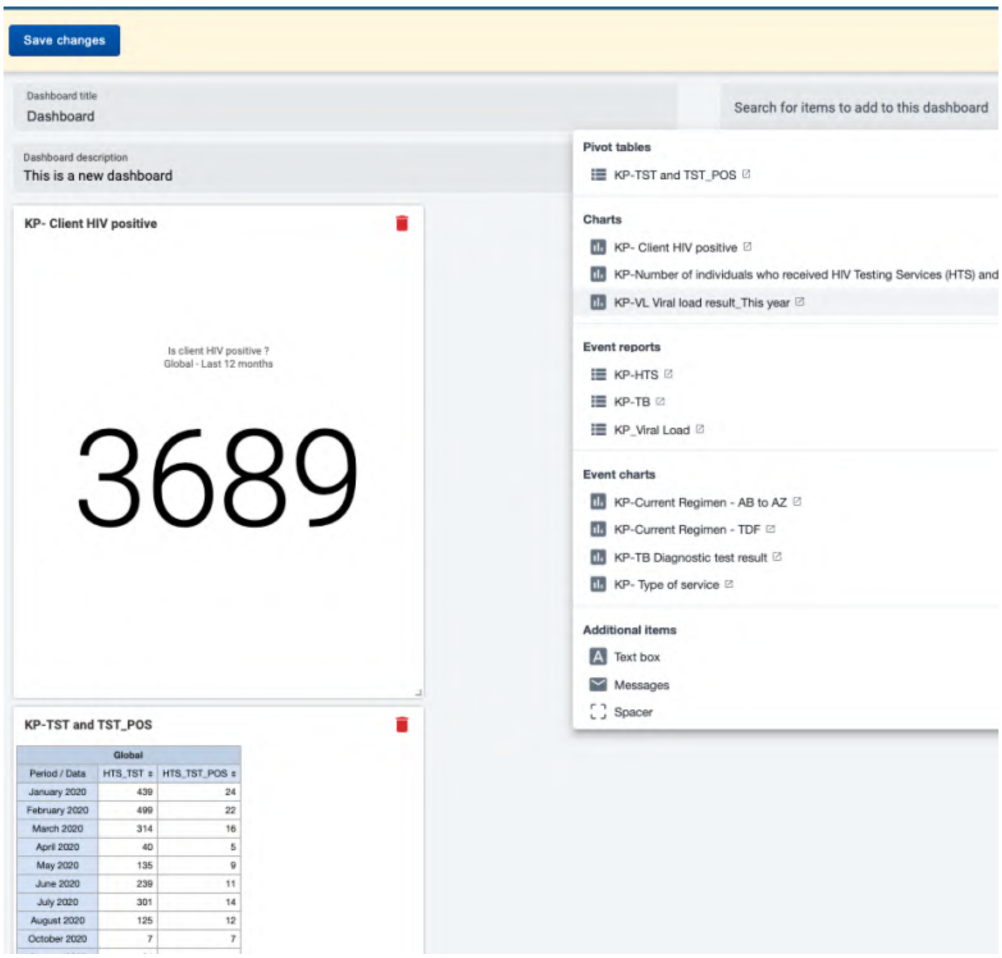
    3) ***Items to be added*** *- these include pivot tables, charts, maps, text etc.*



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.

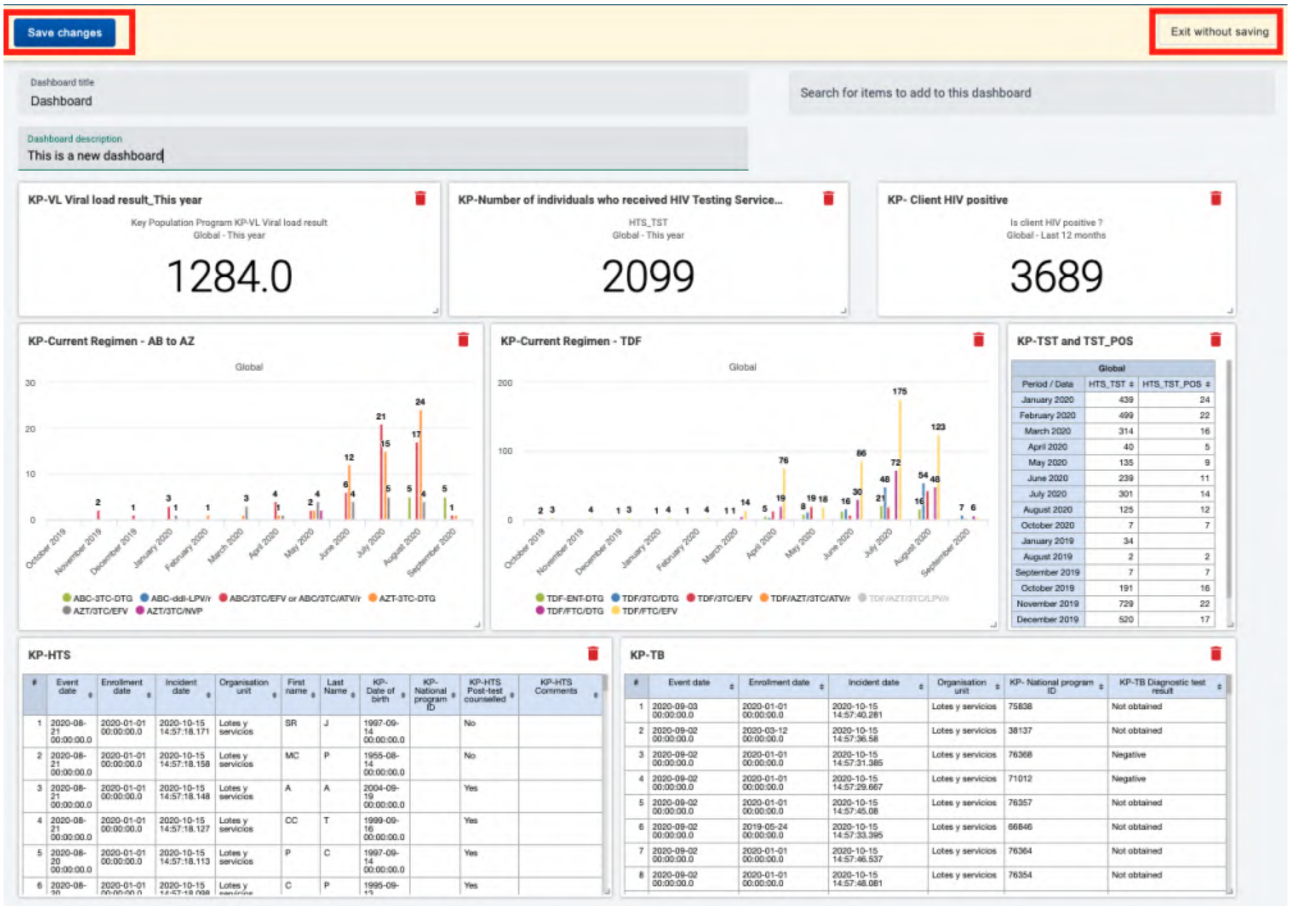


5. Each each object can be

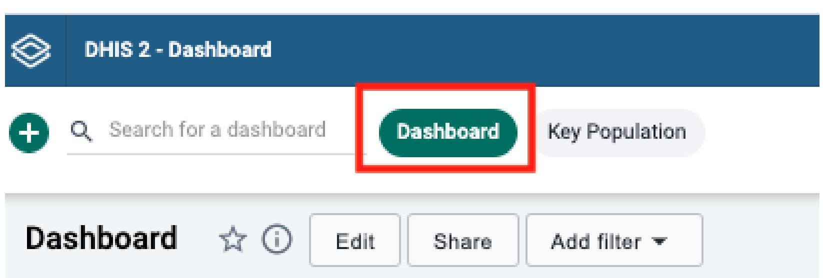
    a. Resized by clicking on the bottom right corner

    b. Positioned as needed in the dashboard by doing a drag and drop

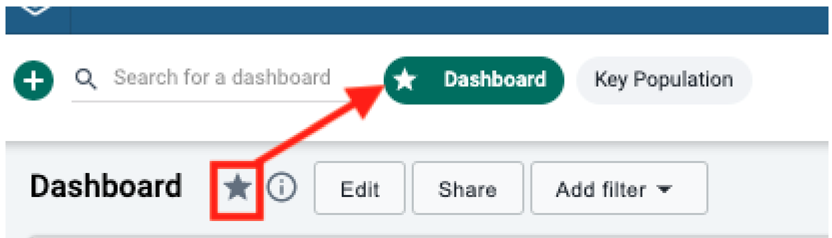
    c. Removed by using the trash symbol on the top right corner



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*



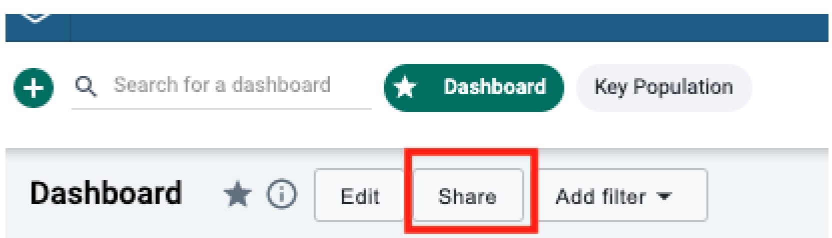
8. *Clicking the star button will mark the Dashboard as a favorite, this favorite will be the first one to be displayed when logging into the system.*



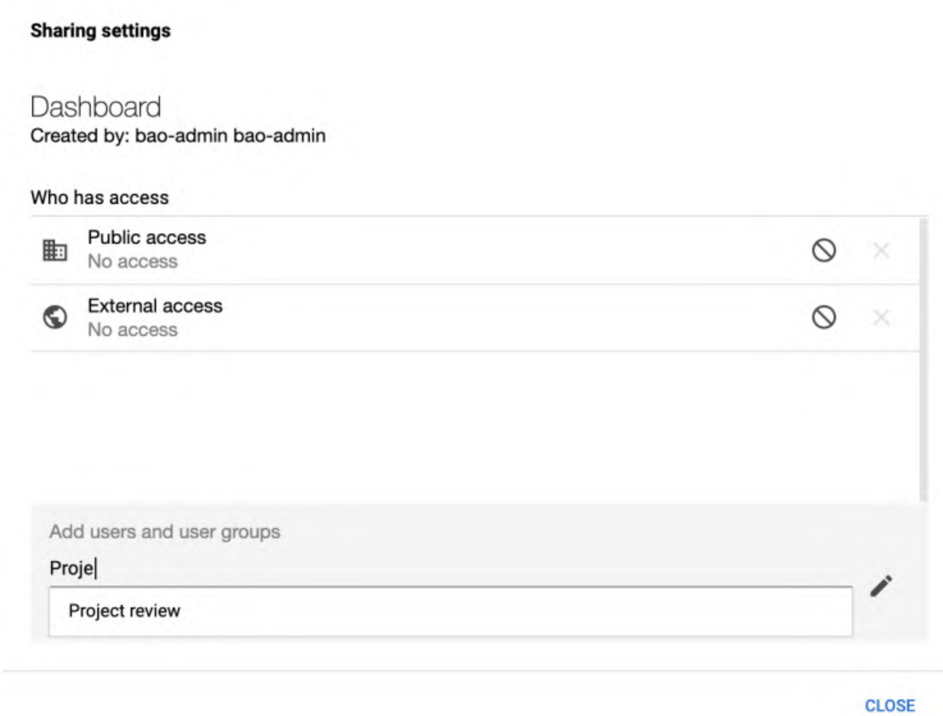
3.1.2 Sharing settings on the dashboard

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*

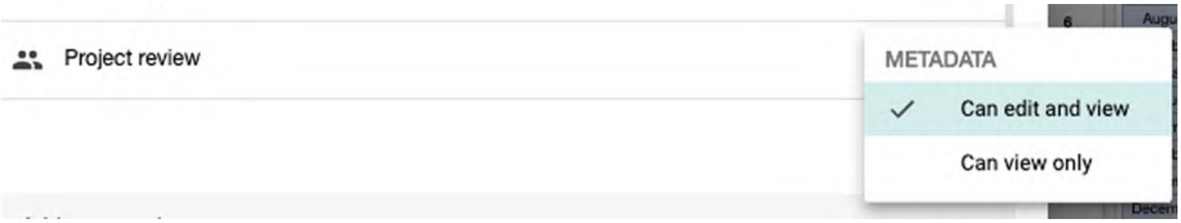


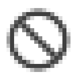
2. *A prompt requesting the Sharing settings details will be displayed; under 'Add users and user groups' type the name of the user or group the dashboard is intended to be shared with. Click on the name to select it.*



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

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



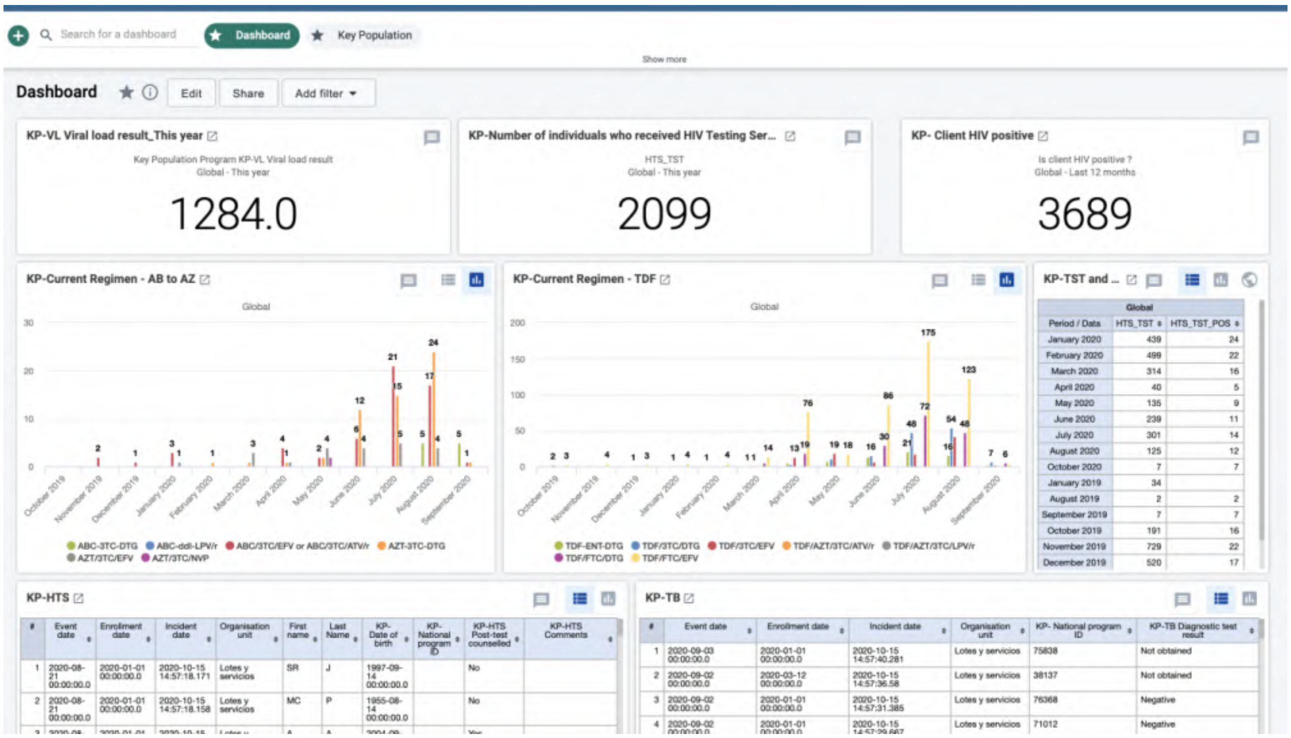
5. *By default, Public access and External access is disabled but can be modified by clicking on this*  *symbol.*

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

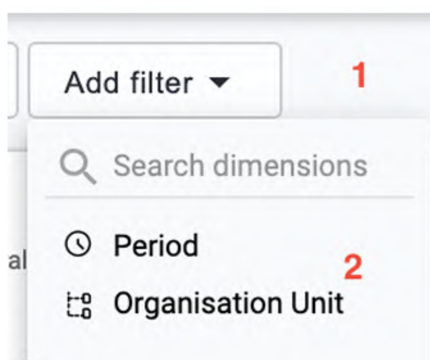
3.1.3 Filter a dashboard

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.

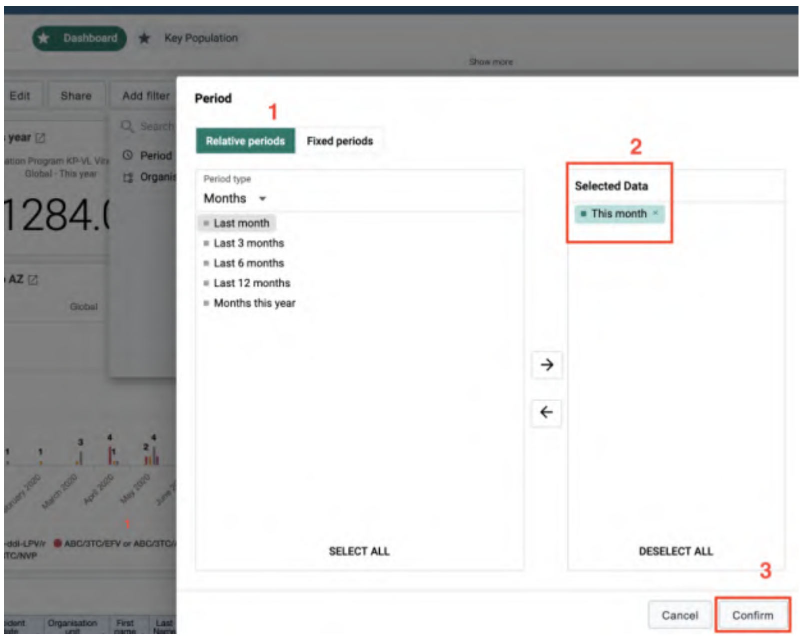
1. *Using the Dashboard menu at the top of the page, select the dashboard that is to be filtered.*



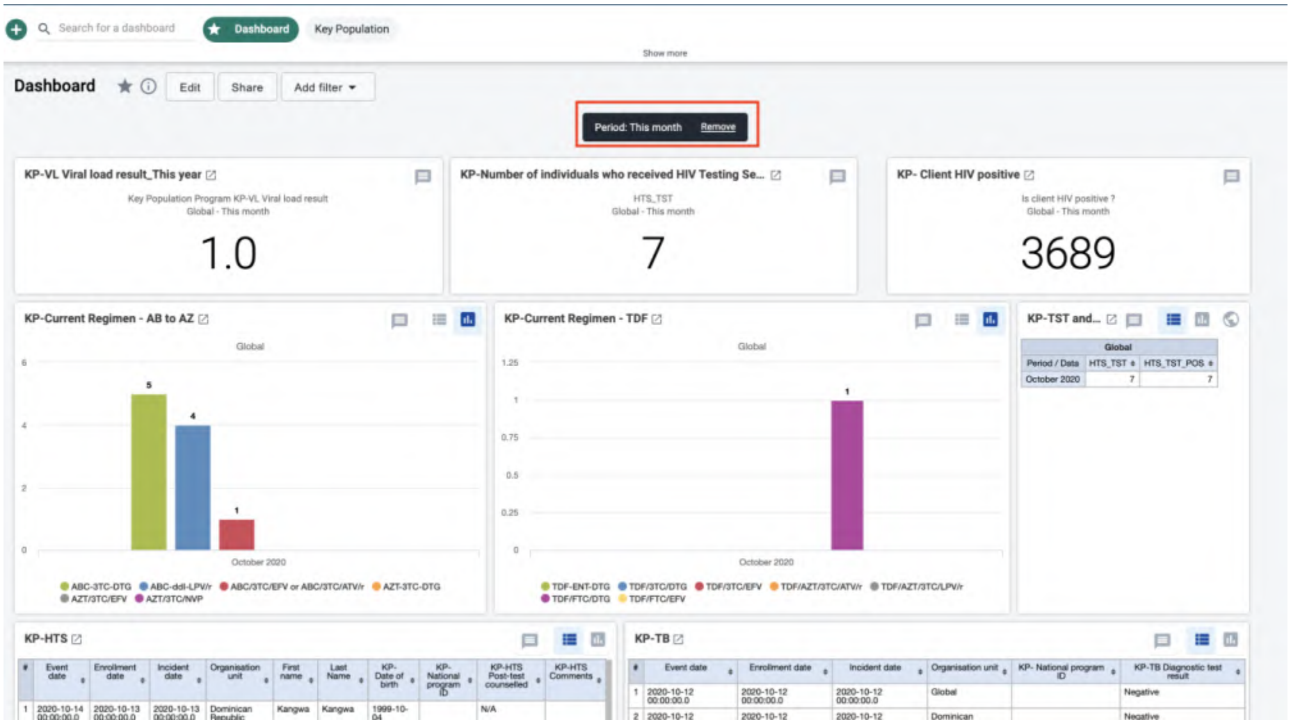
2. *Next, click on the* ***Add filter*** *button and then select the desired dimension type. In this case we will use the 'Period'.*



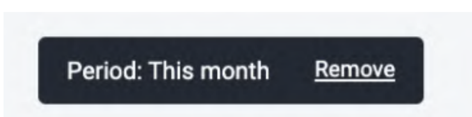
3. *When prompted, select:*
    a. *'Relative periods'*
    b. *Period type: 'Months,' 'This month'*
    c. *Then click **Confirm***



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.*



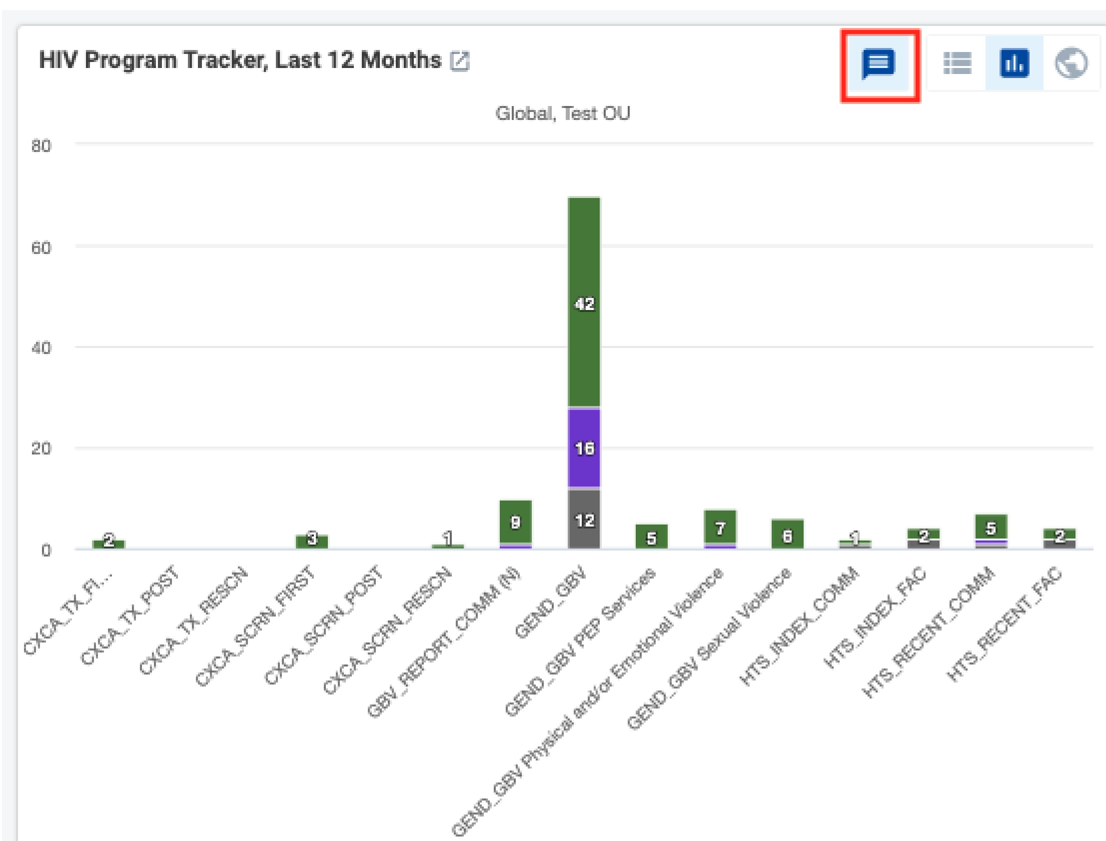
3.1.4 Creating Interpretations

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

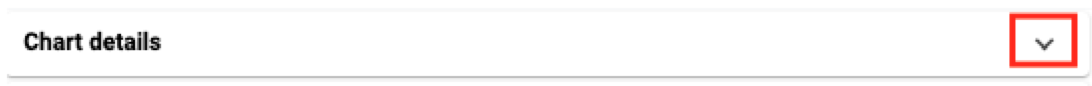
This feature allows users to:

- *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'.*

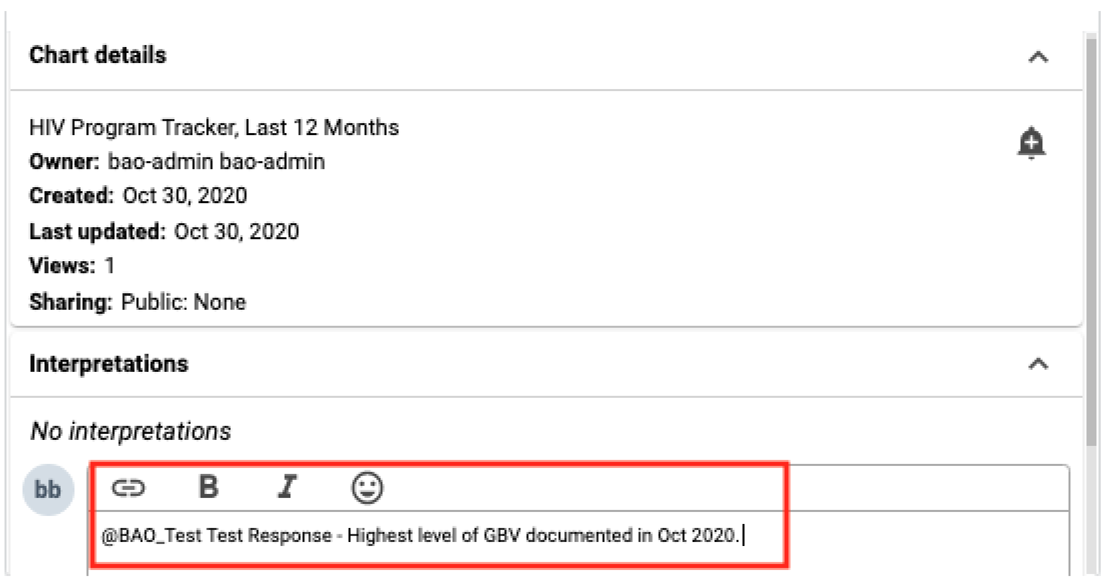


Below the object you can see the object's details which contain a description, the owner of the object, when it was created and updated, object views and, lastly, sharing details. It is possible to collapse this section by clicking on the up arrow.



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

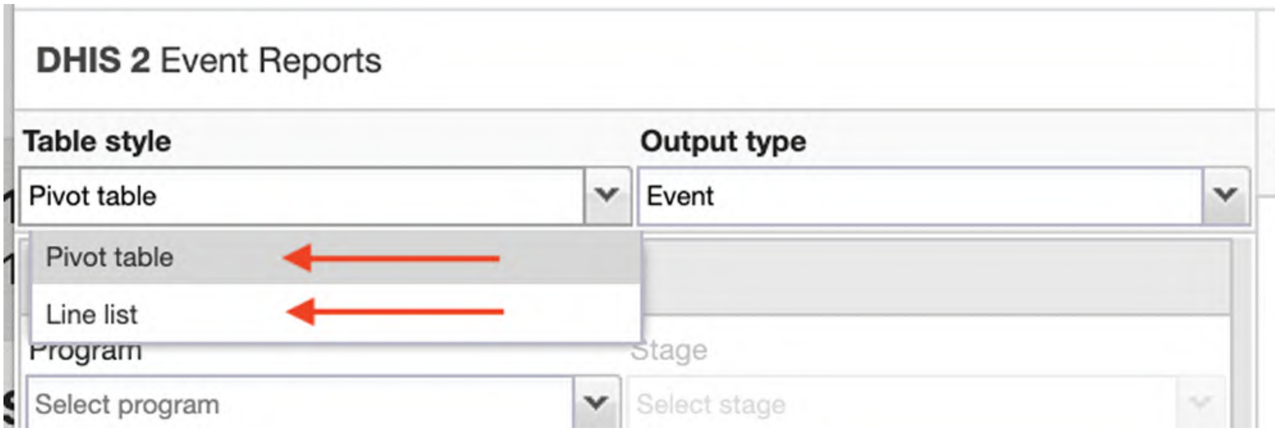
Data can be put into two main categories, quantitative and qualitative. Quantitative data is numerical or binary data, including numbers or 'yes/no'. We can also get quantitative information from text fields with drop down menus, for example, the number of forms where 'option A' was selected. Qualitative 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*

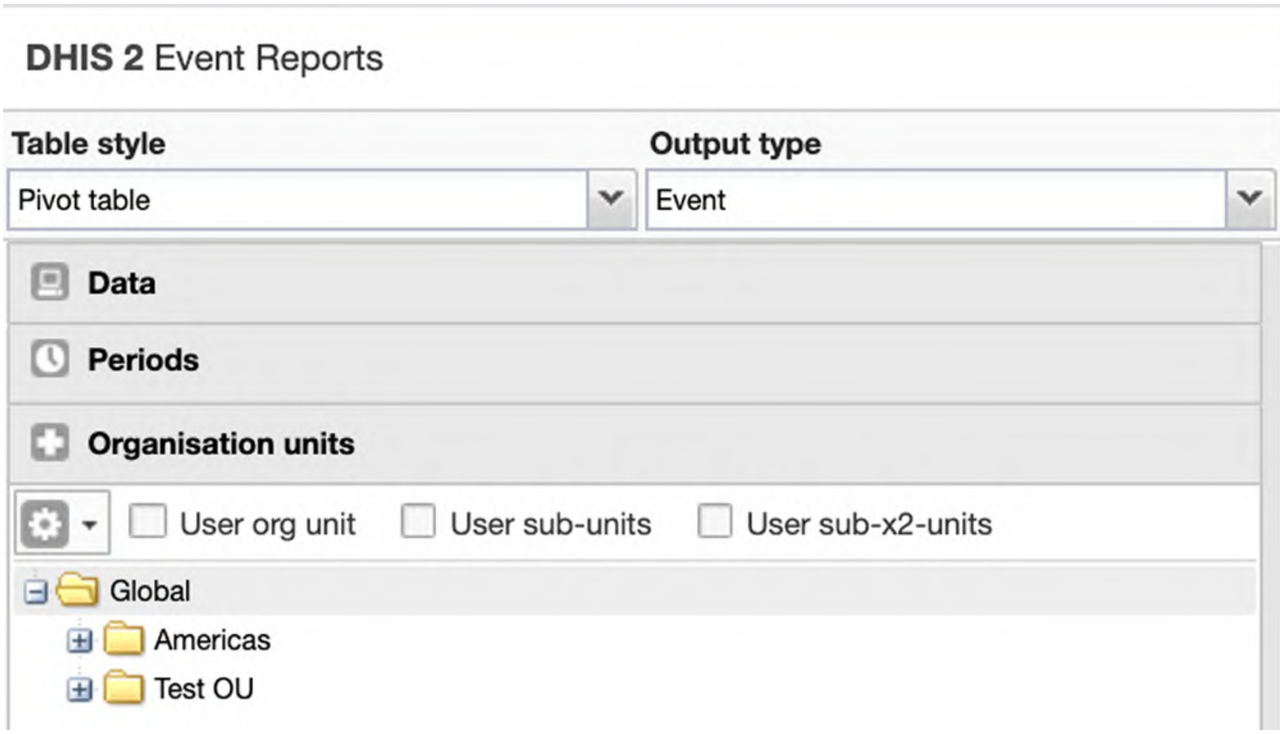


2) *Analysis can be performed using multiple dimensions available in the left side menu. These include:*

   a) *Data*

   b) *Period*

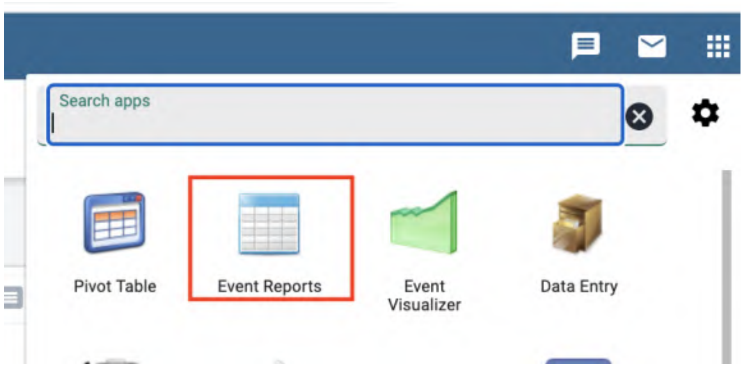
   c) *Organisation units*



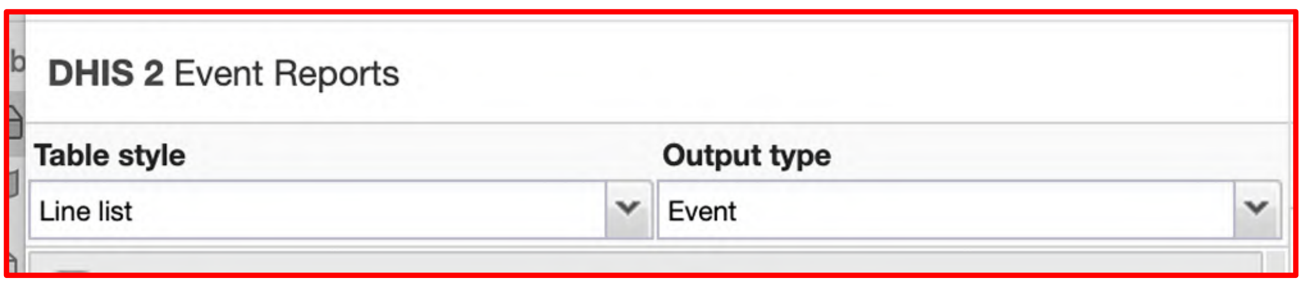
Each dimension can have a corresponding filter.

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.*

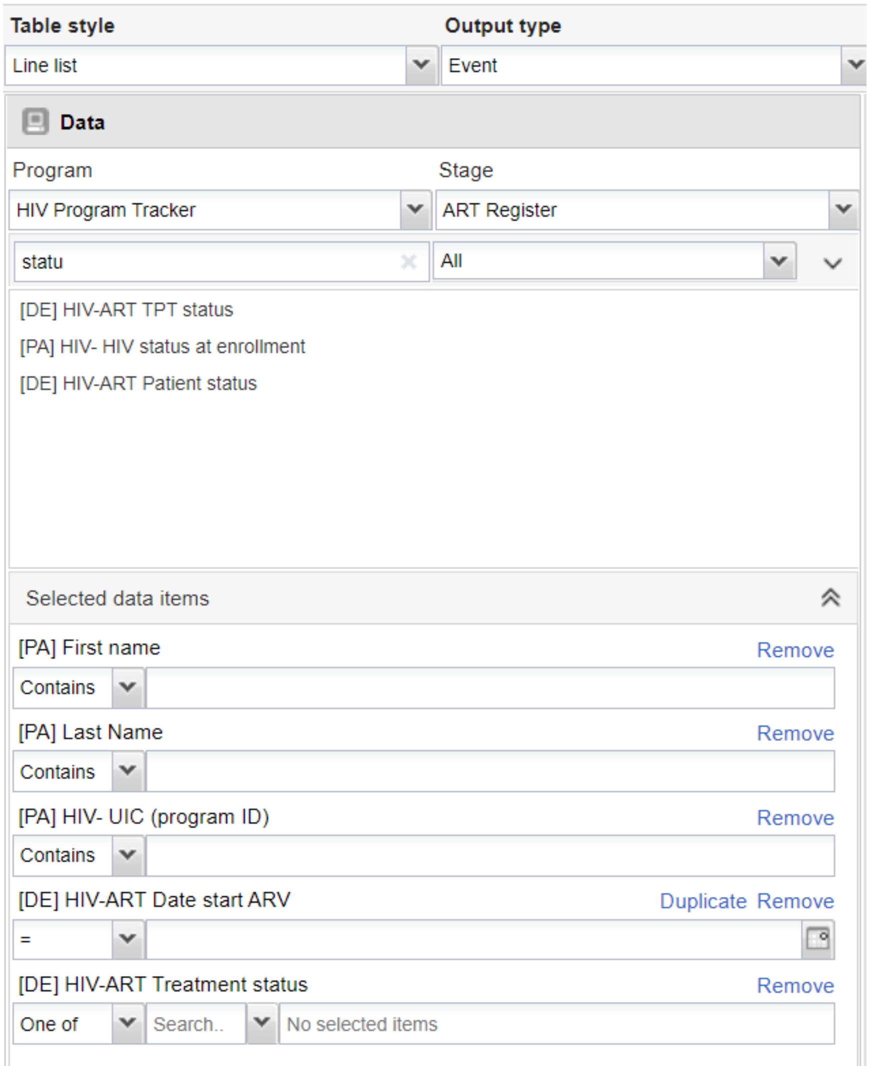
   i) *[PA] First name*

   ii) *[PA] Last name*

   iii) *[PA] HIV - UIC (program ID)*

   iv) *[DE] HIV - ART Data start ARV*

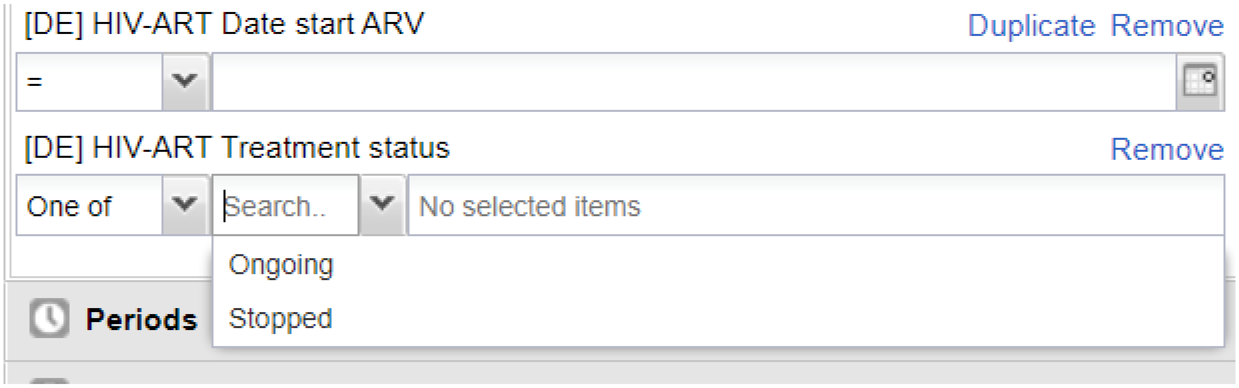
   v) *[DE] HIV - ART Treatment status*



The 'Remove' button is used to remove a data item selection and 'Duplicate' 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.

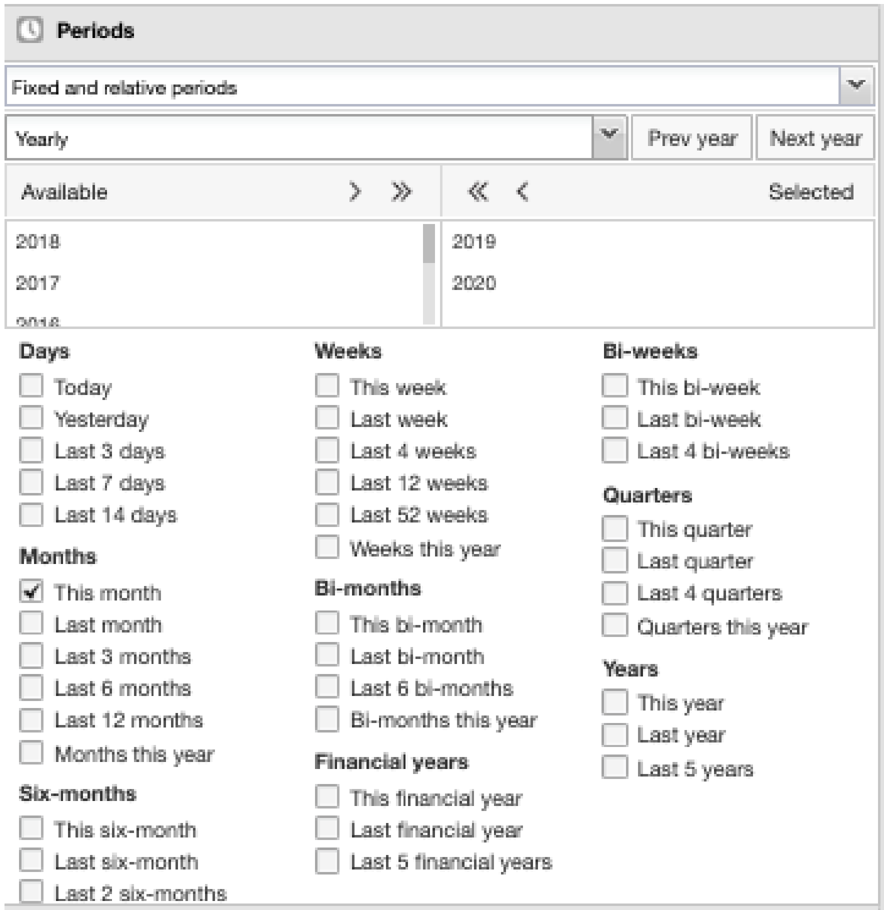
Example: HIV-ART Treatment status is equal to Ongoing will list all the TEI which are under ART



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

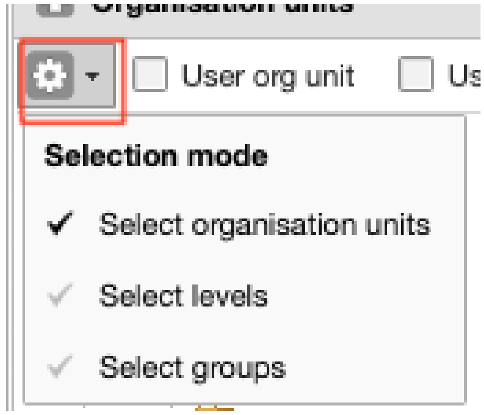
'Start/End dates' are used to select a specific range of dates, and 'Fixed and relative periods' to select a period type such as Daily, weekly, etc.

*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.*



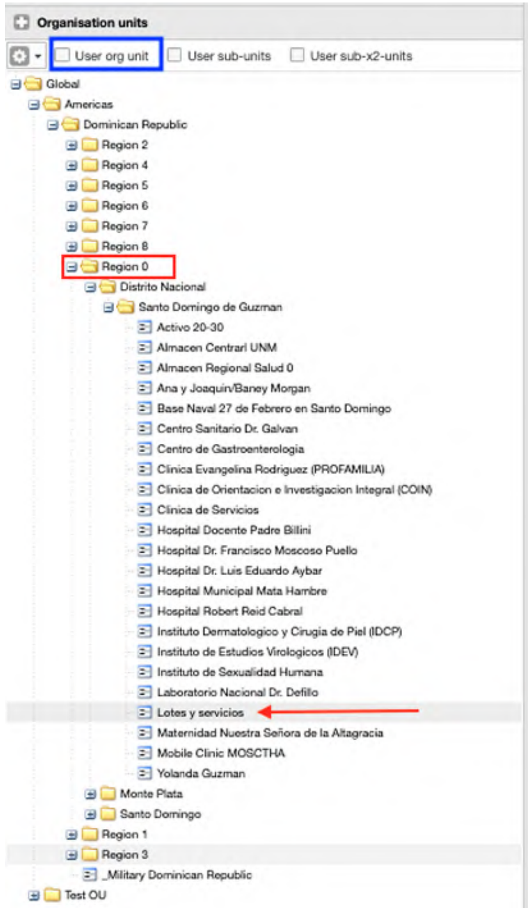
5. Under the ***Organisation Units*** *section, we will need to define the location of the data that will be displayed.*

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'.



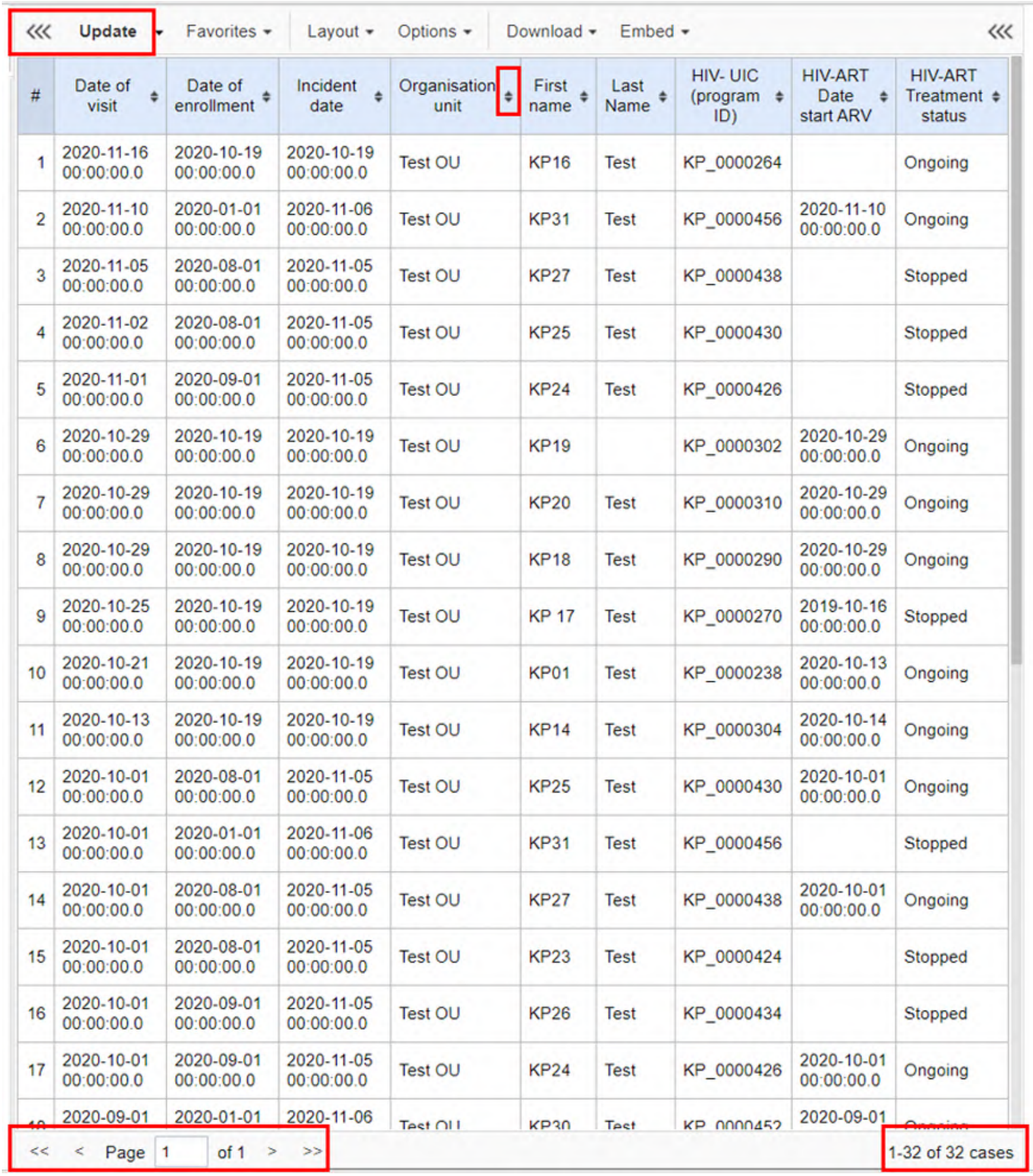
b. *Click on the* **+** *button next to the parent organisation unit to display the children below it. For this example, expand the organisation unit* ***Global*** > ***Americas*** > ***Dominican Republic*** > ***Region 0*** > ***Distrito Nacional*** > ***Santo Domingo de Guzman*** > ***Lotes y servicios.***

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.



Update Favorites Layout Options Download Embed

#	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	2020-01-01	2020-11-06	Test OU	KP30	Test	KP_0000452	2020-09-01	Ongoing

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

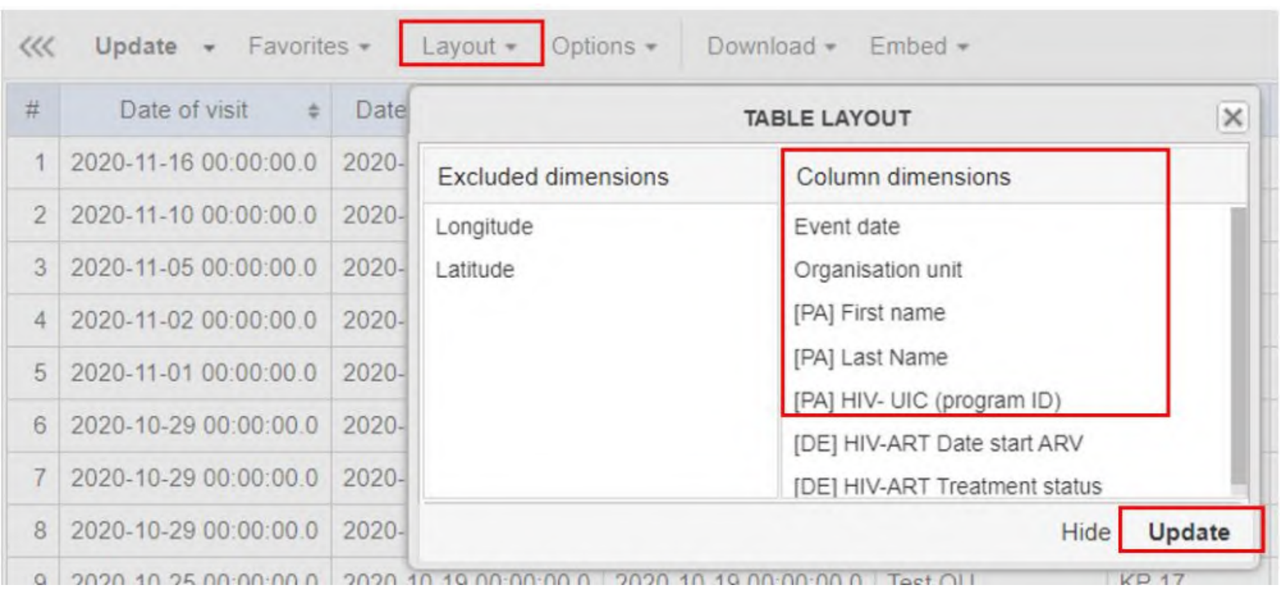
b. At the bottom of the page the number of pages are pages, along with the navigation symbols, and the total number of records.

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

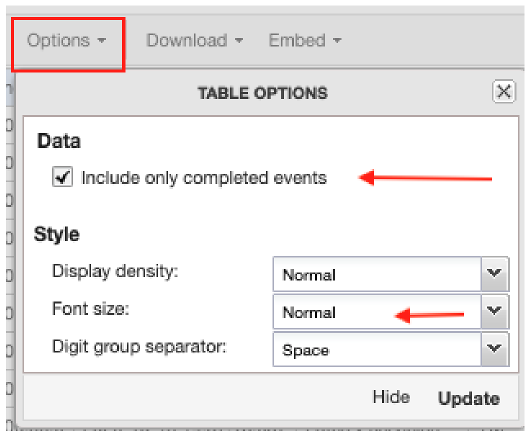
a. To test this, move a dimension from 'Excluded dimensions' to 'Column dimensions'

b. Re-order the elements under Column dimensions

*c. Then click on **Update** to apply*

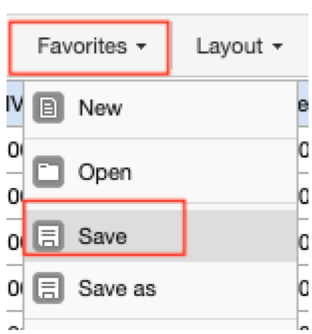


*8. The Table **Options**, also located in the top header, let's you edit the 'Data' and 'Style' display. For example, you have the option to 'include only completed events' in the table. Feel free to test this by selecting one of these options and then clicking **Update**.*



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:

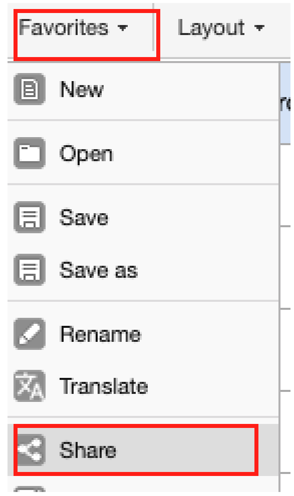
   BAO_ART Register_Site name_ID_GBV_Unassisted_User Org Unit_2019_2020

   - *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*

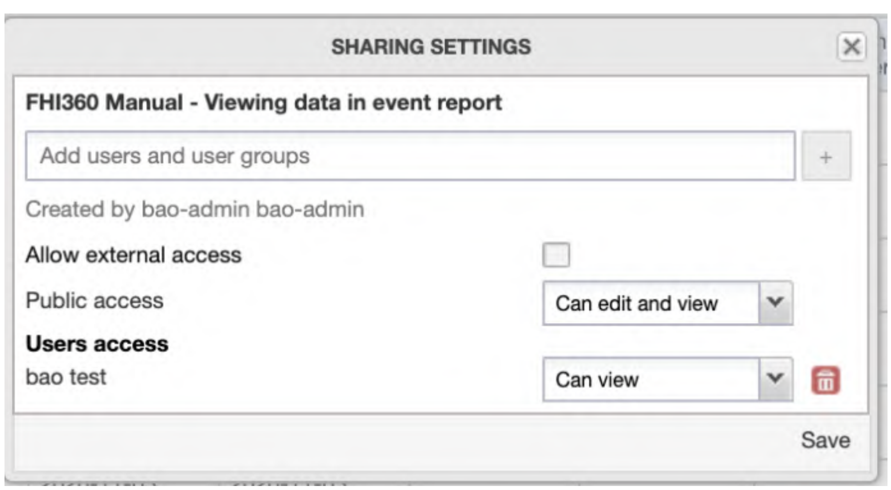


2) *When prompted*

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***

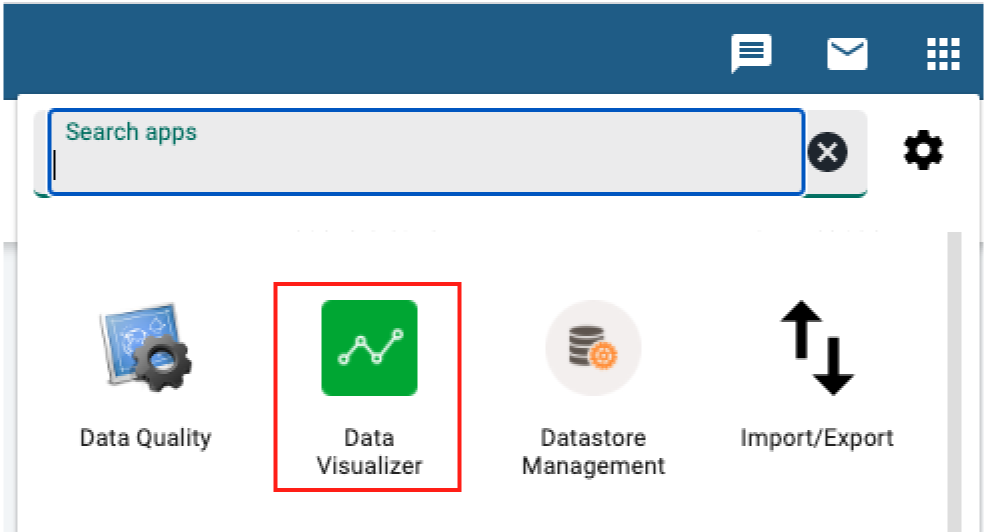


3.6 Data visualizer

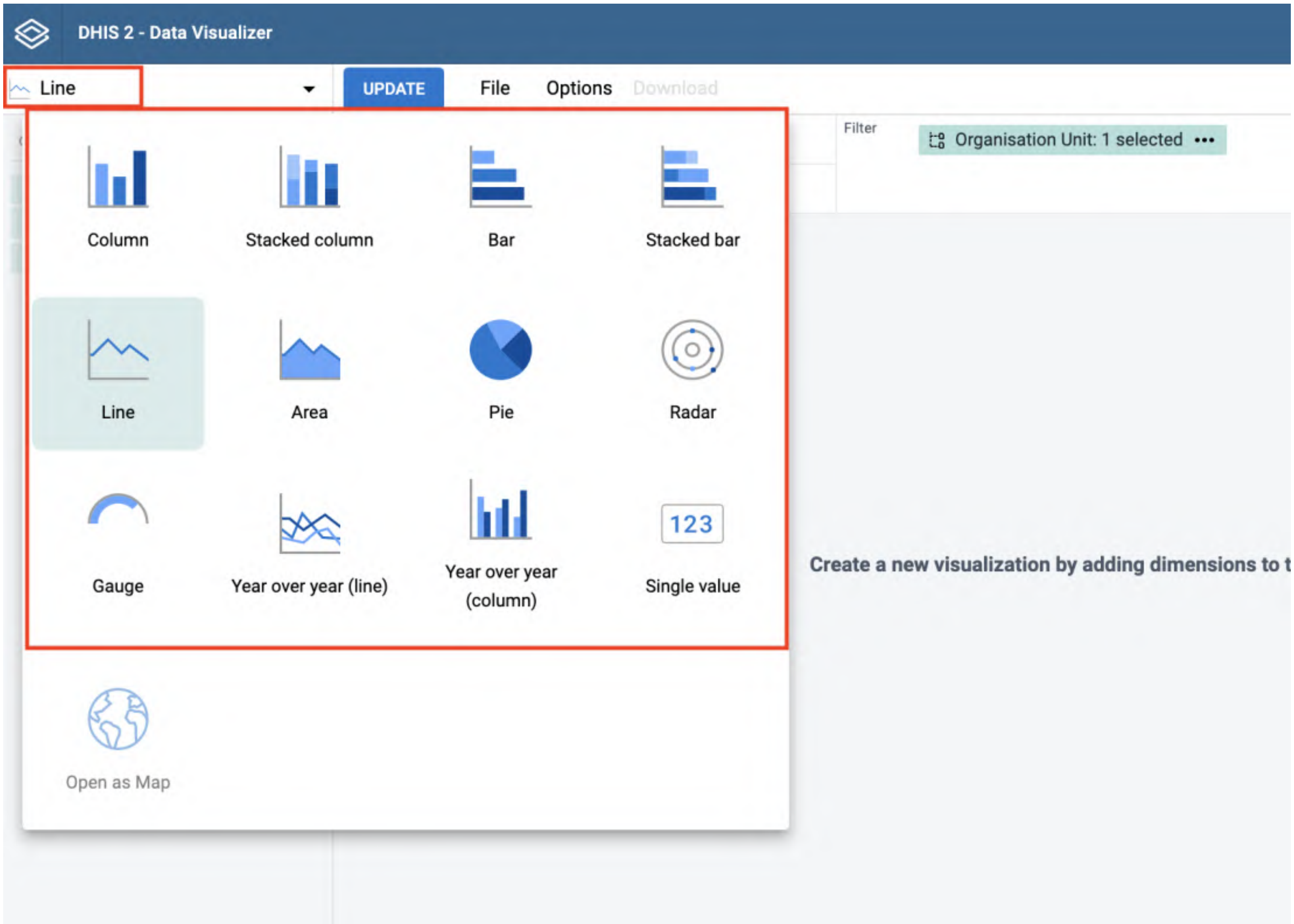
This app provides a method for analysing quantitative (numerical) data within the FHI 360 system. With this app it is possible to create visualizations for the integrated analysis of aggregate and event/tracker data through indicators. You can create tables, a wide variety of charts (bar, line, pie, 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.*



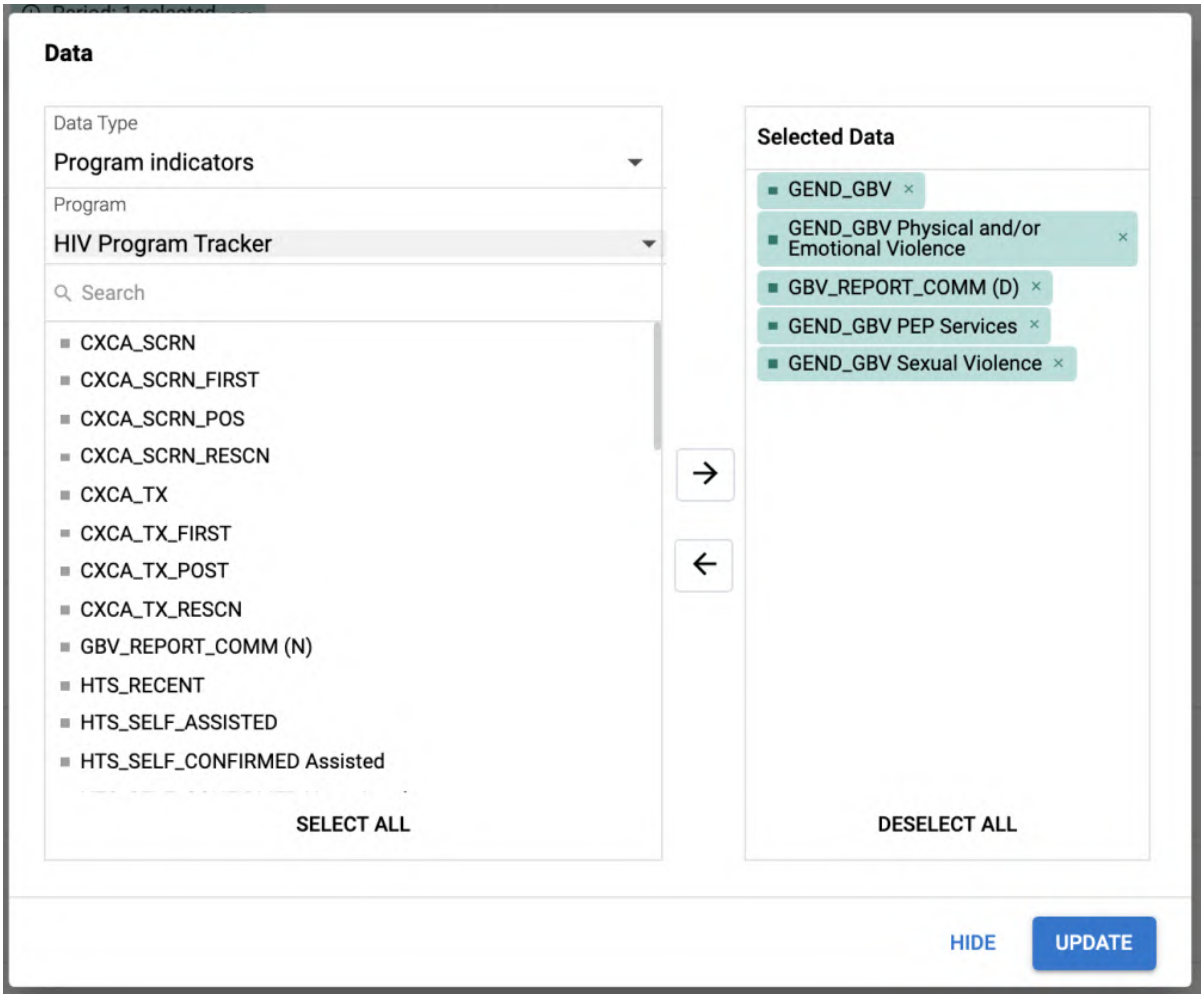
2. *First, select the chart type menu in the upper left to choose which chart type you would like to use.*



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.*

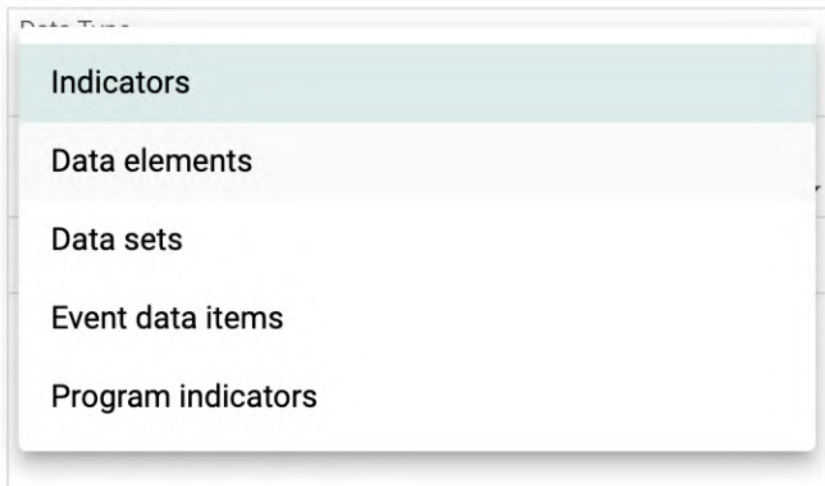
        i. *Under the **data** tab, select the data dimensions that represent which data values or calculated value from the form you want to display.*


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:*

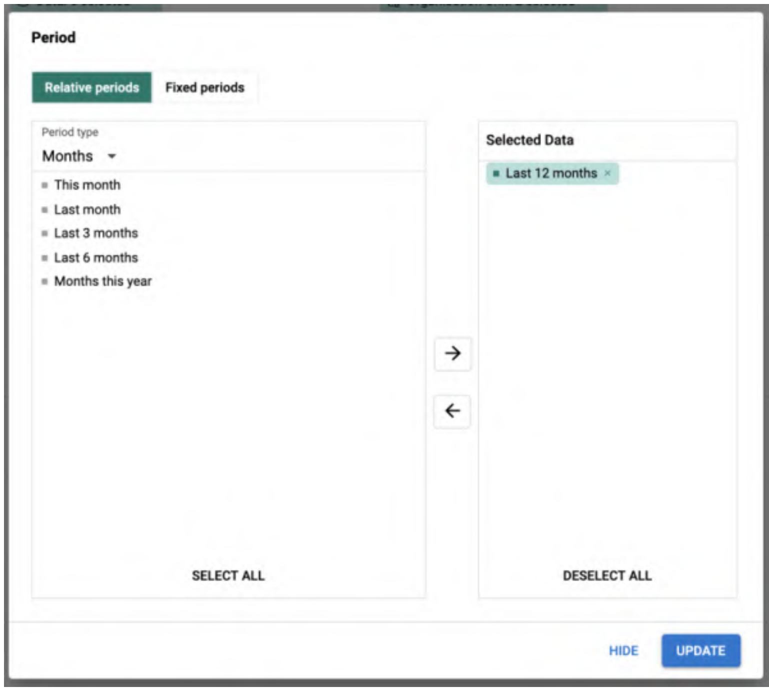
- *'Event data items' refer to raw data values entered for the programs.*
- *'Indicators' and 'Program indicators' are calculated values from the raw values in each program.*
- *'Data elements' and 'data sets' are data from a different data model based on aggregated values different from the Event/tracker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

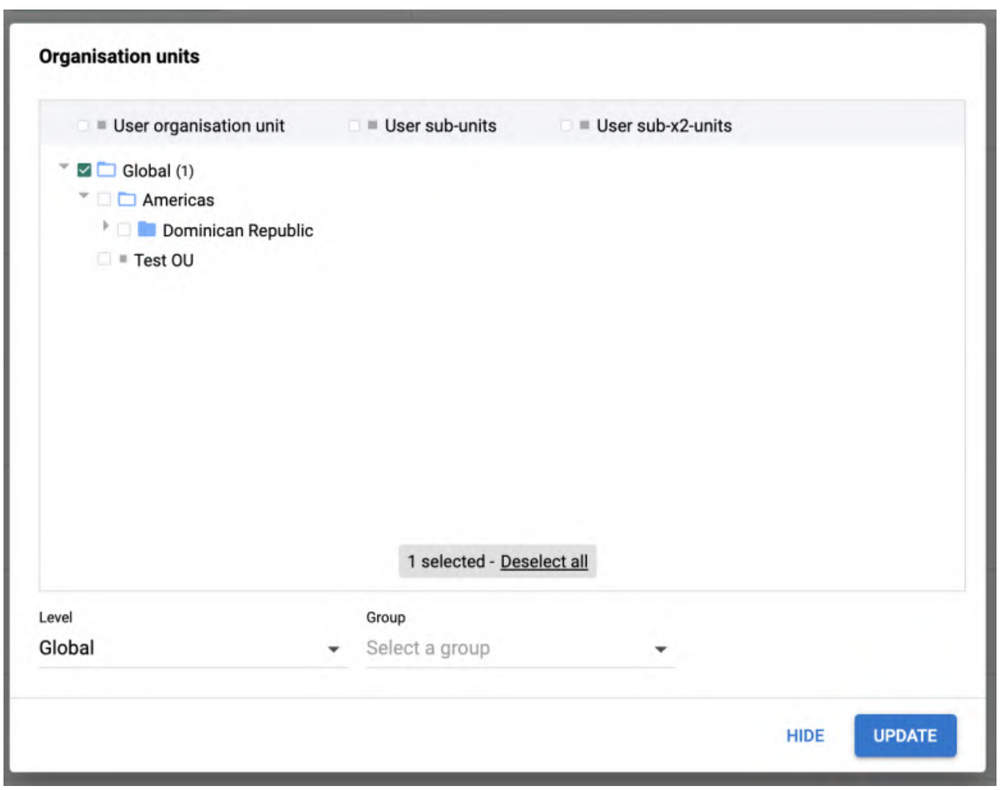
ii. The ***period*** *input is the dimension that represents the date(s) you want to represent data for.*



*c. **Organisation Unit** dimension:*

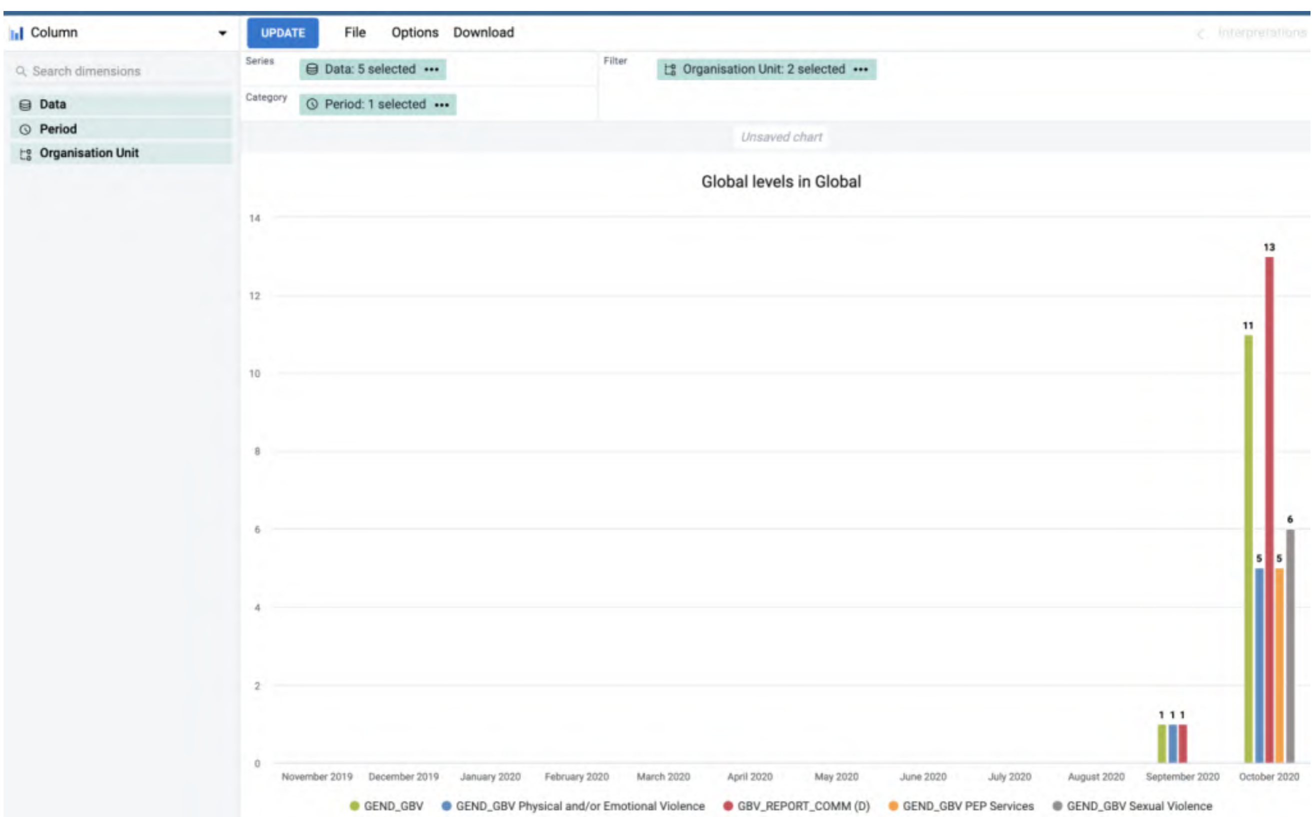
*iii. The **Organisation Unit** input determines which geographic regions you want to include data for.*

Example:



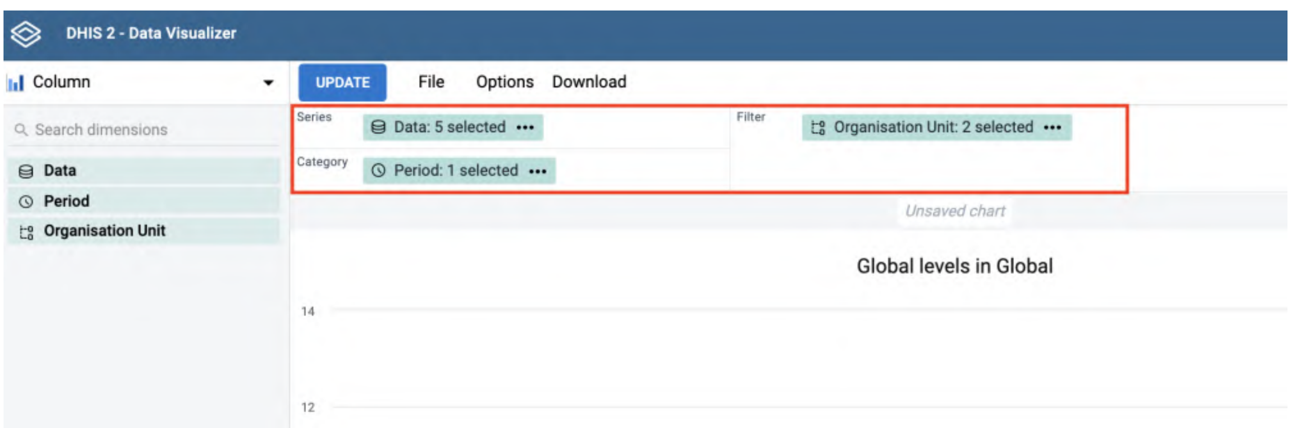
*Click on **Update**. Based on the data and chart type you chose, your results should be produced in the chart.*

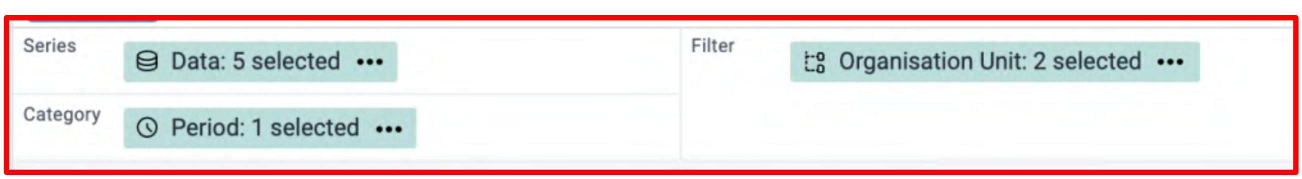
Example:



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*

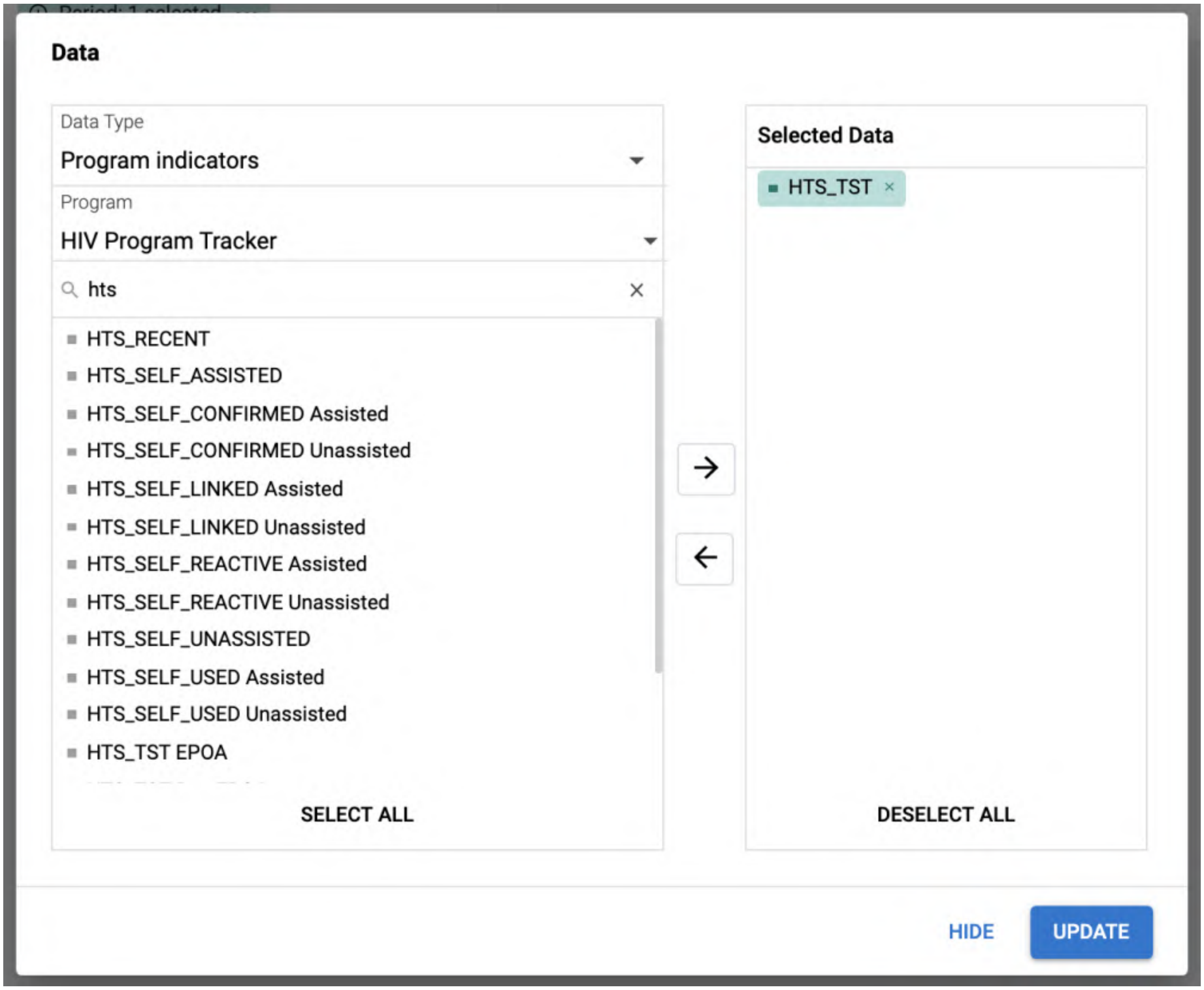
   b. ***Data type****: Program indicators*

   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:

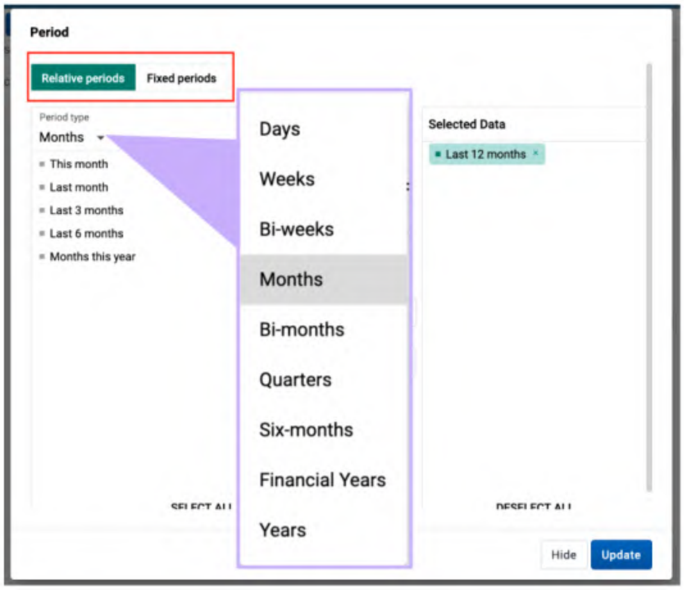


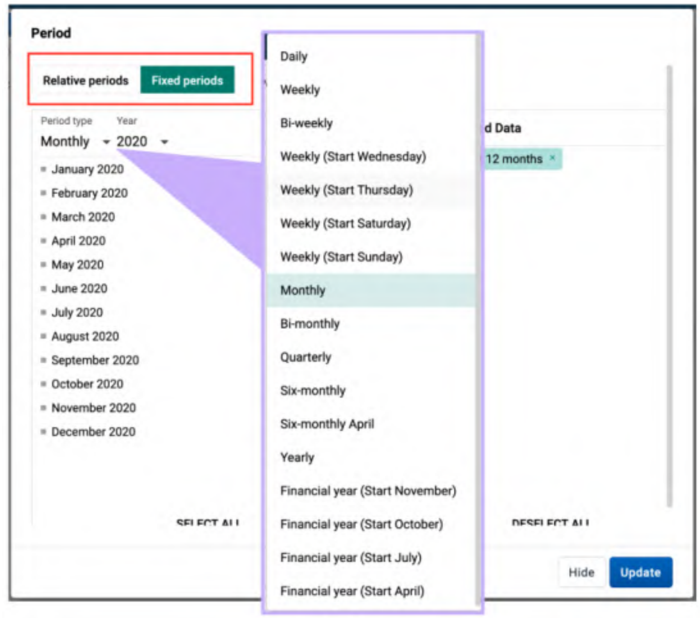
5. *Click on **Update***

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.***

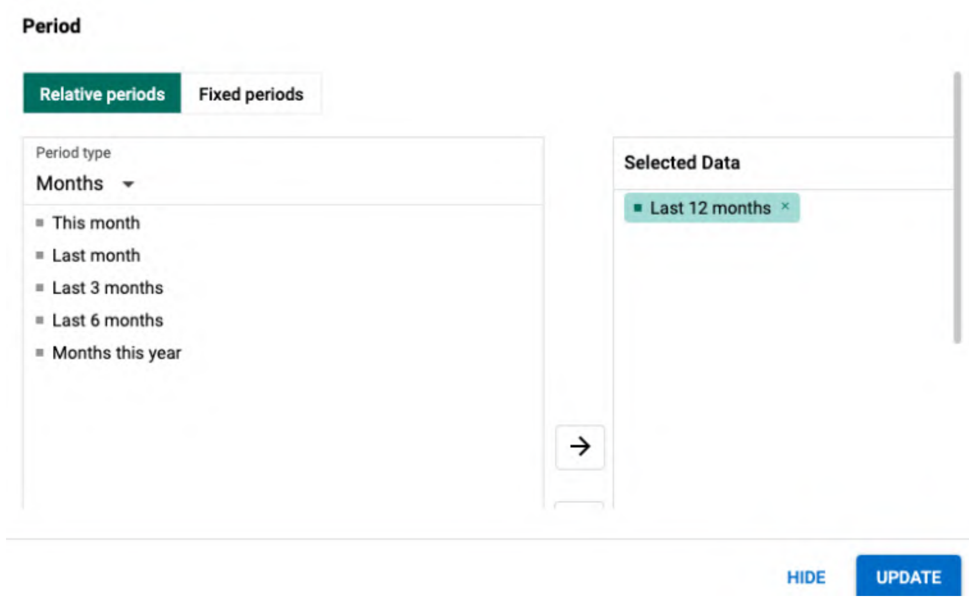
- *Relative and fixed periods are separated through icons at the top of the menu and periods selected for both options appear as a drop down menu.*

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

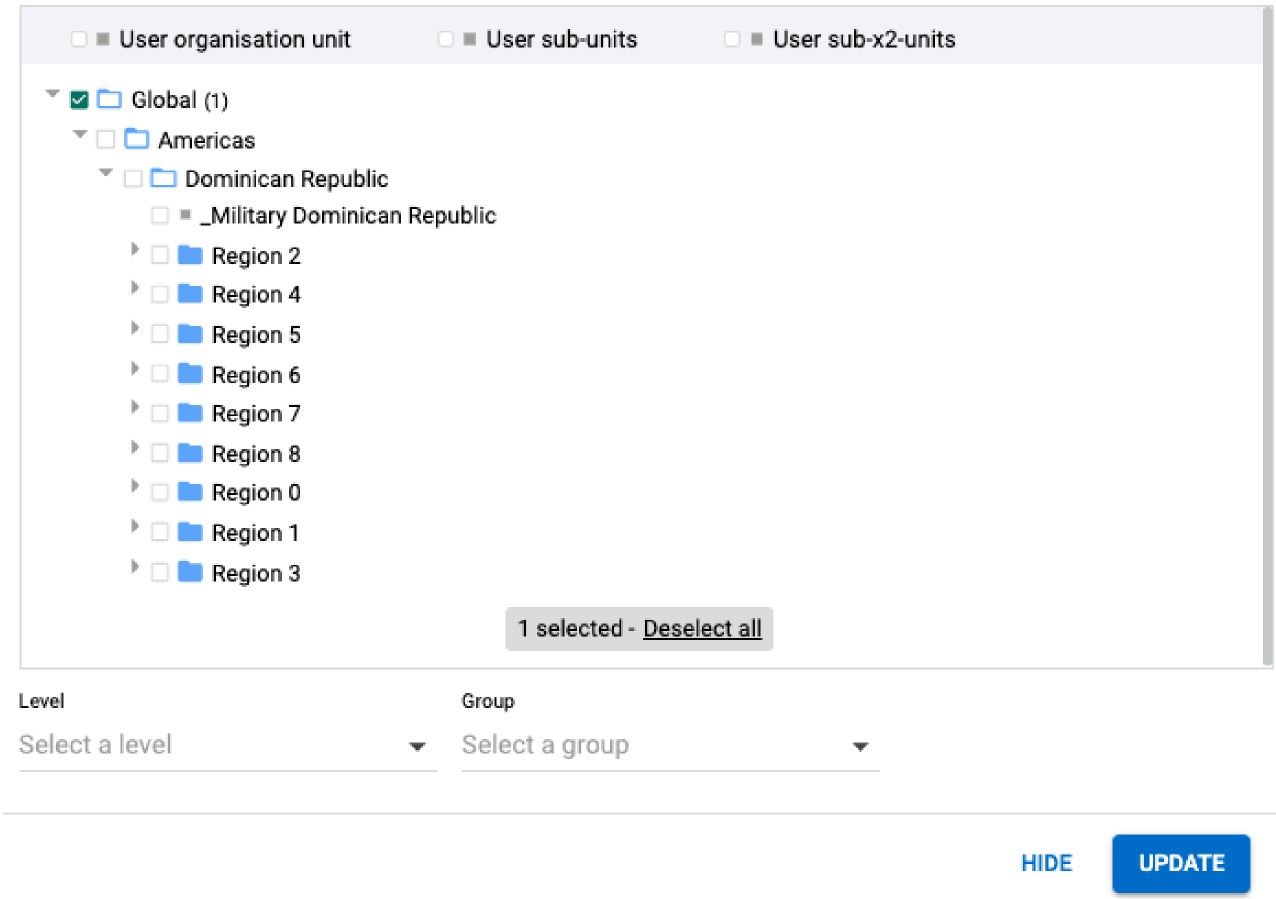




Example:



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



8. *Click on **Update** to list all the data for the request broken down by the selected organisation unit and periods.*

Results:

3.7 Maps

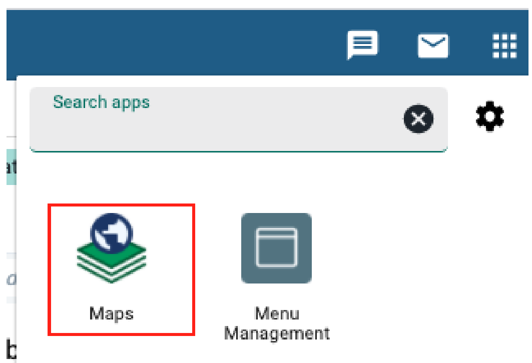
The maps application is a powerful tool for creating eye catching visualizations, however just because the final visualization looks good does not mean it's the best way to represent the data, in many cases a chart is a much better way to display the data, as it allows the viewer to more easily compare 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.

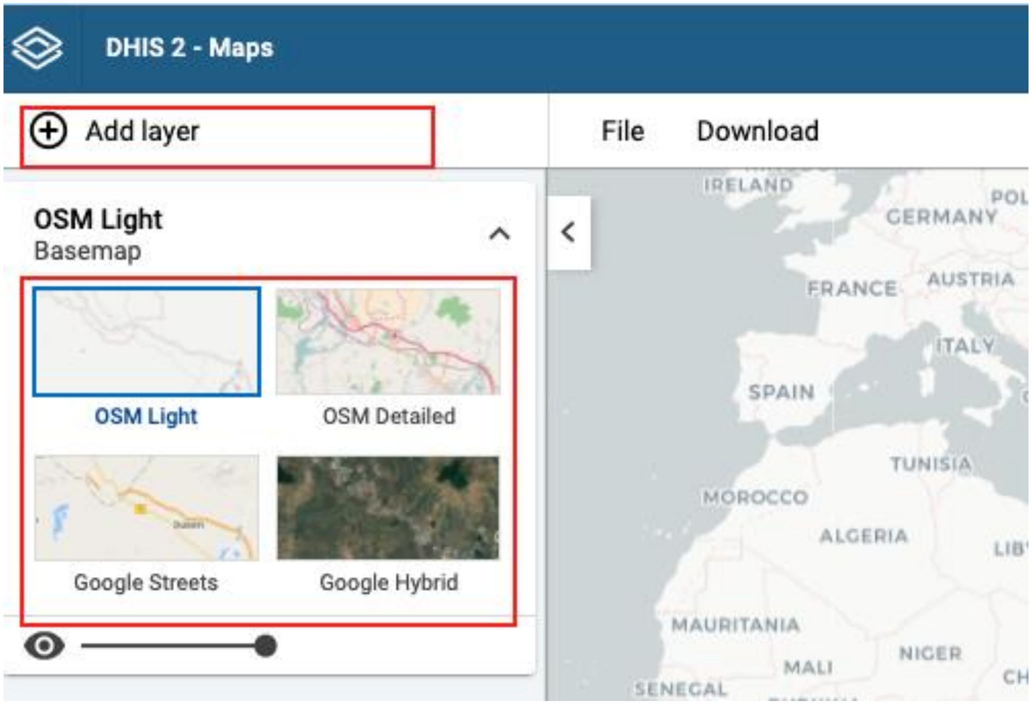
The section will provide a solid introduction to the maps application and how to use it to analyse numerical fields.

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.*



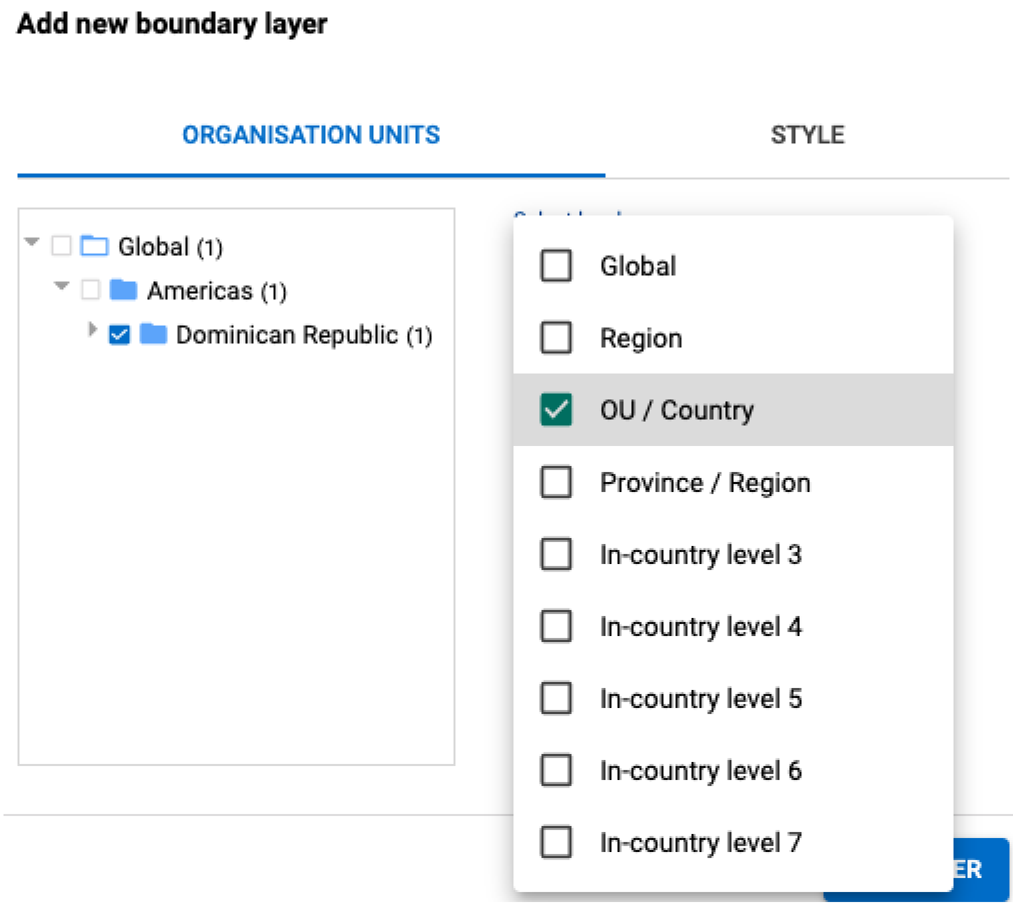
2. *Next, familiarize yourself with the Maps app interface.*



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

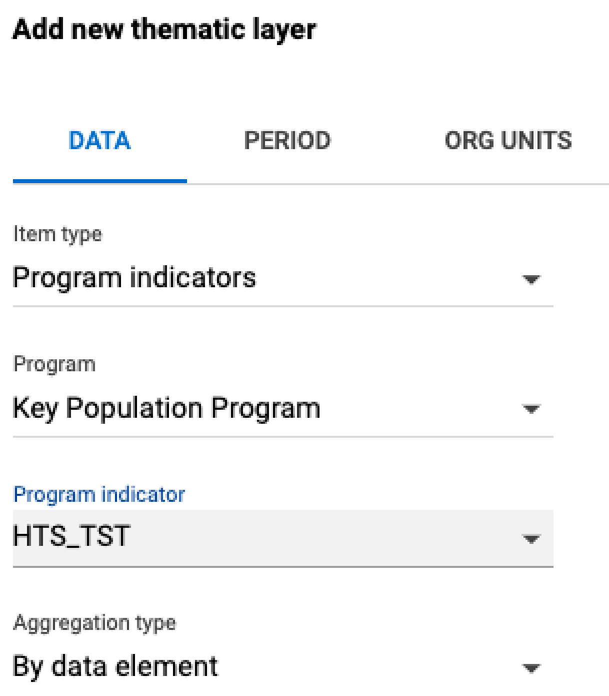


*c. Click on **Update***

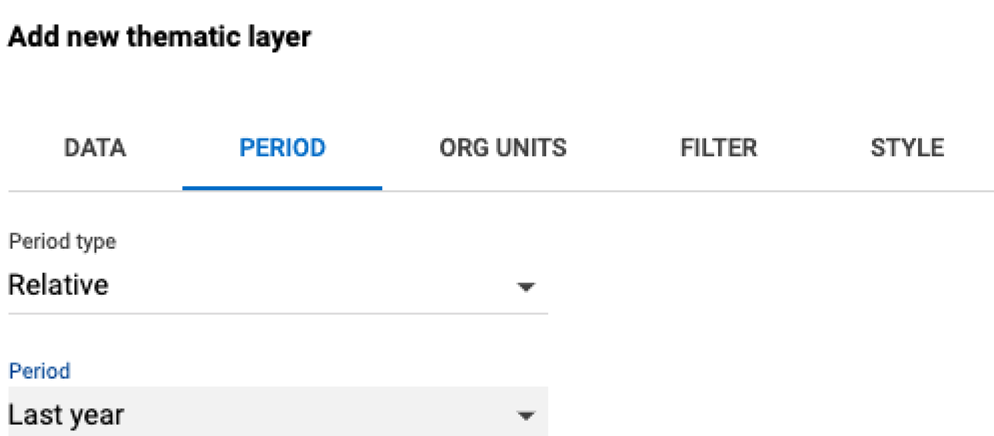
4. *Create a Thematic layer*

    a. *Click on Add layer - select Thematic*

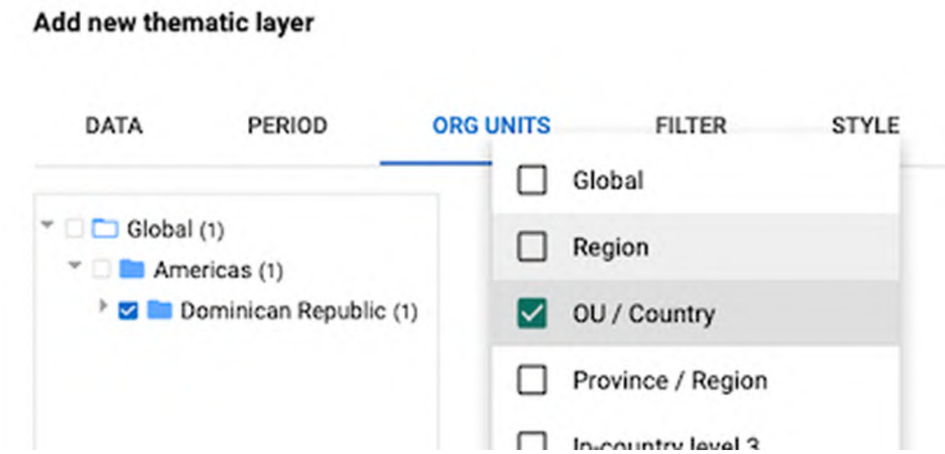
    b. *Define the data dimension by selecting the Item type, the Program and the Program indicator: HTS_TST and click on Update layer*



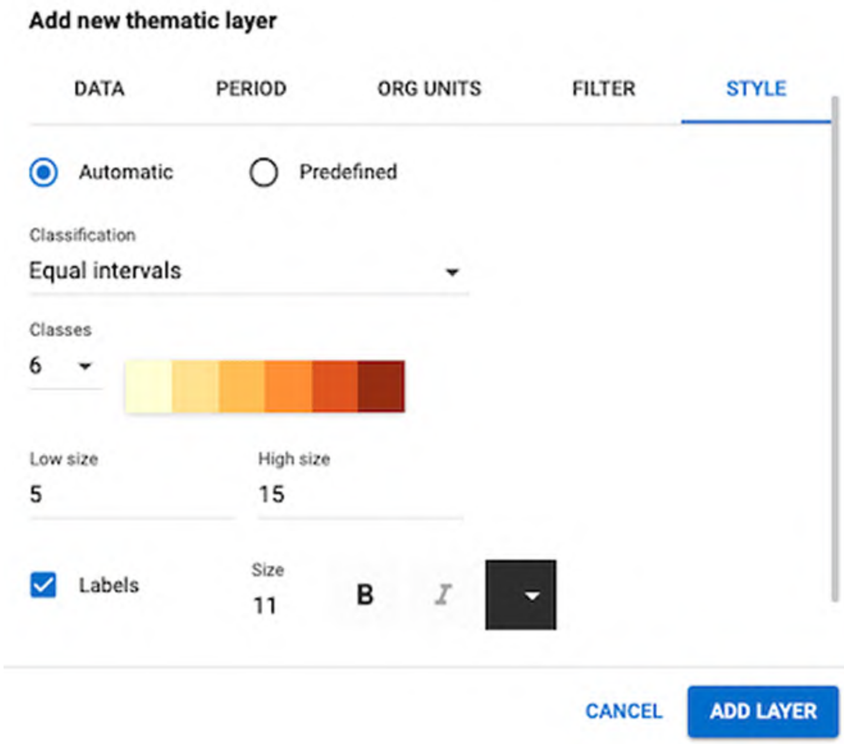
c. *Define the Period and click on Update layer*



d. *Define the Organisation unit and click on Update layer*



e. Define the style and click on Update layer



f. *Click on Update layer*