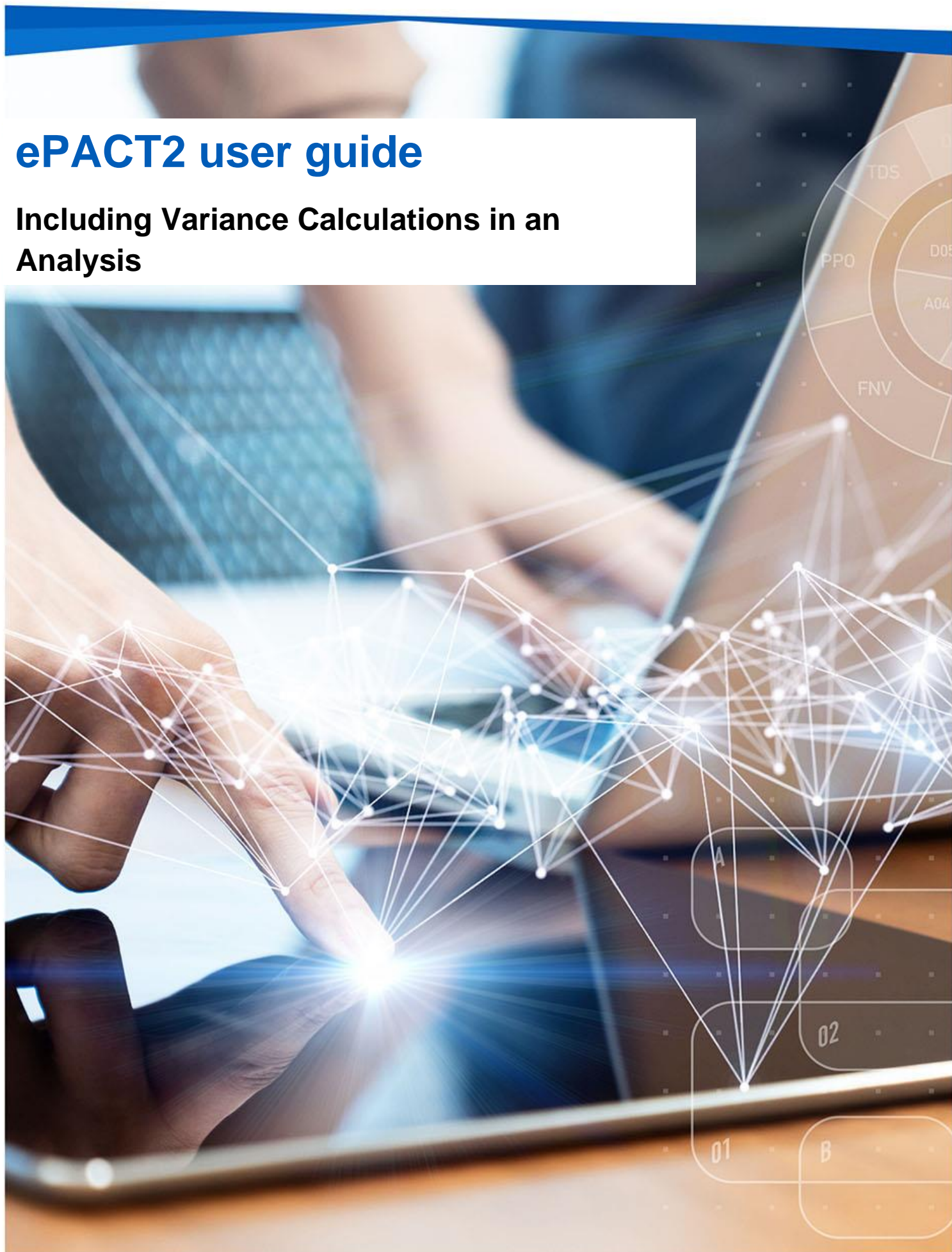


ePACT2 user guide

Including Variance Calculations in an Analysis



Interactive Contents

Use this interactive contents list to jump straight to the content you want to see. Just click the titles below to go directly to that section:

Contents

Variance

Aggregating columns

Variance calculations

Getting more help

Variance

It is possible to show variance in several different ways, for the purposes of this guide we will be using the method employed in the previous ePACT system.

To show variance we will be creating an 'Estimate' figure for the organisation based on the prescribing of its parent organisation. The variance will then be the difference between the estimated and actual figures.

For example, if the estimated items for a practice were required the formula below would be used:

$$\text{Comm/Provider Items} / \text{Comm/Provider List Size} \times \text{Practice List Size} = \text{Estimated Practice Items}$$

The estimated figure will be calculated using the list size for the organisation and its parent. As we will need to show information at multiple organisational levels in the same report we will first be aggregating data within the analysis.

Aggregating columns

It is possible to aggregate columns within ePACT2, this enables you to show different levels of data within the same report.

In the following example we will show how to aggregate data up to SICB level or National level. In this example 'Items' is being used however it is possible to use any fact column, such as 'Actual Cost'.

For this you will need one following formula, depending on the level you want to aggregate to:



SICB level formula:

AT "England Prescribing Organisations"."Prescribing Organisation"."Commissioner / Provider Level"



National level formula:

AT "England Prescribing Organisations"."Prescribing Organisation"."Country Level"

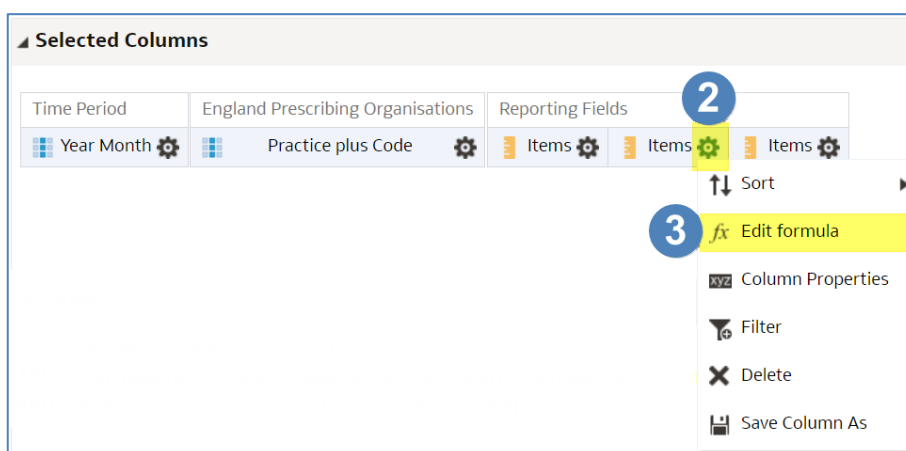
1. Set up your analysis, in this example we are bringing the data back at practice level for NHS North East and North Cumbria ICB (13T00).

The screenshot shows the 'Selected Columns' section with three columns: 'Time Period' containing 'Year Month', 'England Prescribing Organisations' containing 'Practice plus Code', and 'Reporting Fields' containing three 'Items' columns. Below this is the 'Filters' section with two filter conditions: 'Year Month is equal to / is in 202303' and 'Commissioner / Provider is equal to / is in NHS NORTH EAST AND NORTH CUMBRIA ICB - 13T - 13T00'.

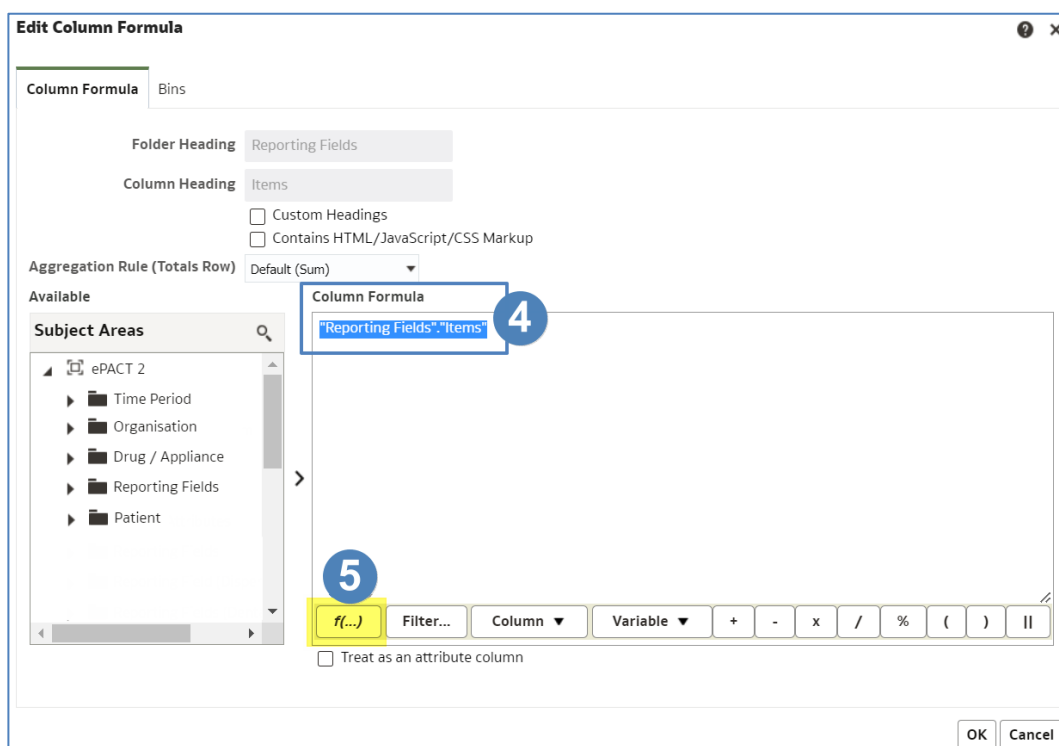


You will notice we have included 3 items columns; this is because we are going to aggregate two of the columns, one to show SICBL items and the other to show National Items.

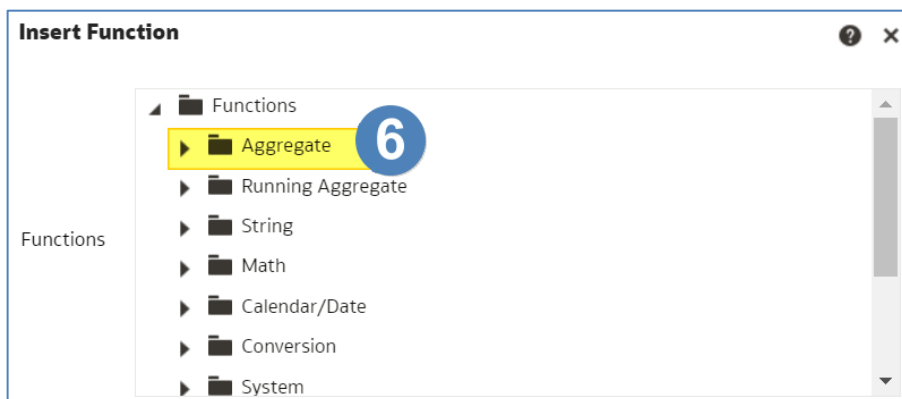
2. Select the Cog icon on a column you want to aggregate.
3. Select 'Edit formula'.



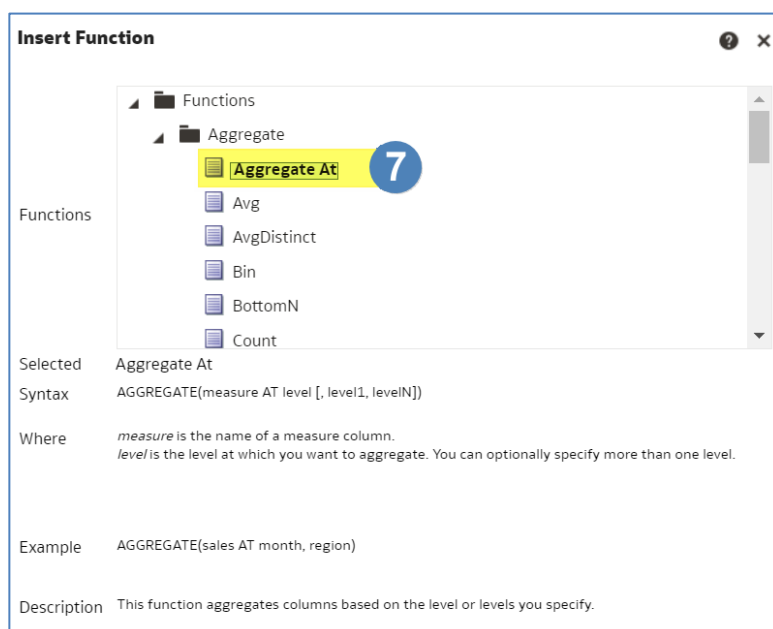
4. Ensuring the 'Column Formula' is highlighted.
5. Select the 'Insert Function' icon.



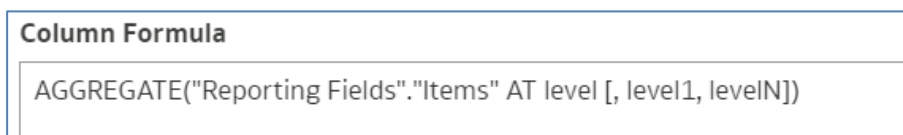
6. Select the drop-down arrow to open the 'Aggregate' folder.



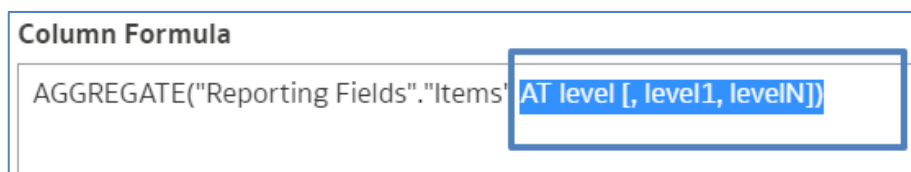
7. Select 'Aggregate At' by double clicking the function icon.



8. The column formula will now update as per below image.



9. Highlight the following in your column formula.





The part we have highlighted is the section of the formula the system will look at to decide what level the column will be aggregated to.

10. Depending on the level you want to aggregate the column to and whether you are using HS England or England prescribing organisation columns, copy either the SICB level formula or the National level formula from below:



HS England Prescribing Organisations SICB level formula:

AT "HS England Prescribing Organisations"."Prescribing Organisation"."Commissioner / Provider Level")



England Prescribing Organisation SICB level formula:

AT "England Prescribing Organisations"."Prescribing Organisation"."Commissioner / Provider Level")



England Prescribing Organisations National level formula:

AT "England Prescribing Organisations"."Prescribing Organisation"."Country Level")



HS England Prescribing Organisations National level formula:

AT "HS England Prescribing Organisations"."Prescribing Organisation"."Country Level")

11. Paste the copied formula into the highlighted section of the column formula pane, the formula in your column should now look similar to the example below:

Column Formula

```
AGGREGATE("Reporting Fields"."Items" AT "HS England Prescribing Organisations"."Prescribing Organisation"."Commissioner / Provider Level")
```



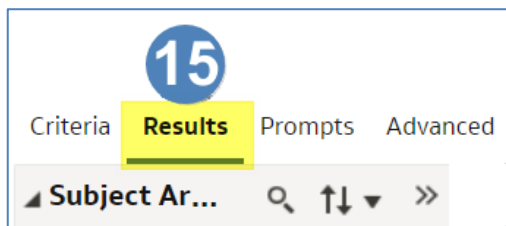
The column is now saying aggregate 'Items' to 'Commissioner / Provider Level'.

12. Select the 'Customer Headings' check box to enable you to give the column an appropriate name.

13. Name the column using the 'Column Heading' box.

14. Select 'OK' to create your new column.

15. Once you have completed your aggregated columns select 'Results' to generate your report.



16. Your report will look similar to the example below:

Year Month	Practice plus Code	Items	Comm / Provider Item
202303	[REDACTED]	2,555	1,183,487
202303	[REDACTED]	11,870	1,183,487
202303	[REDACTED]	24,242	1,183,487
202303	[REDACTED]	9,461	1,183,487
202303	[REDACTED]	33,017	1,183,487
202303	[REDACTED]	13,679	1,183,487
202303	[REDACTED]	15,652	1,183,487
202303	[REDACTED]	42,587	1,183,487

17. Repeat the process to include 'List Size' column at SICB level. The 'List Size' column is located within the 'Patient' folder.

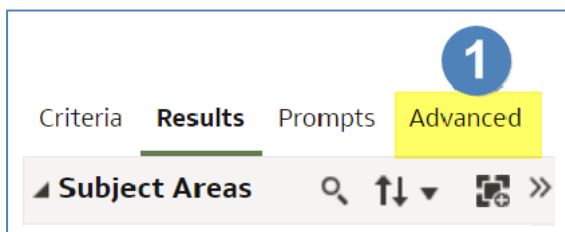
18. Once complete your results will look similar to this:

Year Month	Practice plus Code	Items	Comm / Provider Item	List Size	Comm / Provider List Size
202303	[REDACTED]	2,555	1,183,487	2,765	547,798
202303	[REDACTED]	11,870	1,183,487	5,388	547,798
202303	[REDACTED]	24,242	1,183,487	9,430	547,798
202303	[REDACTED]	9,461	1,183,487	3,998	547,798
202303	[REDACTED]	33,017	1,183,487	11,313	547,798
202303	[REDACTED]	13,679	1,183,487	7,421	547,798
202303	[REDACTED]	15,652	1,183,487	10,167	547,798
202303	[REDACTED]	42,587	1,183,487	15,650	547,798

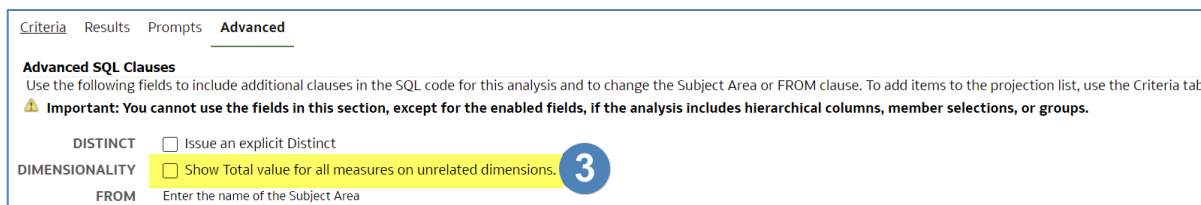
Including drug information

If drug information is to be included in the report the analysis should be set to show values for all measures on unrelated dimensions.

1. Select the 'Advanced' tab from the top left-hand corner of the analysis builder.



2. Scroll down to the 'Advanced SQL Clauses' section.
3. Select 'Show Total value for all measures on unrelated dimensions'.



4. The 'Results' tab can now be selected.

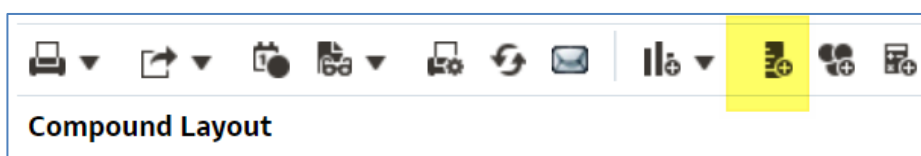
Variance calculations

Now that we have aggregated the columns to show data at different organisational levels we can use these columns to perform the 'Variance' calculations.

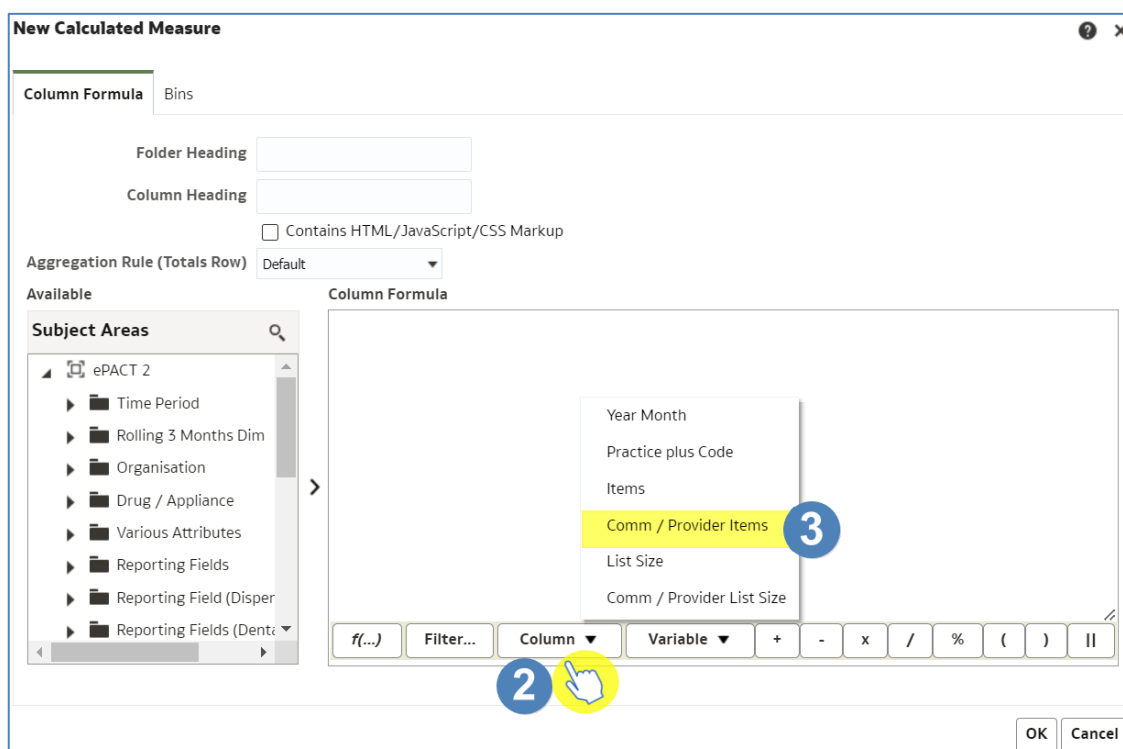
We will use the 'New Calculated Measure' function to create columns to show the 'Estimate' and 'Variance'.

Using this process to create calculations to show the SICB level items divided by the SICB level List Size and then multiplied by the Practice List Size.

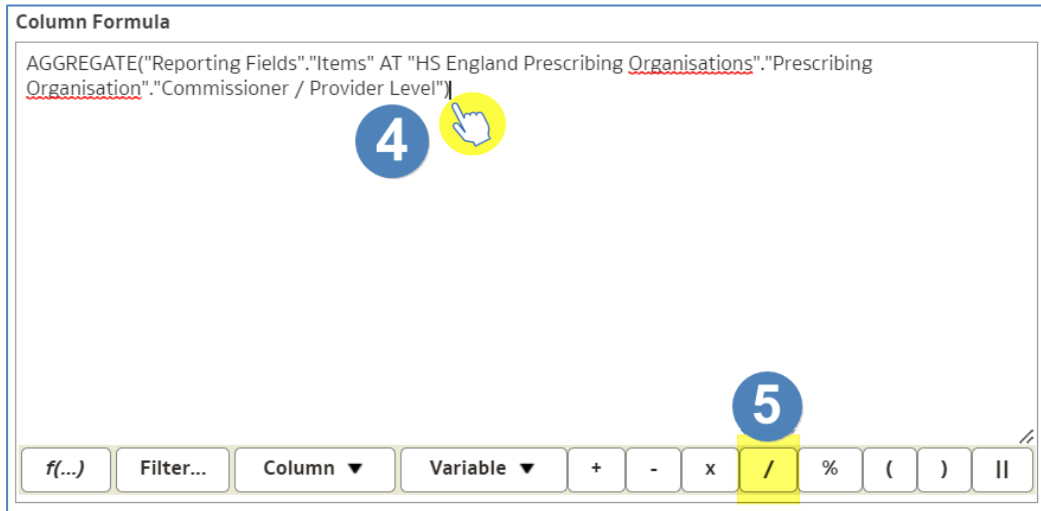
1. In the 'Results' tab, select the 'New Calculated Measure' icon.



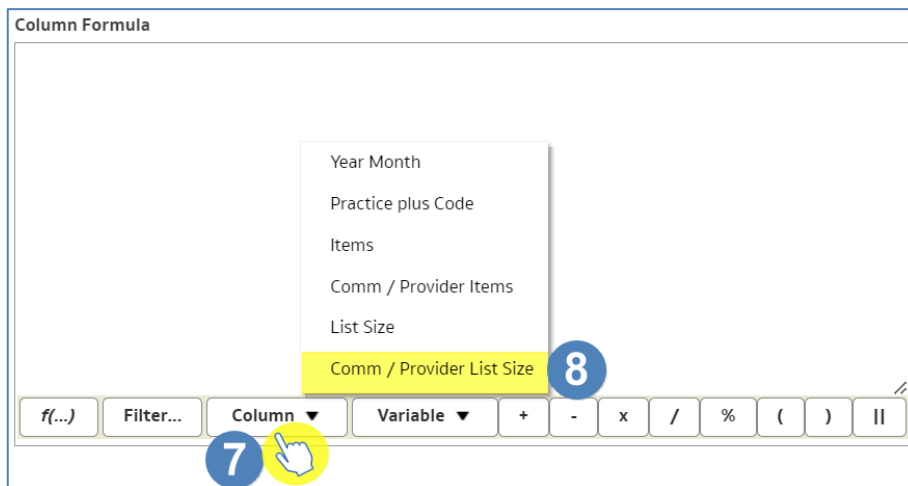
2. Select the 'Column' icon.
3. This will display all available columns to include in your analysis, select the column you want to include, in this example we are going to select 'Comm / Provider Items'.



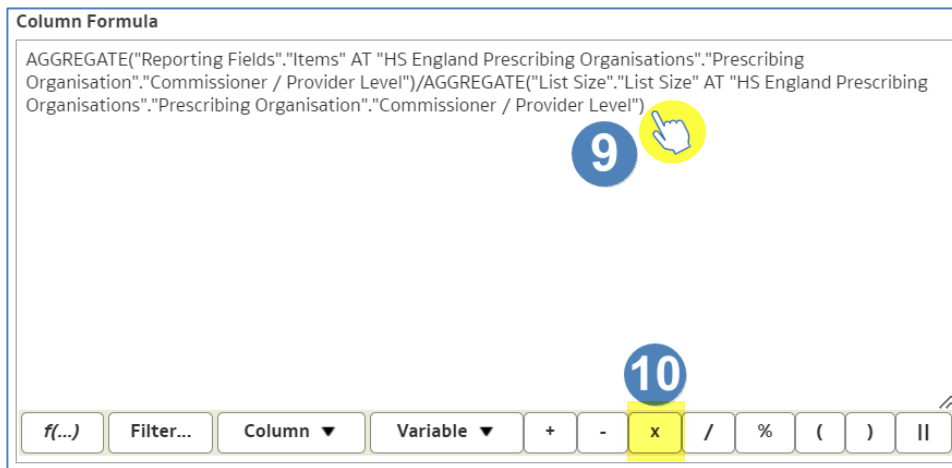
4. Click at the end of the formula that has populated the 'Column Formula' pane.
5. Ensuring your cursor is at the end of the formula, and the formula is no longer highlighted, select the divide symbol from the formula taskbar.



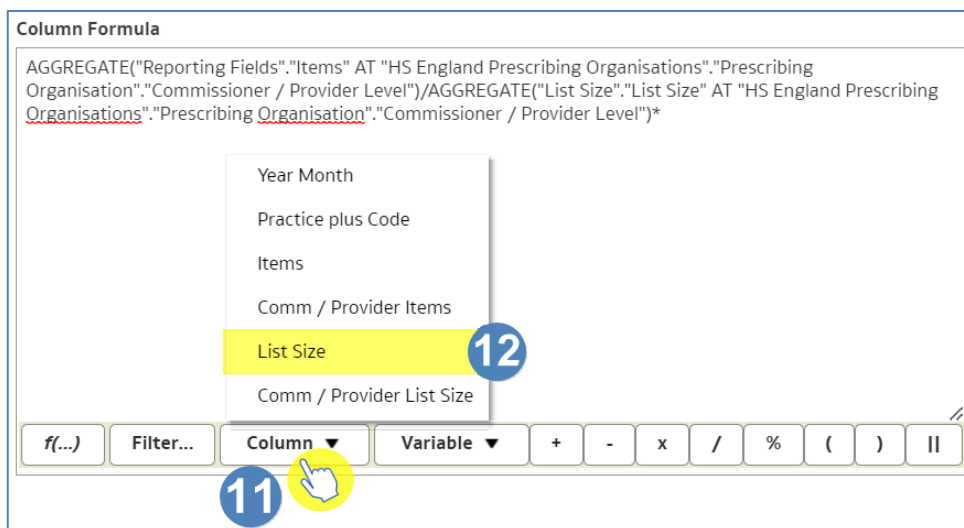
6. The divide symbol will now be input into the formula, again click at the end to ensure the divide symbol is no longer highlighted.
7. From the 'Column Formula' taskbar select the 'Column' icon.
8. Select the appropriate column from the list, in this example we are choosing 'Comm / Provider List Size':



9. Click at the end of the formula that has populated the 'Column Formula' pane.
10. Select the multiply symbol from the 'Column Formula' taskbar.



11. From the 'Column Formula' taskbar select the 'Column' icon.
12. Select the appropriate column from the list, in this example we are choosing 'List Size'.



13. Name the column as 'Estimate'.
14. Select 'OK' to create your calculated column.

17. The column will then be shown in the data.

Year Month	Practice plus Code	Items	Comm / Provider Items	List Size	Comm / Provider List Size	Estimate	Variance
202303	WATER SUPPLY (WATER SUPPLY)	2,555	1,183,487	2,765	547,798	5,974	-3,419
202303	WATER SUPPLY (WATER SUPPLY)	11,870	1,183,487	5,388	547,798	11,640	230
202303	WATER SUPPLY (WATER SUPPLY)	24,242	1,183,487	9,430	547,798	20,373	3,869
202303	WATER SUPPLY (WATER SUPPLY)	9,461	1,183,487	3,998	547,798	8,637	824
202303	WATER SUPPLY (WATER SUPPLY)	33,017	1,183,487	11,313	547,798	24,441	8,576
202303	WATER SUPPLY (WATER SUPPLY)	13,679	1,183,487	7,421	547,798	16,033	-2,354
202303	WATER SUPPLY (WATER SUPPLY)	15,652	1,183,487	10,167	547,798	21,965	-6,313
202303	WATER SUPPLY (WATER SUPPLY)	42,587	1,183,487	15,650	547,798	33,811	8,776

Getting more help



Additional training material and user guides

The ePACT2 training team has developed several how to guides to help you get the best out of ePACT2. These can be found on our [ePACT2 user guides page](#)

Webinar sessions

We offer a free webinar training service to all our users and you can book as many sessions as you need.

Our webinar sessions are booked as 1hour slots and we offer a number of different sessions covering a range of topics.

We also offer bespoke sessions which are delivered just to you or your invited colleagues. You can let us know if you have any specific topics or reports you'd like to cover or if you would prefer an introductory tour of the system.

Our experienced trainers deliver these sessions using MS Teams and you can take part wherever you are as long as you can get online.

You can find our more and book your webinar by going to our [ePACT2 training page](#)