

ePACT2 User Guide

Analysis In-Depth

Contents	
Using the Time Period measures	1
Using Age bands	3
Calculated Items	6
Using Bins	10
Hierarchy Columns	15
Selection Steps	16
Aggregating columns	25
Using Patient Count	30
Creating and using a saved column	32
Filtering individual columns	39
Getting Help	45

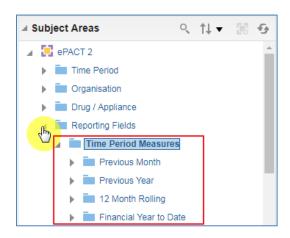
Using the Time Period measures

To enable users to compare values over time the NHSBSA have produced 'Time Period Measure' columns.

By including Time Period Measure column into your analysis you will be able to compare the time period in your analysis with either the corresponding time period in the previous year, the previous month, a twelve month rolling figure to the time period in your analysis or the figure for the financial year to date.

The 'Time Period Measure' folder can be found in the following location:

ePACT2 > 'Reporting Fields' > 'Time Period Measures'



In the following example I will compare items for a CCG in August 2018 compared to Items for August 2017

- 1. Open a blank analysis
- 2. Include the following columns:



3. Include the following filters:

✓ Filters

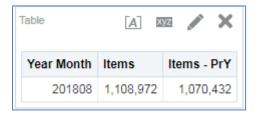
✓ Year Month is equal to / is in 201808

AND HS Commissioner / Provider plus Code is equal to / is in NEWCASTLE GATESHEAD CCG (13T00) - 13T00

4. Select 'Results'



Your results will look like this, 'Year Month' shows August 2018, 'Items' shows the number of items for the CCG in August 2018, 'Items –PrY' shows the Items for August 2017.



Using Age bands

ePACT2 holds age band data, meaning it is possible to break you results down into specified age bandings.

You can break your data down into the following banding options:

- 5 Year Age Bands The selected criteria is returned, split into pre-defined 5
 year age bands showing the start age of the age bands selected i.e. 0, 5, 10
 years etc.
- 10 Year Age Bands The selected criteria is returned, split into pre-defined 10 year age bands of 0-9 years, 10-19 years, 20-29 years etc.
- Miscellaneous Age Bands The selected criteria is returned, split into predefined miscellaneous age bands such as 0-11 years, 12-17 years, 18-24 years etc.

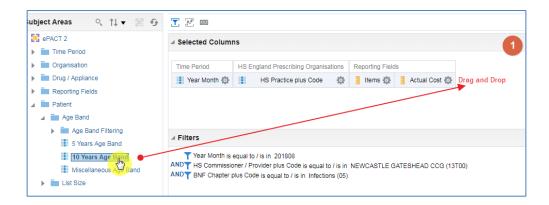
You can use <u>the age logic summary flowchart</u> for information on how patient age is determined in ePACT2.

The age band columns can be found via the 'Patient' folder



In this example I am going to use the '10 Year Age Band' column to filter my analysis to bring back data for everyone over the age of 70

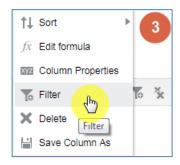
1. Double click, or drag and drop your age band column to the 'Selected 'Columns' pane to include the column into your analysis:



2. Select the cog icon of the '10 Year Age Band' column:



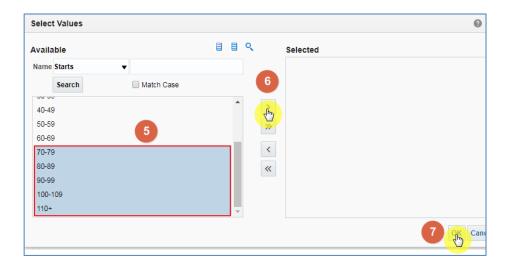
3. Select 'Filter



4. In the 'New Filter' pane select the magnifying glass from the 'Value' box:



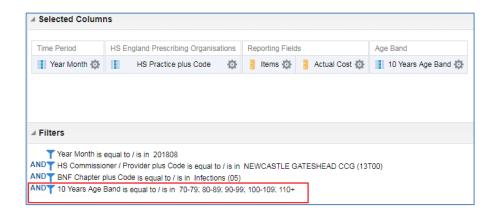
- Select the values you want to filter on (in this example I am picking everyone
 and over).
- 6. Select the single arrow icon to move the values to the 'Selected' box.
- 7. Select OK to action the change:



8. Select 'OK'



The filter will now be applied to your analysis:





If the '10 Year Age Band' column is left in your 'Selected Columns' the results will be broken down by 10 year age bands.

If you delete the column from your 'Selected Columns' the data will return aggregated. In our example this means we would get a total items and actual cost for each practice for the over 70's.

Calculated Items

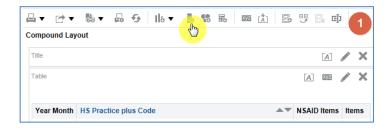
It is possible to perform calculations within ePACT2, you can do this using the 'New Calculated Measure' icon available via the analysis results pane:



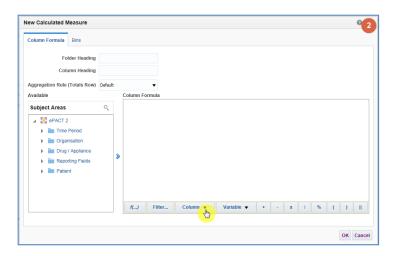
As a result you do not need to export data from the system to third party software to perform calculations.

In my example I am going to work out the percentage of items for 'NSAID's. I have one column showing the total items for the practice and one column showing the total for the practice.

 From the results pane of your analysis 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 I am going to select NSAID Items



4. Click at the end of the formula that has populate the 'Column Formula' pane



5. Ensuring your curser 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:

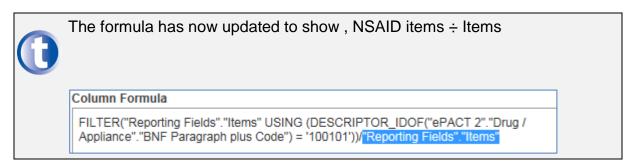


7. From the 'Column Formula' taskbar select the 'Column' icon:

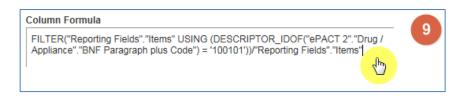


8. Select the appropriate column from the list, in this example I am choosing 'Items':





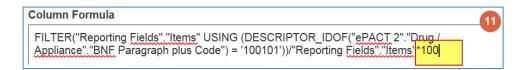
9. Click at the end to un highlight column formula:



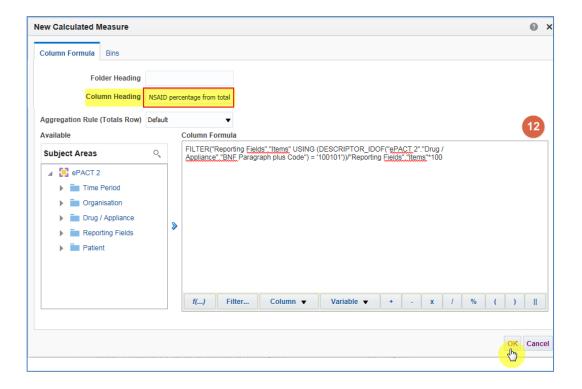
10. Select the multiply symbol from the 'Column Formula' taskbar:



11. Again click at the end of the input symbol and to complete the percentage calculation type in 100:



12. Name column and then select 'OK' to create your calculated column:



Your new calculated column will now be included in the results:



Using Bins

Binning a measure creates a new column based on the value of that measure; this means you are able to create groups of specific measures within a column.

It is possible to create bins on most columns such as for groups of practices, groups of presentations, groups of months, etc.

In this example I am going to create a report with bins for groups of chemical substances.

 Create your analysis and include the columns you want to return data for, in this example i am returning data for August 2018, Newcastle Gateshead CCG and I am returning the number of items for chemical substances:



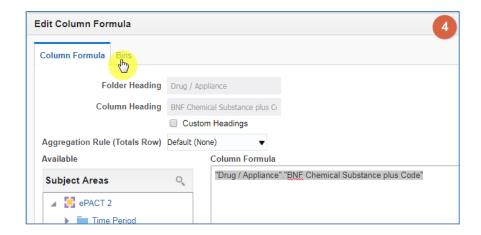
2. Select the cog icon for the column you want to add 'Bins' to



3. Select 'Edit formula'



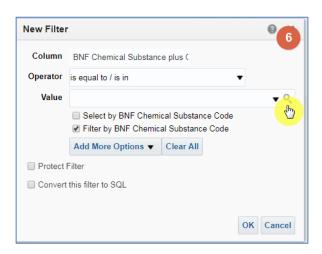
4. Select 'Bins'



5. Select 'Add Bin'

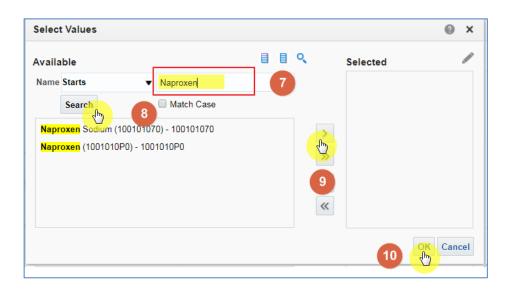


6. Select the magnifying glass icon to search for the values you want to include in your bin.



Search for your values using the search box, in my example I am going to create a bin for all Naproxen chemical substances.

- 7. Type item in search box
- 8. Select Search
- 9. Use single arrow to move items into selected
- 10. Select OK



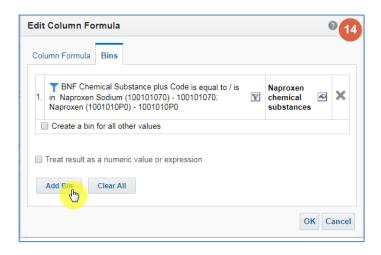
11. Select OK



- 12. Give bin and appropriate name
- 13. Select OK



14. To add additional bins to the column select 'Add Bin' again

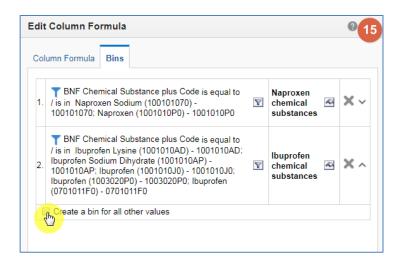


Follow the same process to create multiple bins.

15. Once you have created all the bins you want to include in the column select 'Create a bin for all other values'



If you do not create bin for all other values your data will return with a line for all other chemical values in the column



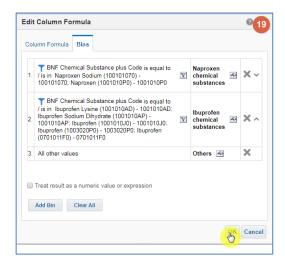
16.

17. Give an appropriate name

18. Select Ok



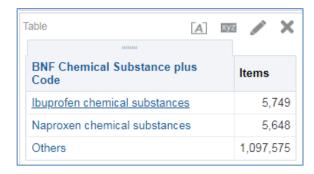
19. Select OK



20. Select 'Results' to run your analysis



You results will now show data split into bins, similar to the below example



Hierarchy Columns

There are numerous 'Hierarchy' columns within ePACT2; the columns are indicated with the hierarchy symbol see below example:



'Hierarchy' columns can be used in conjunction with selection steps within your analysis results to display different levels of data within the same report.

The benefit of using 'Hierarchy' columns is that this allows you to navigate down to lower levels of data within the same analysis. Normal columns do not allow you to do this.



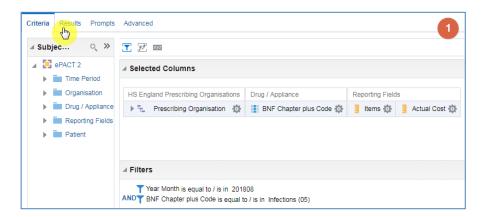
Results will return slower for analysis containing selection steps

Selection Steps

Using Selection Steps to limit the data displayed

When you have used a 'Hierarchy column' within your analysis 'Selection Steps' can be used to limit the data to only the organisation/BNF level required. The results can then be expanded to show data at multiple levels.

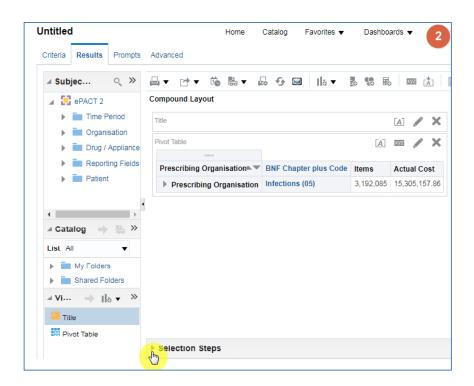
1. Set up your analysis with the required columns of data and the required hierarch column, then navigate to the results pane via the 'Results' tab





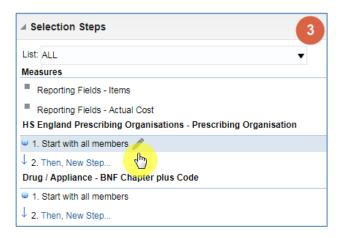
In this example I am running the data for August 2018 and Chapter 5 returning data for Items and Actual Cost

2. Click the arrow to expand the 'Selection Steps' pane.

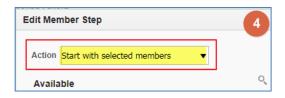


The default 'Selection Steps' for the Organisation hierarchical column or BNF hierarchical column will be displayed.

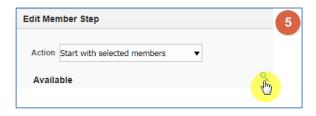
3. Hover the curser over 'Start with all members' to bring up the 'pencil' icon, select this icon to allow you to edit the field.



4. You will now be prompted with the 'Edit Member Step' pane, ensure the 'Action' is set to 'Start with selected members'



5. Select the search icon to expand the search pane



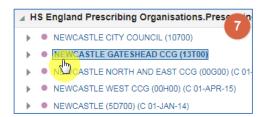
6. Search for the required overall organisation or BNF



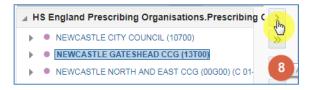


In this example my top level organisation will be Newcastle Gateshead CCG

7. Highlight the organisation or BNF required in the search results



8. Use the single arrow icon to select the organisation or BNF



9. The organisation or BNF will be displayed in the 'Selected' section



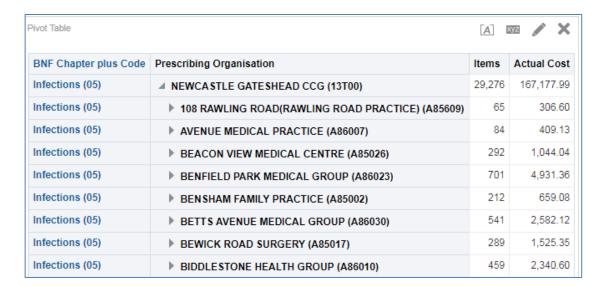
10. Click 'Ok'



The total figure will now display the organisation selected



11. Select the 'arrow' icon to expand the organisation



Including total for groups of organisations/BNF

Selection Steps can also be used to include totals figures for groups of organisations or multiple BNF selections.

1. From the results pane select the arrow to expand the 'Selection Steps'



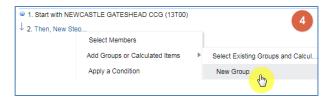
2. Select the 'Then, New Step' link to add a further step



3. From the drop down list select 'Add Groups or Calculated Items



4. From the drop down list select 'New Group'



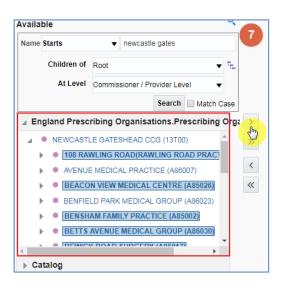
5. You will now be presented with the 'New Group' pane, select the search icon to expand the search pane



6. Search for the required organisation or BNF



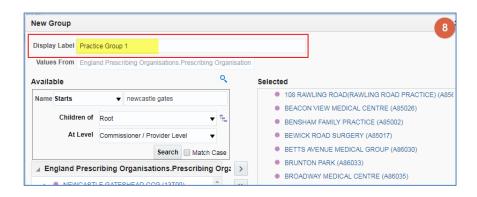
Highlight the organisations or BNF required in the search results.
 (Organisations or BNF's can be expanded within the search results) once selected use the arrow key to move the organisations/ BNF to selected



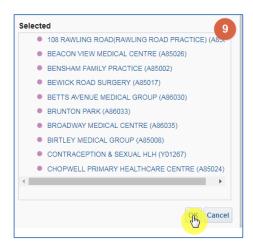
The organisations will be displayed in the 'Selected' section



8. Enter and appropriate name in the 'Display Label' section



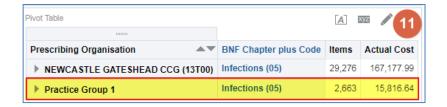
9. Click 'Ok'



10. The group created will now be displayed in the selection steps pane



11. The group created will now be displayed in the results



12. The steps above can then be repeated to include all groupings required.

Saving Groups for use in future analysis

Once created groups can be saved and then reused in future analyses.

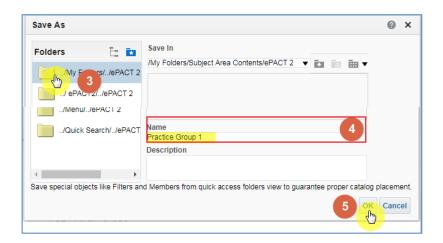
1. Click the link for the group



2. Select 'Save Group As' from the drop down list



- 3. Select an appropriate folder to save the group in
- 4. Enter an appropriate name for the group
- 5. Click 'Ok'



Re-using Saved Groups

It is possible to use saved groups in other analysis, enabling you to create the group once and use in multiple reports.

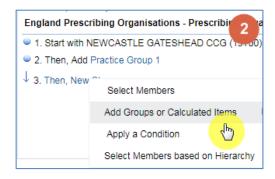


You can only use a saved group for the column it has been created and saved under. i.e. you can only use a group of practices you have created in the 'England Prescribing Organisation' column, in this column on other analysis

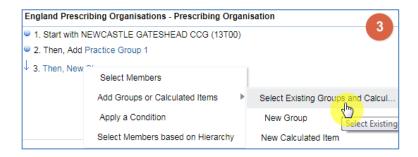
1. Select the 'Then, New Step' link to add a further step



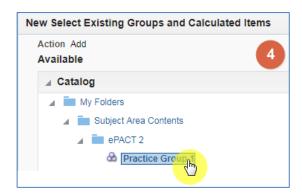
2. From the drop down list select 'Add Groups or Calculated Items'



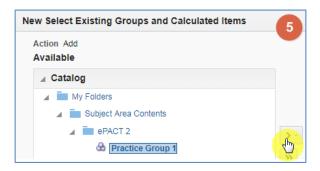
3. From the drop down list select 'Select Existing Groups and Calculated Items'



4. Select the group from the saved location



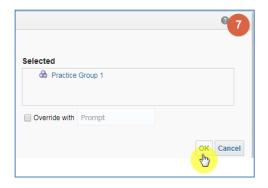
5. Use the arrow icon to select the group



6. The group selected will be displayed in the 'Selected' section



7. Click 'Ok'



The new group added will now be displayed in the selection steps pane, and your results pane.

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 I will show how to aggregate data up to CCG or National level.

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



CCG level formula:

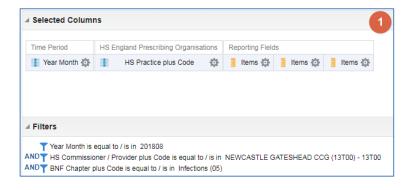
AT "England Prescribing Organisations". "Prescribing Organisation". "Commissioner / Provider Level"



National level formula:

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

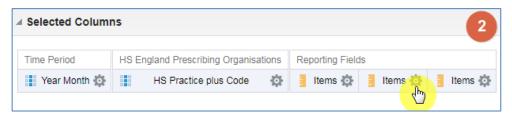
1. Set up your analysis, in my example I am brining the data back at practice level for Newcastle Gateshead CCG, and bringing back Items for Chapter 5.



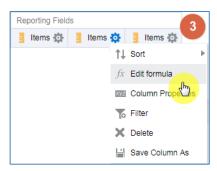


You will notice I have included 3 items columns, this is because I am going to aggregate two of the columns, one to show CCG items and the other to show National Items.

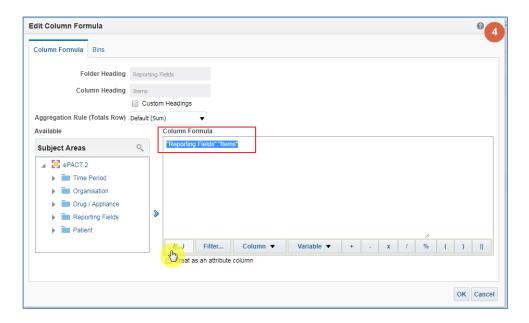
2. Select the Cog icon on a column you want to aggregate



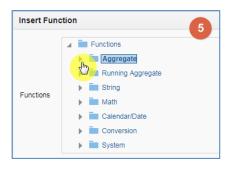
3. Select 'Edit formula'



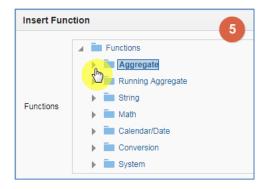
4. Ensuring the 'Column Formula' is highlighted select the 'Insert Function' icon



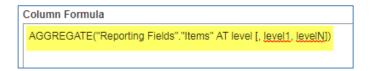
5. Select the drop down arrow to open the 'Aggregate' folder



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

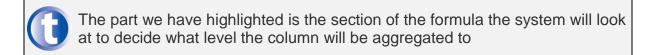


7. The column formula will now update as per below image



8. Highlight the following in your column formula





9. 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 CCG level formula or the National level formula from below:



HS England Prescribing Organisations CCG Level formula:

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



England Prescribing Organisations CCG 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")

10. Paste the copied formula into the highlighted section of the column formula pane, the formula in your column should now look like this:

Column Formula

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

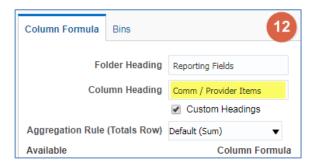


The column is now saying aggregate 'Items' to 'Commissioner / Provider Level'

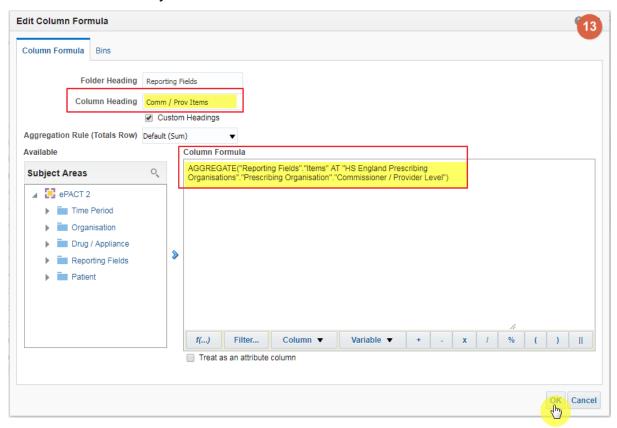
11. Select 'Customer Heading' check box to enable you to give the column an appropriate name



12. Name column using the 'Column Heading' box



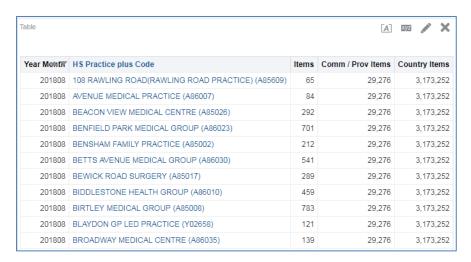
13. Select 'OK' to create your new column



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



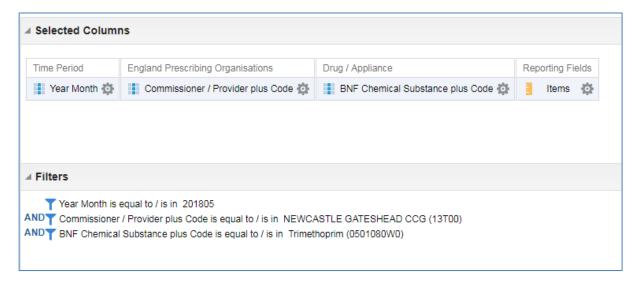
Your report will look similar to this:



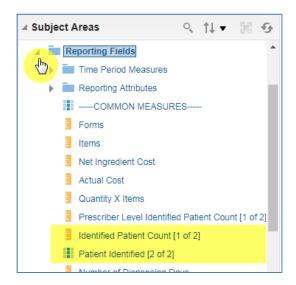
Using Patient Count

ePACT2 enables you to return patient count data in your results; this means you can see the number of unique identified patients that are receiving specific items

1. Set up a basic analysis with the following columns and filters, (in this example I am running data for Newcastle Gateshead CCG, May 2018 and bringing back the number of Items for Trimethoprim.)



2. Apply the Identified Patient Count [1 of 2] and 'Patient Identified [2 of 2], these can be found in the 'Reporting Fields' folder.



3. Select the results tab, your results should look like this:





Identified Patient Count [1 of 2] – this will give the number of unique identified patients; patients are identified by the NHS number printer on the prescription. This column needs to be used when running data at practice level or above.



Patient Identified [2 of 2] – this will separate the results into identified and unidentified patients, N indicated not identified and Y indicates identified patients and gives the count.



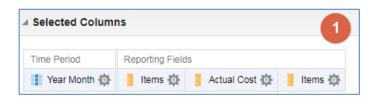
If you are running the analysis at prescriber level and would like to bring the patient count data down you will need to include the Prescriber level Identified Patient Count [1 of 2] column. You only see this column if you have prescriber level access to ePACT2

Creating and using a saved column

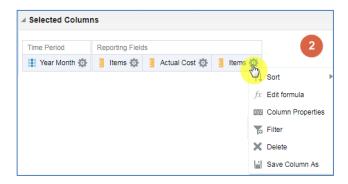
The increased functionality of ePACT2 allows you to create columns which you can then save to use in subsequent analysis.

In my example I am going to create a column that shows the cost per item, i.e. Actual costs ÷ Items.

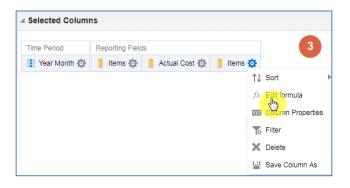
 Insert the columns you would like to use in your analysis to create your new column, and insert it an additional column (this can be anything as we are going to delete the column formula and edit it)



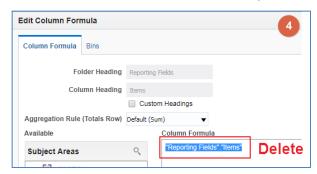
2. Select the cog icon on the additional column you have included in your report (in my example it is the 'items' column)



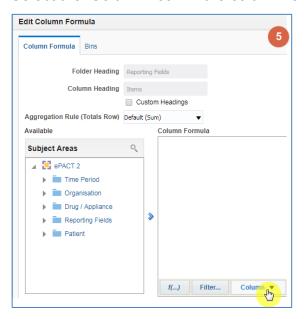
3. Select 'Edit formula'



4. Delete content of 'column formula' pane



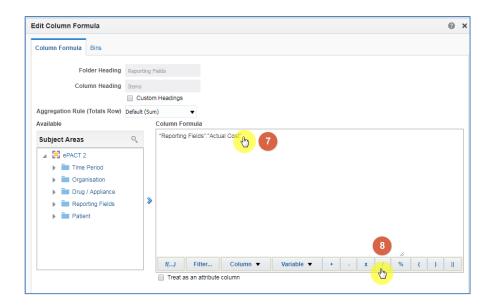
5. Select the 'Column' icon in the column formula toolbar,



6. From the available list choose the first column you want to input, in my example I am choosing Actual cost first



- 7. Click at the end of the formula to ensure it is no longer highlighted
- 8. using the tool bar select the mathematic symbol you require, in my example I am choosing divide



 click at the end of the formula to ensure your mathematic symbol is no longer highlighted



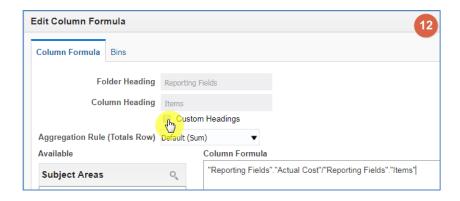
10. Select the column icon



11. Select the other column you wish to use, in my example I am choosing Items



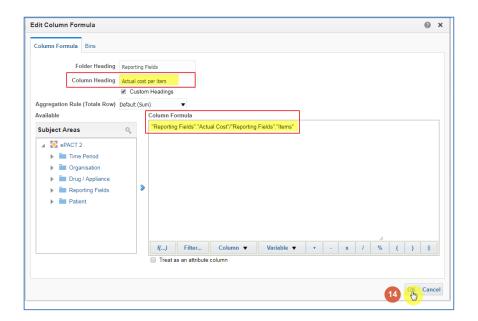
12. Select 'Custom Headings'



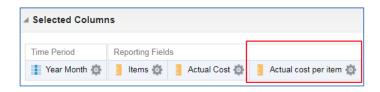
13. Give your column an appropriate name, In my example I am naming my column 'Actual Cost per Item'



14. Select OK



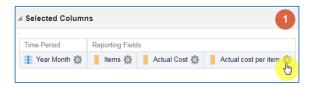
Your new column will now be created



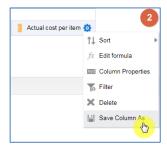
Saving a column

Once you have created a new column in ePACT2 it is possible to save it for future use in other analysis.

1. Select the cog icon of the column you wish to save



2. Select 'Save Column As' from available list



- 3. Select an appropriate location to save your column
- 4. Give column an appropriate name
- Select OK



Your column will now show a downwards green arrow, this indicates it is a save column.

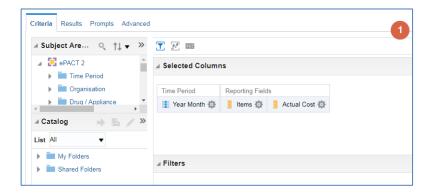


Using a saved column in your analysis

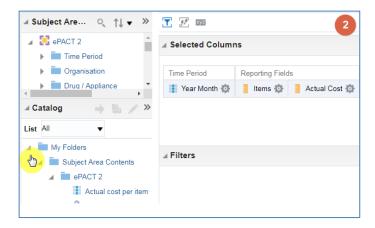
If you want to use a column you have previously created and saved use the following steps.

All content you create and save will be held in your my folder.

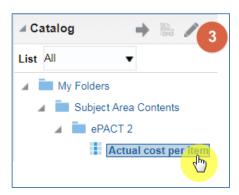
1. Open up the analysis you want to add your saved column to and navigate to the criteria pane.



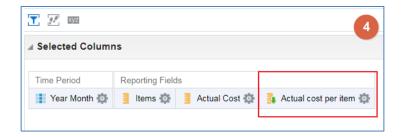
2. Select the drop down on 'My Folders' in the Catalog pane and navigate to where you have saved your column.



3. Double click on the column you want to add



4. The column will now be included in your analysis



Filtering individual columns

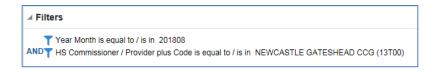
It is possible within ePACT2 to filter individual columns instead of the whole analysis; this enables you to run multiple sets of data within the same analysis.

In this example I am going to run a report at practice level with one field showing total items for all NSAID's and one showing all items attributed to the practice.

- 6. Open a blank analysis
- 7. Include the following columns:



8. Include the following filters:



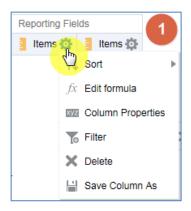


At the moments this analysis would return two columns, with both showing the number of items attributed to each practice under Newcastle Gateshead CCG for August 2018.

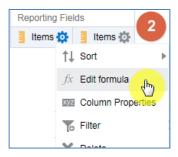
Filter the column

We are now going to filter one of the 'Items columns to show the NSAID items.

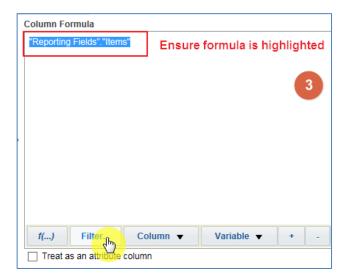
1. Select the cog icon on the column you intend to filter



2. Select 'Edit formula'



3. You will now be presented with the 'Edit Column Formula' pane, from here select 'Filter'





You must ensure the 'Column Formula' is highlighted when filtering a column, if it is not highlighted the formula will not update correctly.

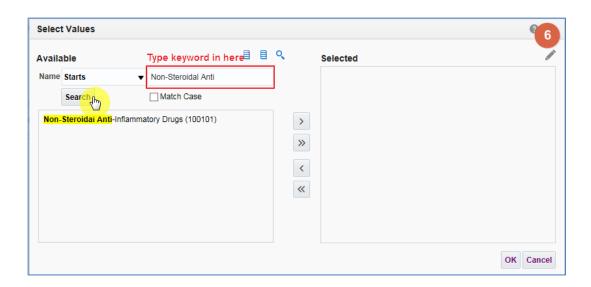
4. You will now be presented with the 'Insert Filter' pane, from here navigate through the 'Subject Area' to the column you want to filter on, in this example I am filtering on the 'BNF Paragraph plus code' column. Double click on the column to open 'New Filter' pane:



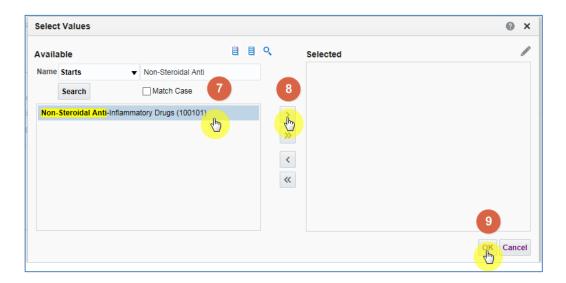
5. Select the Magnifying glass icon to search the column for the value you want to filter on:



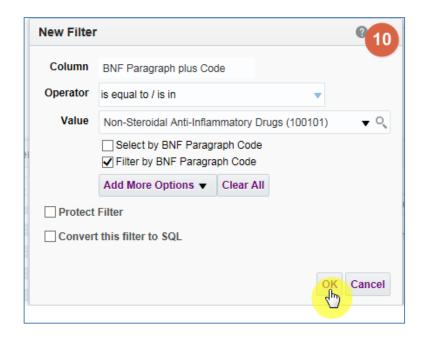
6. You will now be presented with the 'Select Values' pane from here search for your value, in this example I am searching for 'Non-Steroidal Anti-Inflammatory Drugs'. Type keyword/ phrase in search box, and then select 'Search' icon:



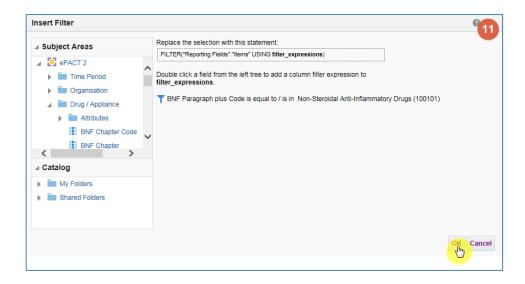
- 7. Select value you want to filter column on from your search results
- 8. Select single arrow icon to move into the selected box:
- 9. Once value showing in 'Selected' box, select 'OK'



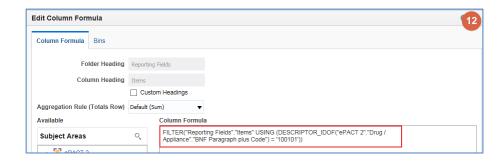
10. You will now be returned to the 'New Filter' pane, the 'Value' box will now be populated with your selected value. Select OK:



11. You will now be presented with the 'Insert Filter' pane; this indicates the filter you are going to apply to the column. 'Select 'OK'



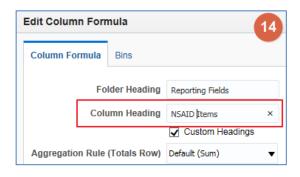
12. The 'Column Formula' will now be updated to show the filter applied.



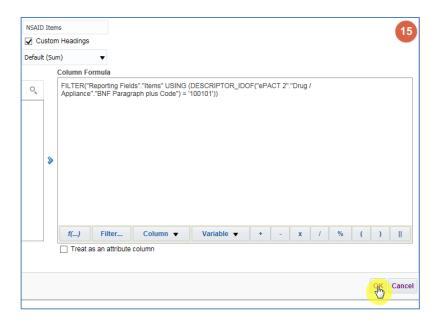
13. Select 'Custom Headings', this enables you to update the 'Column Heading' and give it an appropriate name.



14. Give appropriate name, in this example I am calling this column 'NSAID items'



15. Select 'OK'



16. Your 'Selected Columns' will now reflect the changes you have made:





This concept works for all columns in the subject area, for example you could filter on columns to show items broken into different age groups.

Getting Help



Additional training material and user guides

The NHSBSA has developed a number of how to guides to help you get the best out of ePACT2. These can be found at: <u>Additional User Guides</u>

WebEx sessions

WebEx will be provided on a number of different topics and features. More information about these can be found here: WebEx Training