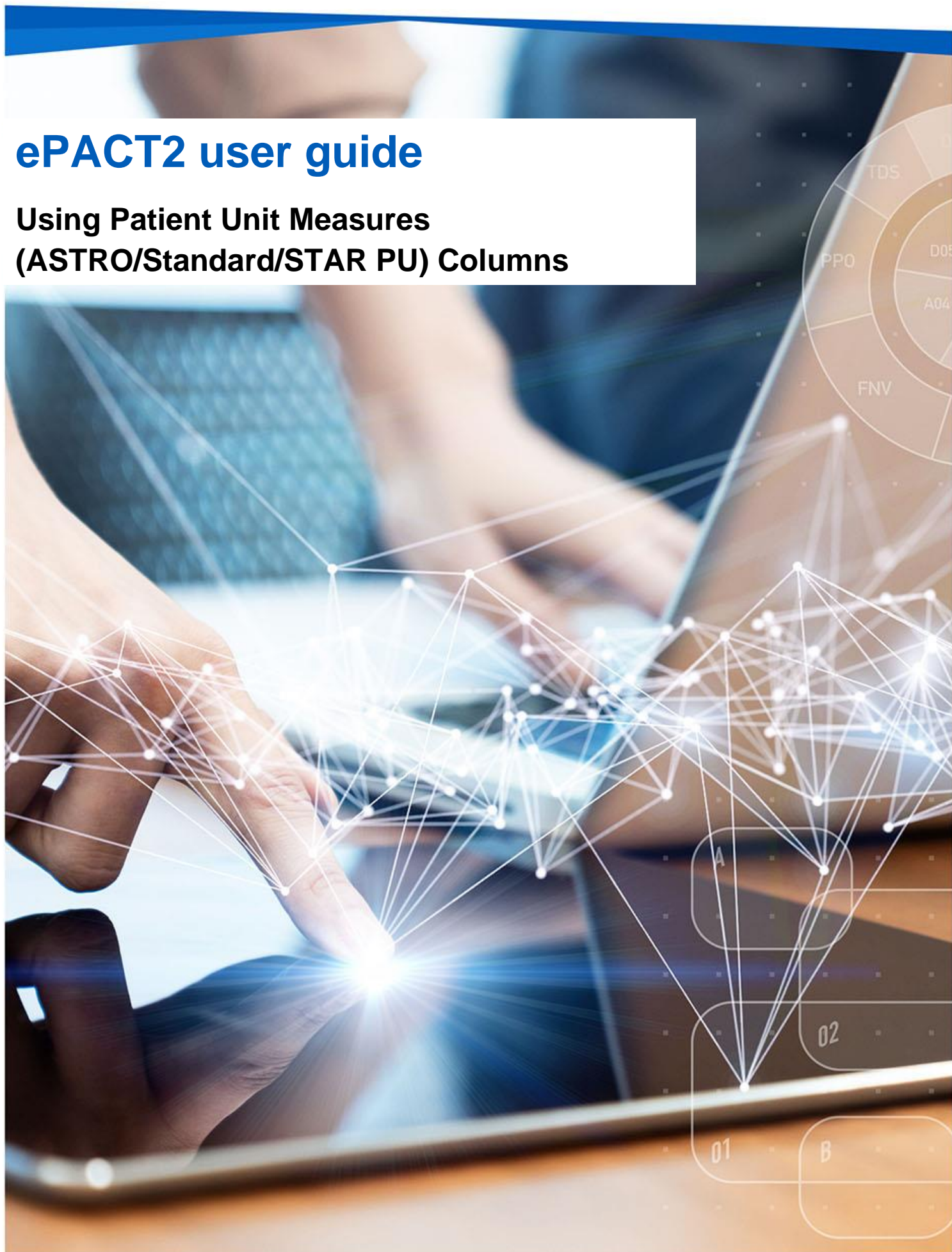


ePACT2 user guide

Using Patient Unit Measures
(ASTRO/Standard/STAR PU) Columns



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:

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Saving a column and re-using a saved column

Saving a column

Re-using a saved column

Including STAR PU columns in an analysis

Calculating the ADQ/DDD per STAR PU

Creating the Calculation

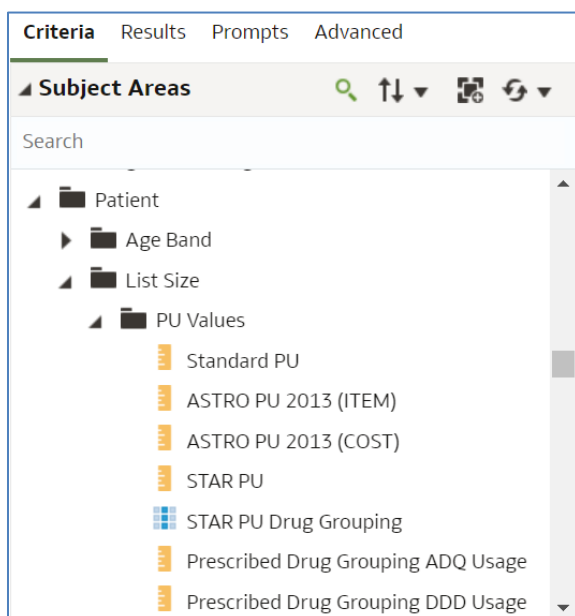
Amending the Data Format

Displaying drugs included in the Drug Grouping

Getting more help

Including ASTRO PU/Standard PU columns in an Analysis

The Standard PU and ASTRO PU 2013 columns can be found in the following folder:

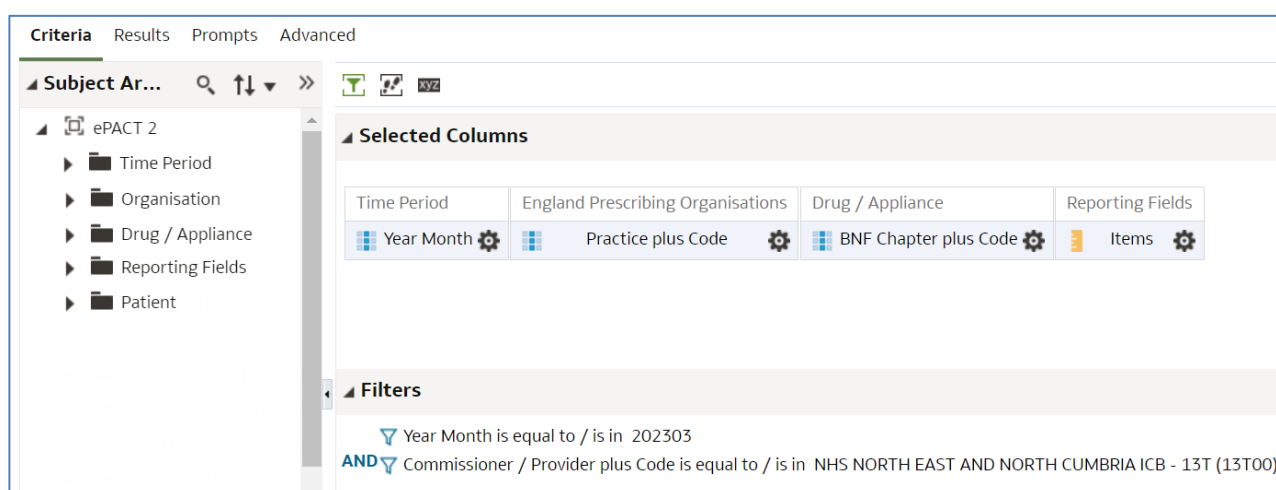


To run analyses with these columns in use the following steps:

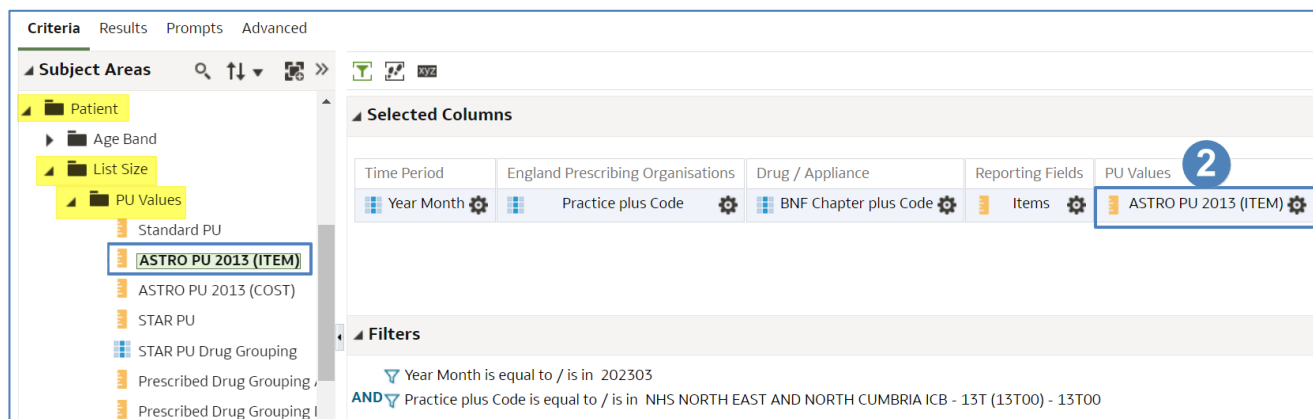
1. Include the columns and filters you wish to return data for.



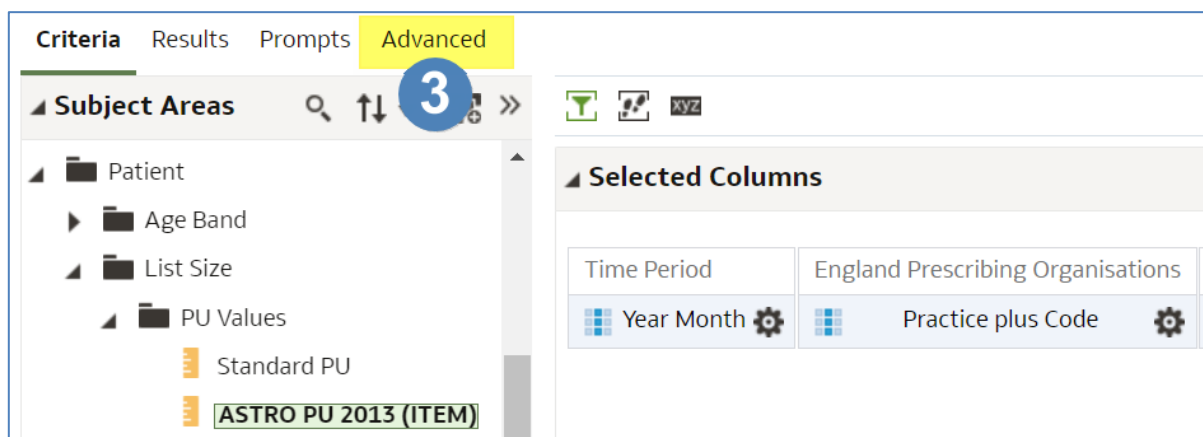
In this example we are running the data for March 2023 and 'NHS North East and North Cumbria 13T (13T00)'. The data will be returned at practice level showing Items for each BNF Chapter and the 'ASTRO PU 2013 (Item)' figure for each practice.



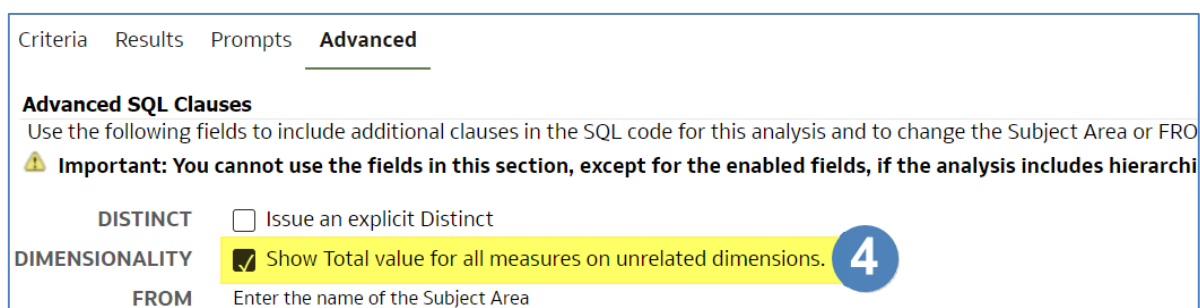
- Expand the subject area to the location – Patient > List Size > PU Values > and select the PU Measures column required. In this example we'll use the 'ASTRO PU 2013 (Items)' column.



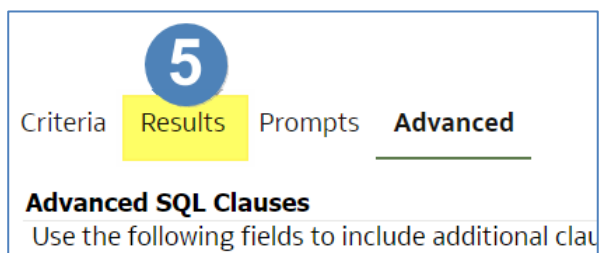
- Select the 'Advanced' tab from the top left-hand corner of the analysis builder.



- Scroll down to the 'Advanced SQL Clauses' section and from here select 'Show Total value for all measures on unrelated dimensions'.



5. Select the 'Results' tab.



6. Your results will then return to show 'ASTRO PU 2013 (ITEM)'.

Year Month	Practice plus Code	BNF Chapter plus Code	Items	ASTRO PU 2013 (ITEM)
202303	ASTRO MEDICAL PRACTICE (01-01)	Gastro-Intestinal System (01)	247	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Cardiovascular System (02)	805	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Respiratory System (03)	130	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Central Nervous System (04)	530	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Infections (05)	112	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Endocrine System (06)	222	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Obstetrics, Gynaecology and Urinary-Tract Disorders (07)	76	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Malignant Disease and Immunosuppression (08)	12	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Nutrition and Blood (09)	173	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Musculoskeletal and Joint Diseases (10)	47	29,350
202303	ASTRO MEDICAL PRACTICE (01-01)	Eye (11)	37	29,350

Using PU Measures in a calculation

Once included in an analysis the column can now be used as part of a calculation.

For the purpose of this guide we will use the 'ASTRO PU 2013 (Item)' column in the analysis, created in the earlier section of the guide, to show the number of items per 1000 ASTRO PUs.



Due to the small number which would be returned by dividing items by the PU, the figure is multiplied by 1000 to show more usable data.

Creating a calculation

- From the 'Results' pane select the 'New Calculated Measures' icon.

Year Month	Practice plus Code	BNF Chapter plus Code
202303	...	Gastro-Intestinal System (01)
202303	...	Cardiovascular System (02)
202303	...	Respiratory System (03)

- The 'New Calculated Measure' pane will be displayed.

New Calculated Measure

Column Formula Bins

Folder Heading

Column Heading

Contains HTML/JavaScript/CSS Markup

Aggregation Rule (Totals Row) Default

Available

Subject Areas

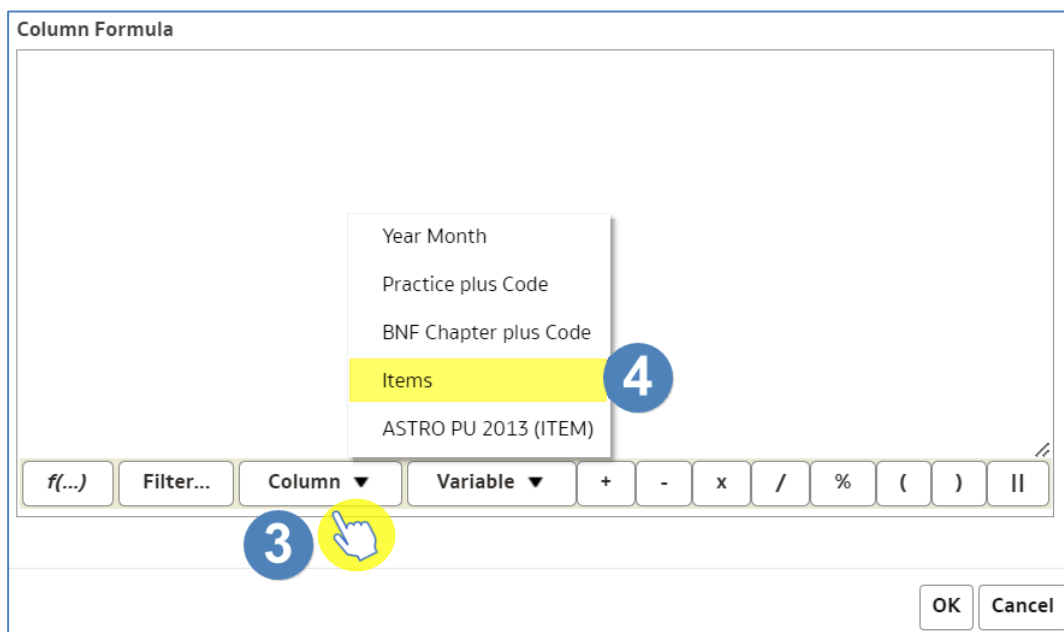
- ePACT 2
 - Time Period
 - Organisation
 - Drug / Appliance
 - Reporting Fields
 - Patient

Column Formula

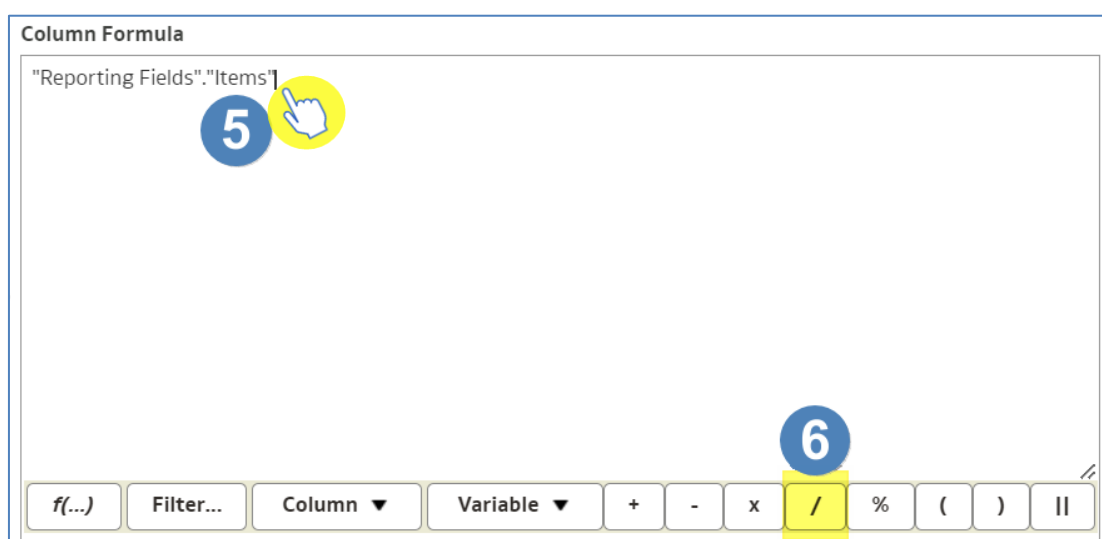
f(...) Filter... Column Variable + - x / % () ||

OK Cancel

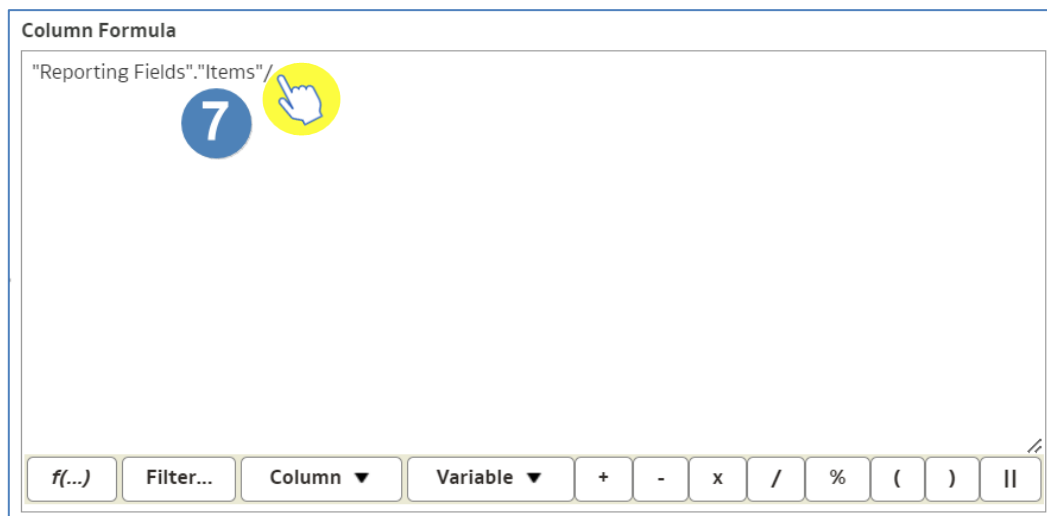
3. Select the 'Column' icon to open up the available columns to select from the analysis.
4. From the options available select 'Items'.



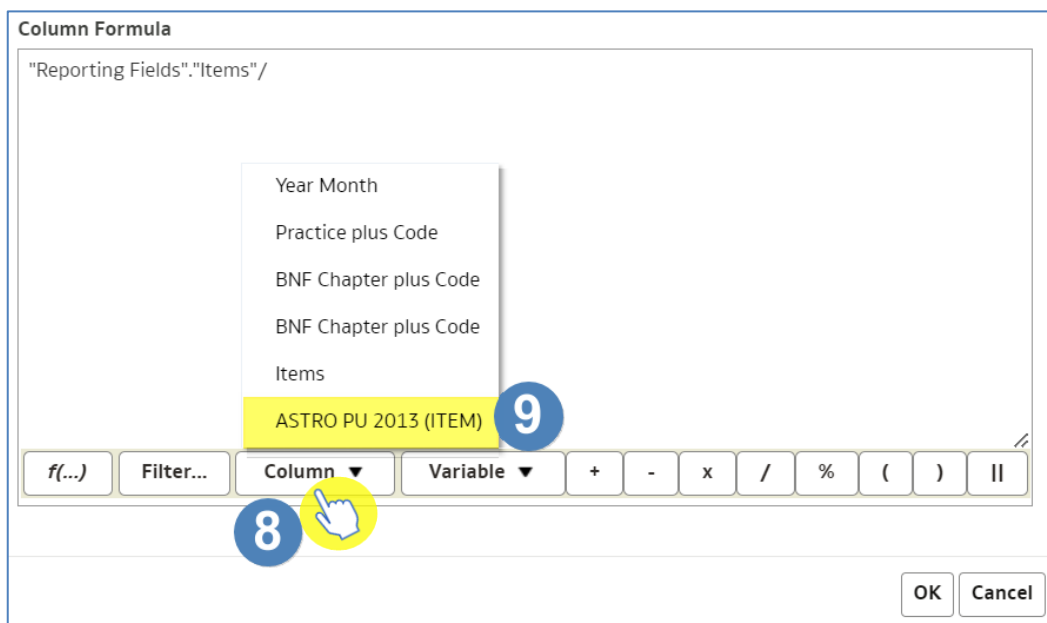
5. The formula for the column will now be included in the 'New Calculated Measure' pane. Click at the end of the inserted column formula to ensure it's not highlighted.
6. Select the divide symbol (/) from the task bar to add to the end of the column formula.



- Click at the end of the inserted divide symbol to ensure it is not highlighted.



- Click the 'Column' icon on the task bar.
- From the available list of columns select 'ASTRO PU 2013 (Items)'.



- Click at the end of the inserted column formula to ensure it is not highlighted.
- Enter the multiply symbol (x) from the task bar to the end of the column formula and then manually enter '1000'.

Column Formula

"Reporting Fields"."Items"/"PU Values"."ASTRO PU 2013 (ITEM)"

10

11

f(...) Filter... Column ▾ Variable ▾ + - x / % () ||



Don't forget to remove the highlight each time another element is added to the formula, if not the next element added will overwrite what is there.

12. Amend the column heading to 'Items per 1000 ASTRO PUs 2013 (Item)'.

Column Formula Bins

Folder Heading

Column Heading **Items per 1000 ASTRO PUs 2013 (Item)** 12

Contains HTML/JavaScript/CSS Markup

Aggregation Rule (Totals Row) Default ▾

Available

Subject Areas 🔍

▲ ePACT 2

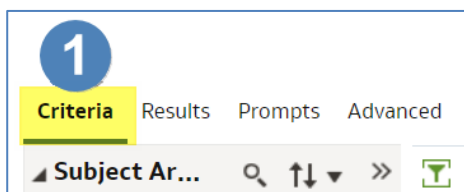
Column Formula

"Reporting Fields"."Items"/"PU Values"."ASTRO PU 2013 (ITEM)"*1000

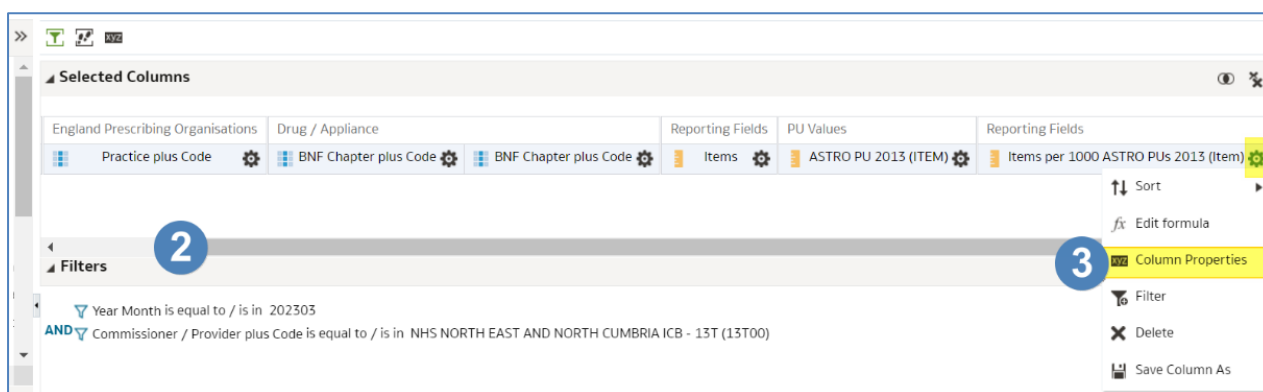
13. Click 'OK', you will now have a new column in your data.

Amending the Data Format

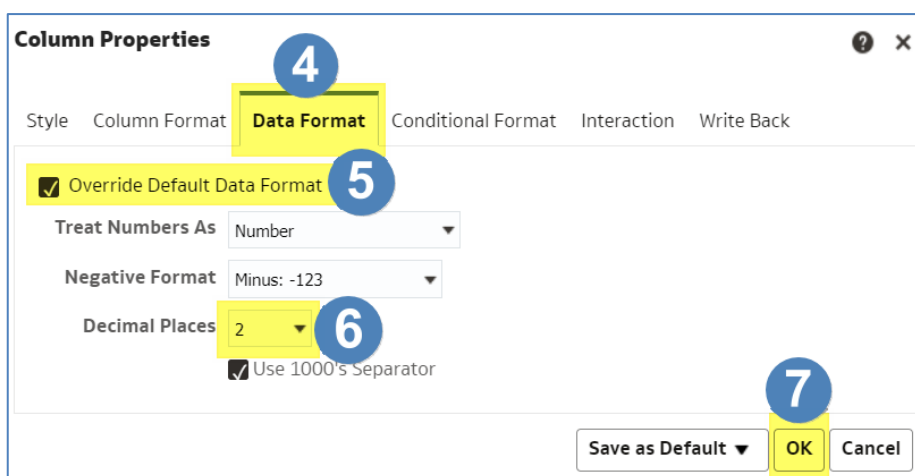
1. Select the 'Criteria' Tab from the top of the page.



2. Use the scroll bar at the bottom of the 'Selected Columns' pane to scroll to the end of the selected columns.
3. Hover over the Cog icon on your new 'Items per 1000 ASTRO PUs 2013 (Item)' column and select 'Column Properties'.



4. The 'Column Properties' box will now open, select the 'Data Format' tab.
5. Tick the 'Override Default Data Format' box.
6. Use the 'Decimal Places' drop-down list to set the number of decimal places to '2'.
7. Select OK to apply the changes.



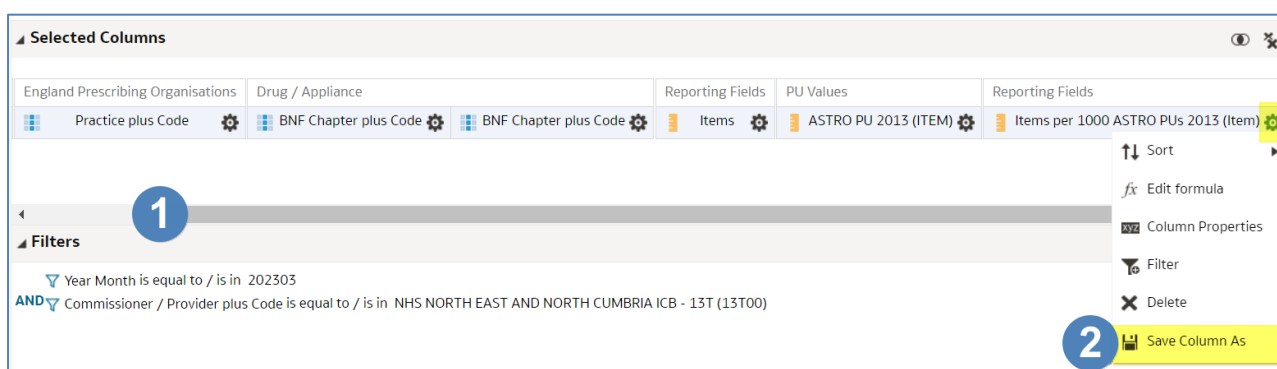
8. Select the 'Results' tab to see the final data.

Saving a column and re-using a saved column

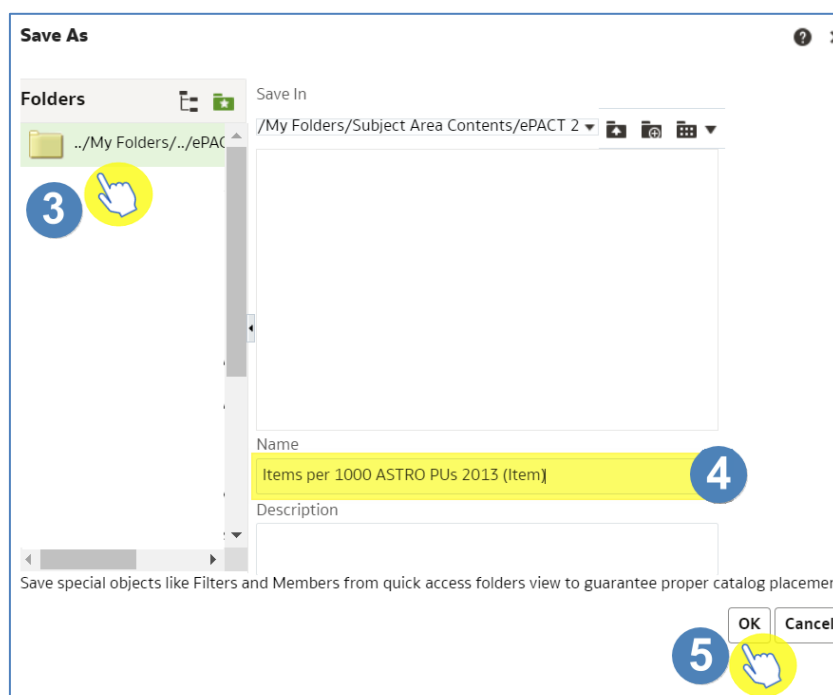
Once the calculated column has been created it is possible to save this column to be re-used in multiple analyses.

Saving a column

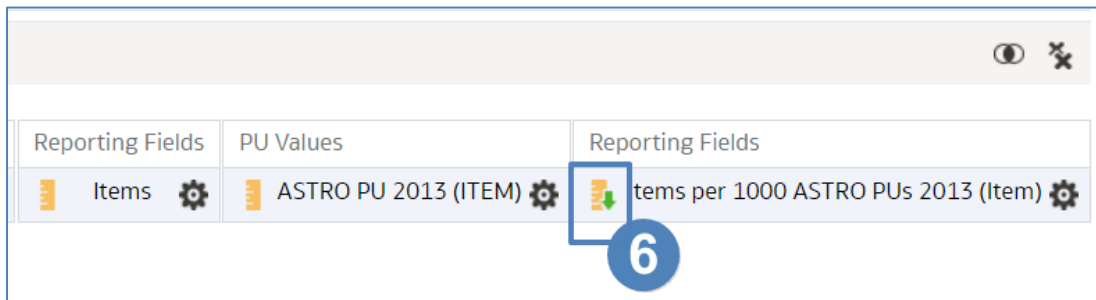
1. Use the scroll bar at the bottom of the 'Selected Columns' pane to scroll to the end of the selected columns.
2. Hover over the Cog icon on your new 'Items per 1000 ASTRO PUs 2013 (Item)' column and select 'Save Column As'. The 'Save As' pane will open.



3. Select the folder you wish to save the column in.
4. Name the column appropriately.
5. Select 'OK' to confirm selections and save the column.

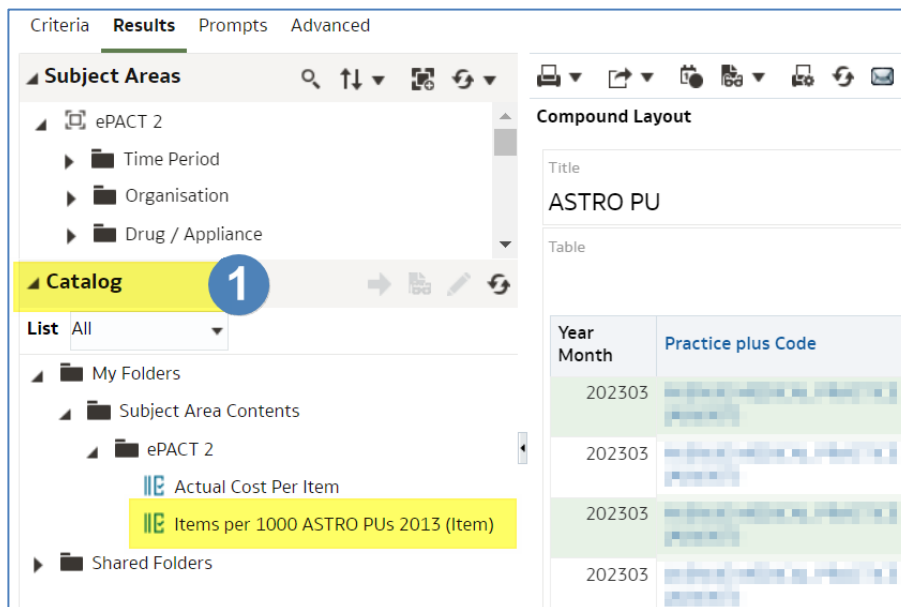


- The column icon will be updated to indicate it is a saved column.



Re-using a saved column

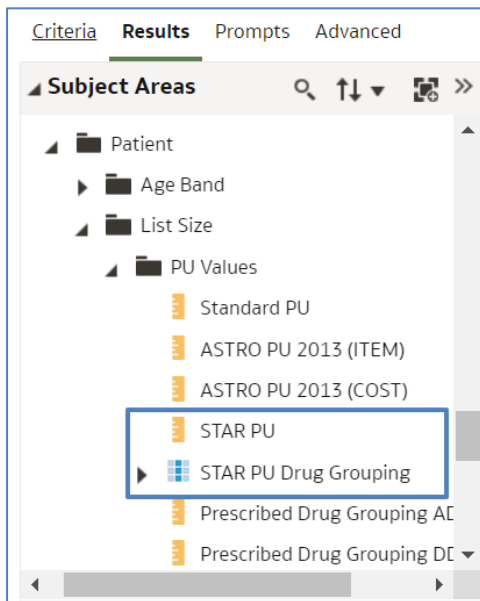
- Locate the saved column within the 'Catalog' area of the analysis builder.



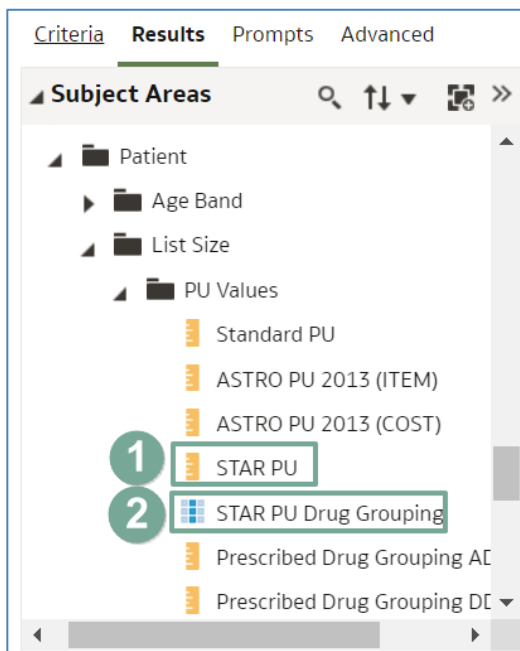
- The column can now be selected in the same way as columns from the subject area. Double click or click and drag the column into the 'Selected Columns' section.

Including STAR PU columns in an analysis

The STAR PU columns can be found in the following folder:



Two columns need to be used in conjunction when returning STAR PU data.



1) STAR PU	Will show the STAR PU figure for the Organisation/Drug Grouping selected
2) STAR PU Drug Grouping	Allows the selection of a specific STAR PU drug grouping

To run analyses with these columns included use the following steps:

1. Include the columns and filters you wish to return data for.



In this example we are running the data for March 2023 and 'NHS North East and North Cumbria ICB (13T00)'. The data will be returned at practice level showing the Antibacterials I (BNF 5.1) STAR PU figure for each.

The screenshot shows the ePACT2 interface with the following configuration:

- Subject Areas:** ePACT 2 > Time Period > Rolling 3 Months Dim > Organisation > Drug / Appliance > Various Attributes > Reporting Fields > Reporting Field (Dispensing) > Reporting Fields (Dental Activity) > PMD Major Therapeutic Group Data
- Selected Columns:**
 - Time Period: Year Month
 - England Prescribing Organisations: Practice plus Code
 - Reporting Fields: Items
- Filters:**
 - Year Month is equal to / is in 202303
 - AND Commissioner / Provider plus Code is equal to / is in NHS NORTH EAST AND NORTH CUMBRIA ICB - 13T (13T00)

2. Expand the subject area to the location – Patient > List Size > PU Values > and select the STAR PU and STAR PU Drug Grouping columns.

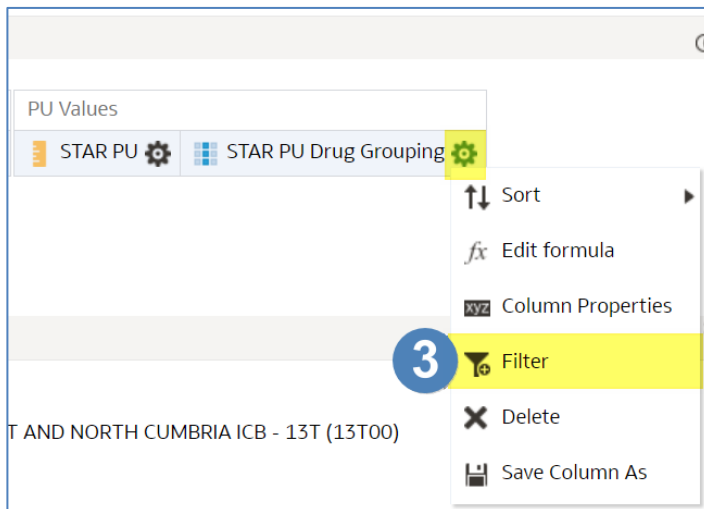
The screenshot shows the ePACT2 interface with the following configuration:

- Subject Areas:** Patient > List Size > PU Values > STAR PU > STAR PU Drug Grouping
- Selected Columns:**
 - Time Period: Year Month
 - England Prescribing Organisations: Practice plus Code
 - Reporting Fields: Items
 - PU Values: STAR PU, STAR PU Drug Grouping
- Filters:**
 - Year Month is equal to / is in 202303
 - AND Commissioner / Provider plus Code is equal to / is in NHS NORTH EAST AND NORTH CUMBRIA ICB - 13T (13T00)

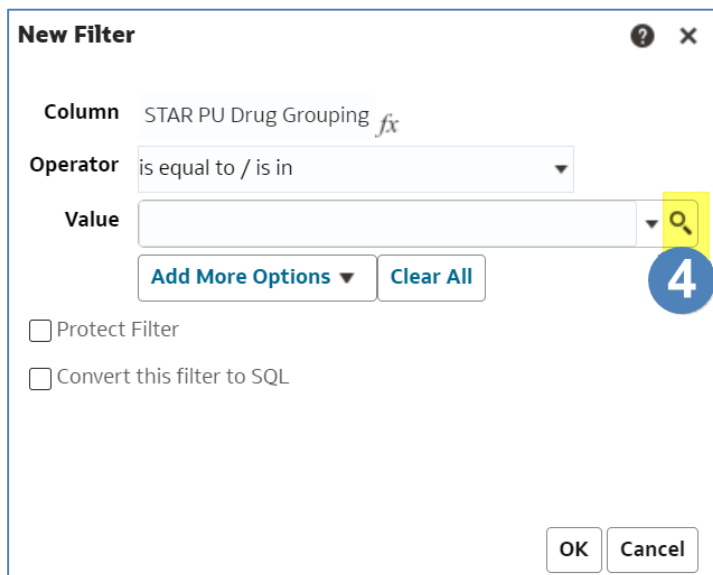


When using the STAR PU columns the report needs to be filtered to a specific Therapeutic group. This can be done using the 'STAR PU Drug Grouping' column.

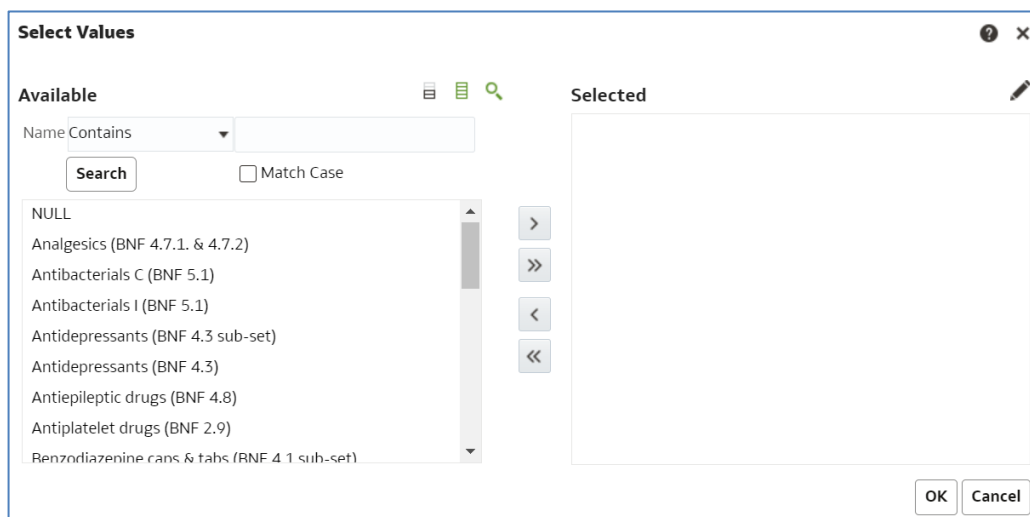
3. Select the 'cog' icon for the 'STAR PU Drug Grouping' column and from the drop-down list select the 'Filter' option.



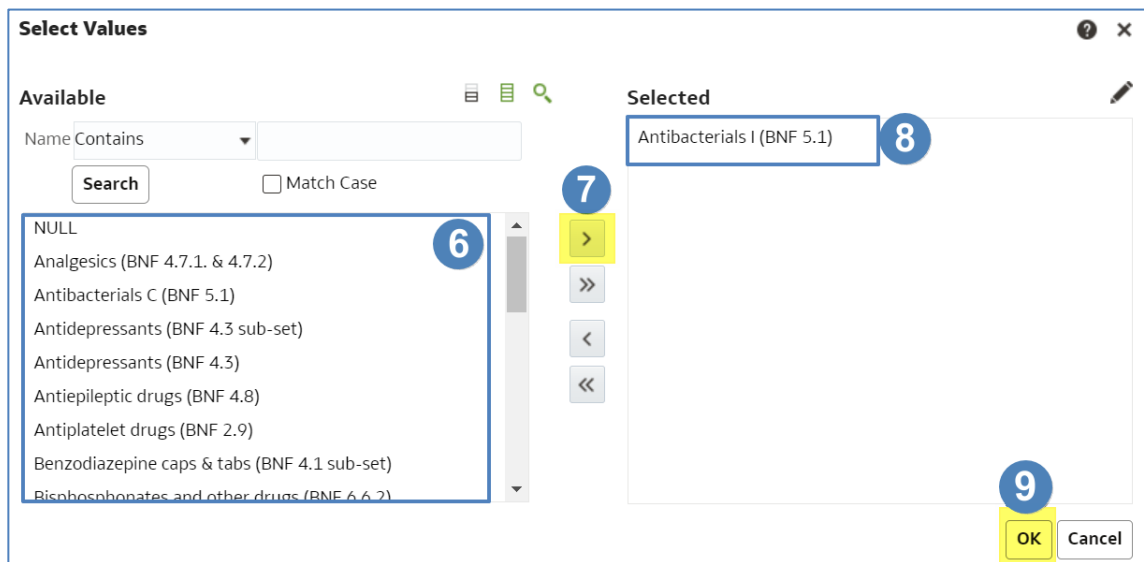
4. Within the 'New Filter' pane select the search icon.



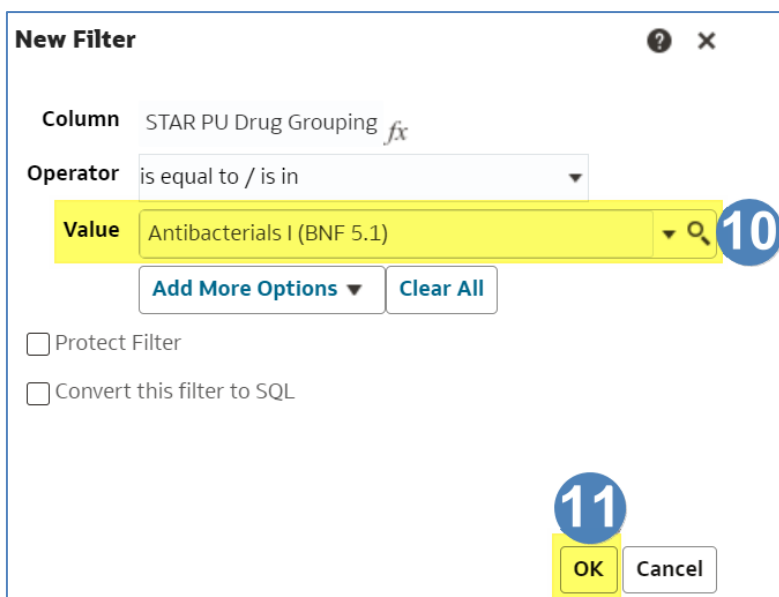
5. The 'Select Values' pane will be displayed.



6. Select the required therapeutic group from the list provided.
7. Use the single arrow icon to move the highlighted group into the 'Selected' pane.
8. The highlighted group will now be displayed in the 'Selected' pane.
9. Select 'OK' to confirm the selection.



10. The 'Values' section of the 'New Filter' pane will be populated with the group selected.
11. Select 'OK' to create the filter.



12. The filter will be added to the 'Filter' pane.

Selected Columns

Time Period	England Prescribing Organisations	Reporting Fields	PU Values
Year Month	Practice plus Code	Items	STAR PU

Filters

- Year Month is equal to / is in 202303
- AND Commissioner / Provider plus Code is equal to / is in NHS NORTH EAST AND NORTH CUMBRIA ICB - 13T (13T00)
- AND STAR PU Drug Grouping is equal to / is in Antibacterials I (BNF 5.1) **12**



As the filter for the 'STAR PU Drug Grouping' has been added to the analysis all columns included will be limited by the drug grouping selected including the 'Items'.

13. Select the 'Results' tab.

13

Criteria **Results** Prompts Advanced

Subject Areas

14. Your results will then return to show the number of Items and the STAR PU figure for the drug group selected.

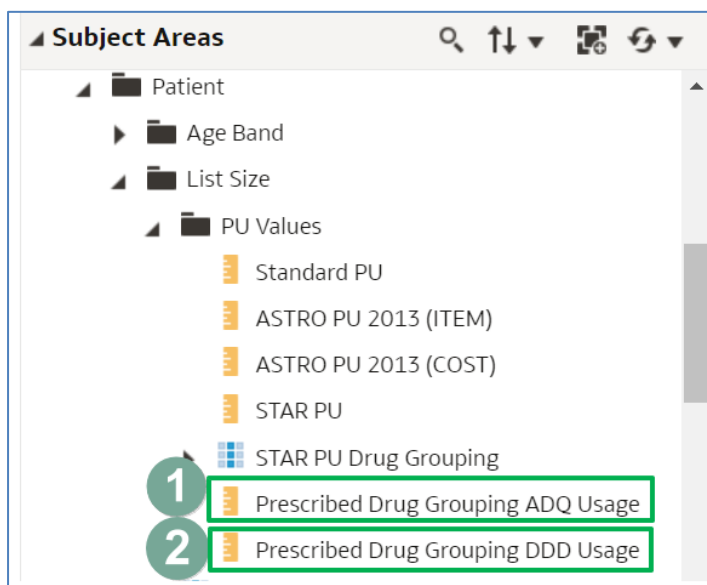
Table

Year Month	Practice plus Code	Items	STAR PU	STAR PU Drug Grouping
202303	[REDACTED]	98	1,408	Antibacterials I (BNF 5.1)
202303	[REDACTED]	274	2,926	Antibacterials I (BNF 5.1)
202303	[REDACTED]	563	5,164	Antibacterials I (BNF 5.1)
202303	[REDACTED]	218	2,308	Antibacterials I (BNF 5.1)
202303	[REDACTED]	747	6,063	Antibacterials I (BNF 5.1)
202303	[REDACTED]	365	3,874	Antibacterials I (BNF 5.1)
202303	[REDACTED]	525	5,218	Antibacterials I (BNF 5.1)
202303	[REDACTED]	694	9,244	Antibacterials I (BNF 5.1)

Calculating the ADQ/DDD per STAR PU

Users may wish to use the STAR PU figure within a calculation to show ADQ/DDD per STAR PU.

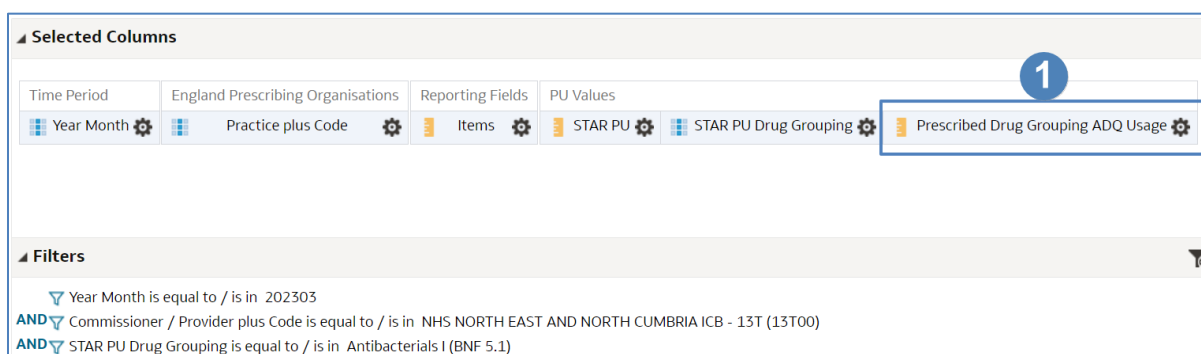
Two columns are available which can be used within an analysis to show the ADQ/DDD usage figures. These columns can then be used within a calculation to show the ADQ/DDD per STAR PU.



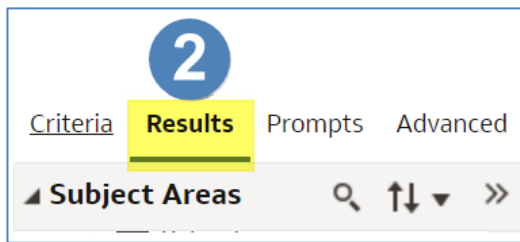
1) Prescribing Drug Grouping ADQ Usage	Will show the ADQ usage for the drug grouping selected
2) Prescribing Drug Grouping DDD Usage	Will show the DDD usage for the drug grouping selected

Creating the Calculation

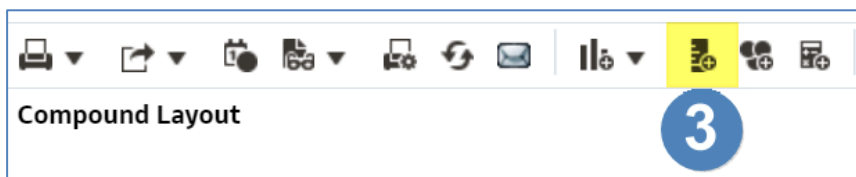
1. Include the required column within the analysis, for this example 'Prescribing Drug Grouping ADQ Usage' has been used.



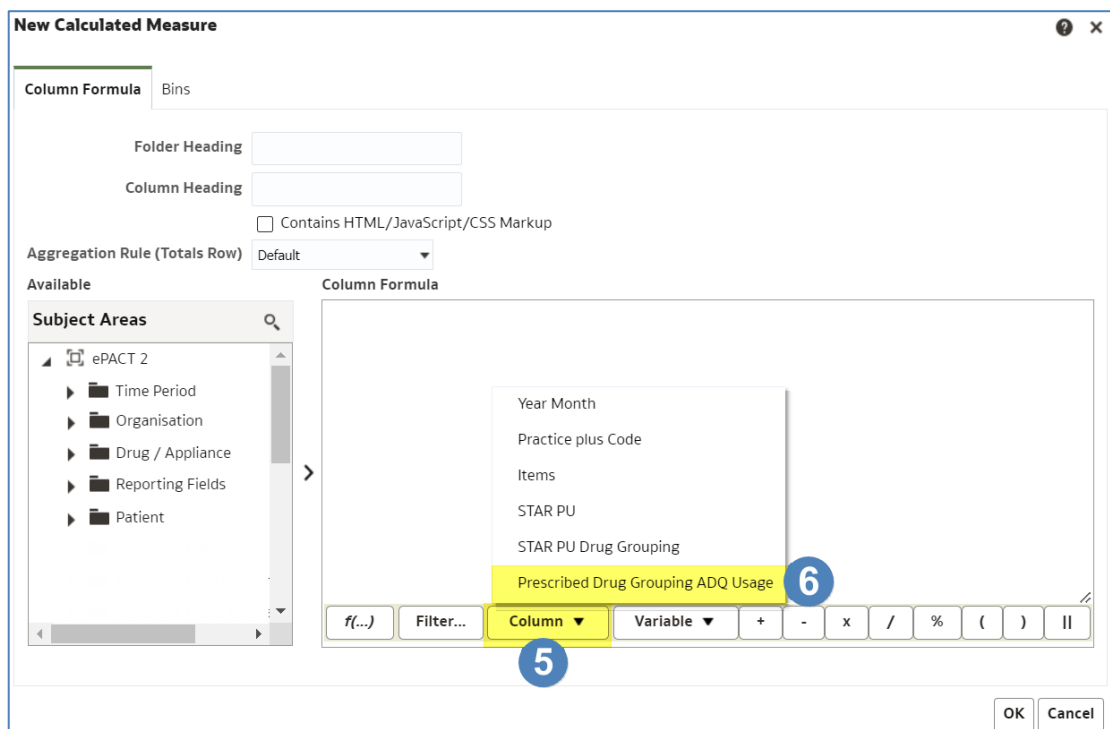
2. Select the 'Results' tab to navigate to the results pane.



3. From the 'Results' pane select the 'New Calculated Measures' icon.



4. The 'New Calculated Measure' pane will be displayed.
5. Select the 'Column' icon to open up the available columns to select from the analysis.
6. From the options available select 'Prescribed Drug Grouping ADQ Usage'.



7. The formula for the column will now be included in the 'New Calculated Measure' pane.
8. Enter the divide symbol (/) from the task bar to the end of the column formula.

Column Formula

"PU Values"."Prescribed Drug Grouping ADQ Usage"

f(...) Filter... Column ▼ Variable ▼ + - x / % () ||

9. Select the 'Column' icon and from the available list of columns to select choose the 'STAR PU' column.



Don't forget to remove the highlight each time another element is added to the formula, if not the next element added will overwrite what is there.

10. Amend the column heading to 'ADQ per STAR PU'.

New Calculated Measure

Column Formula Bins

Folder Heading

Column Heading ADQ per STAR PU

Contains HTML/JavaScript/CSS Markup

Aggregation Rule (Totals Row) Default

Available

Subject Areas

Reporting Fields

Patient

Column Formula

"PU Values"."Prescribed Drug Grouping ADQ Usage"/"PU Values"."STAR PU"

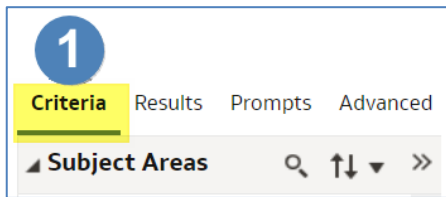
f(...) Filter... Column ▼ Variable ▼ + - x / % () ||

OK Cancel

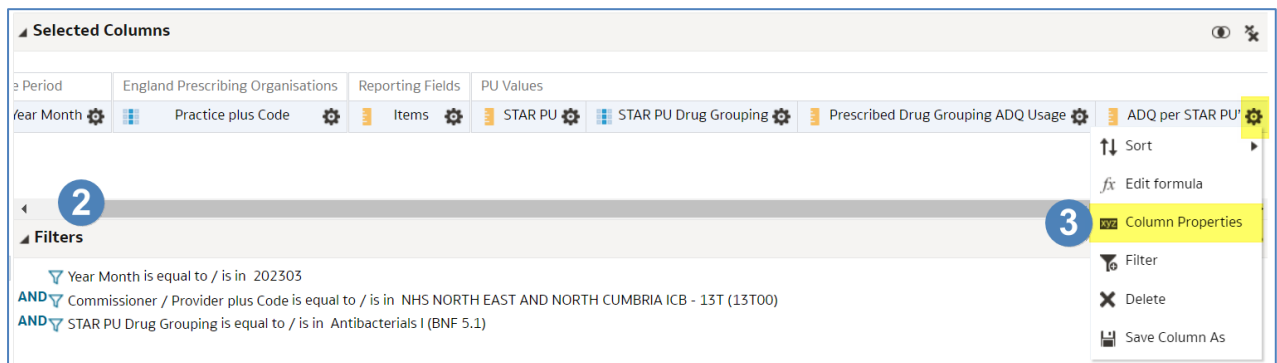
11. Click 'OK', you will now have a new column in your data.

Amending the Data Format

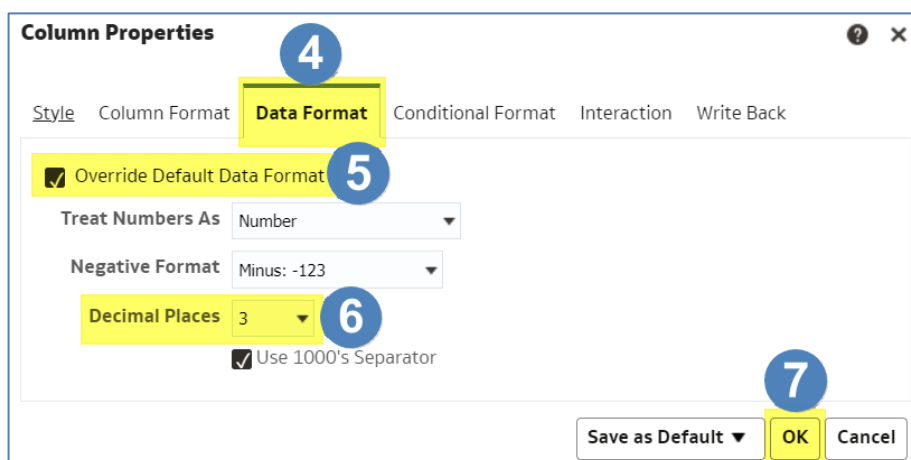
1. Select the 'Criteria' tab from the top of the page.



2. Use the scroll bar at the bottom of the 'Selected Columns' pane to scroll to the end of the selected columns.
3. Hover over the Cog icon on your new 'ADQ per STAR PU' column and select 'Column Properties'



4. The 'Column Properties' box will now open, select the 'Data Format' tab.
5. Tick the 'Override Default Data Format' box.
6. Use the 'Decimal Places' drop-down list to set the number of decimal places to '3'.
7. Select 'OK' to apply the changes.



8. Select the 'Results' tab to see the final data.

Displaying drugs included in the Drug Grouping

When including a STAR PU figure in an analysis it is possible to break the information returned down by a BNF level for the values included within the drug grouping.

For the purposes of this guide we'll use the STAR PU analysis created in the earlier section of the guide and break the information down to show the individual BNF Presentation for the drug grouping.



For this example the information will be broken down to BNF Presentation level, if an alternative BNF level is required the appropriate BNF column should be included in the analysis.

1. Return to the 'Criteria' tab for the analysis.

Selected Columns

Time Period	England Prescribing Organisations	Reporting Fields	PU Values
Year Month	Practice plus Code	Items	STAR PU, STAR PU Drug Grouping

Filters

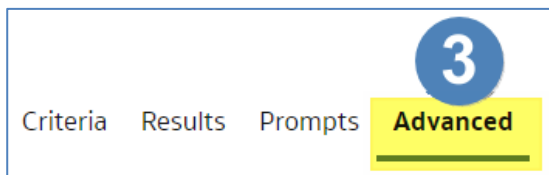
- Year Month is equal to / is in 202303
- AND Commissioner / Provider plus Code is equal to / is in NHS NORTH EAST AND NORTH CUMBRIA ICB - 13T (13T00)
- AND STAR PU Drug Grouping is equal to / is in Antibacterials I (BNF 5.1)

2. Expand the subject area and include the 'BNF Presentation plus Code' column in the analysis.

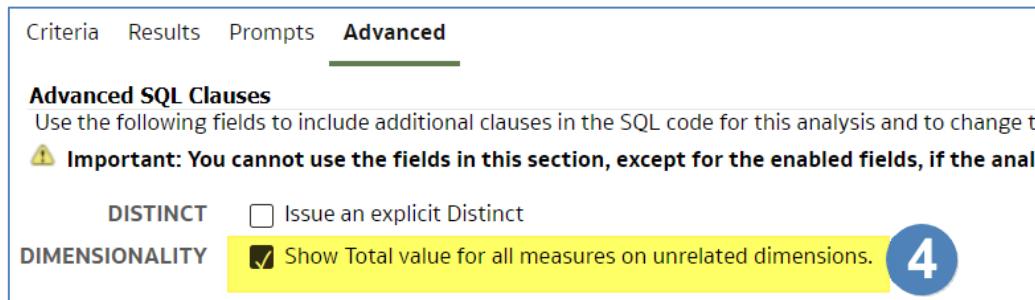
Selected Columns

Time Period	England Prescribing Organisations	Drug / Appliance	Reporting Fields	PU Values
Year Month	Practice plus Code	BNF Presentation plus Code	Items	STAR PU, STAR PU Drug Grouping

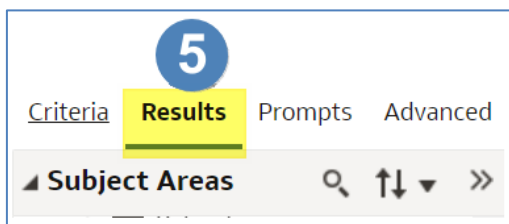
- Select the 'Advanced' tab from the top left-hand corner of the analysis builder.



- Scroll down to the 'Advanced SQL Clauses' section and select 'Show Total value for all measures on unrelated dimensions'.



- Select the 'Results' tab.



- Your results will then return to show individual BNF Presentation included in the drug grouping,

Year Month	Practice plus Code	Items	STAR PU	STAR PU Drug Grouping	BNF Presentation plus Code
202303	[Link]	1	1,408	Antibacterials I (BNF 5.1)	Phenoxymethylpenicillin 250mg/5ml oral solution (0501011P0AAAFAF)
202303	[Link]	6	1,408	Antibacterials I (BNF 5.1)	Phenoxymethylpenicillin 250mg tablets (0501011P0AAAIAJ)
202303	[Link]	1	1,408	Antibacterials I (BNF 5.1)	Phenoxymethylpenicillin 250mg/5ml oral solution sugar free (0501011P0AAASAS)
202303	[Link]	2	1,408	Antibacterials I (BNF 5.1)	Flucloxacillin 250mg capsules (0501012G0AAAAAA)
202303	[Link]	10	1,408	Antibacterials I (BNF 5.1)	Flucloxacillin 500mg capsules (0501012G0AAABAB)
202303	[Link]	15	1,408	Antibacterials I (BNF 5.1)	Amoxicillin 500mg capsules (0501013B0AAABAB)
202303	[Link]	2	1,408	Antibacterials I (BNF 5.1)	Amoxicillin 250mg/5ml oral suspension sugar free (0501013B0AAATAT)
202303	[Link]	1	1,408	Antibacterials I (BNF 5.1)	Co-amoxiclav 250mg/62mg/5ml oral suspension sugar free (0501013K0AAAGAG)
202303	[Link]	3	1,408	Antibacterials I (BNF 5.1)	Cefalexin 250mg capsules (0501021L0AAAAAA)
202303	[Link]	1	1,408	Antibacterials I (BNF 5.1)	Cefalexin 500mg capsules (0501021L0AAABAB)
202303	[Link]	14	1,408	Antibacterials I (BNF 5.1)	Doxycycline 100mg capsules (0501030I0AAABAB)

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.

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