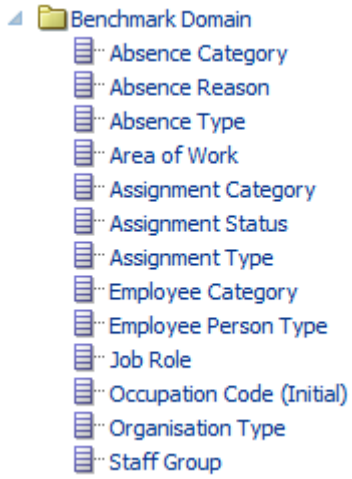
Guide to Benchmarking in ESR BI

Benchmarking in ESR BI allows users to compare key measures (such as absence % FTE or turnover %) against those of the organisation, their region, country (England/Wales) or the NHS in total. A full list of measures available via benchmarking is available in the appendix of this document.

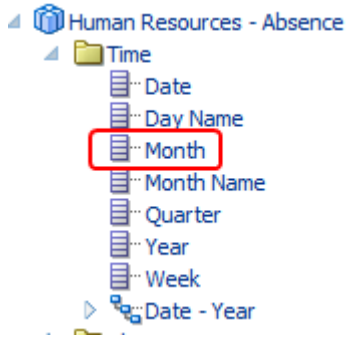
Overview

The benchmarking data is 'refreshed' once per month and updates the previous two years' worth of data to allow trending. Figures are aggregated at month level because lower level analysis is considered less useful.

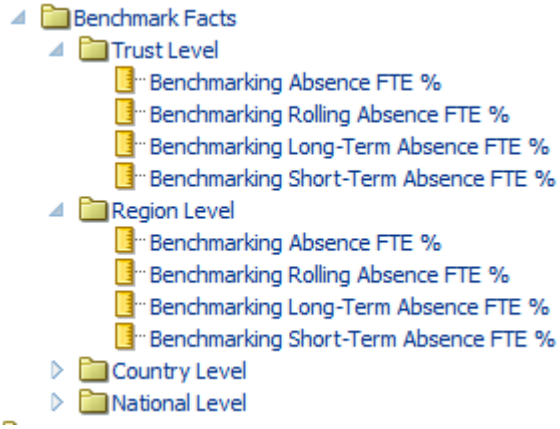
The data is calculated with a number of key 'groupings' in mind called 'domains' in ESR BI. These include Staff Group, Assignment Category and Job Role. These can be found within the Benchmark Domain folder in the relevant ESR BI subject area:



An analysis using benchmarking must be created using the 'Month' item from the time folders, rather than the usual 'Date' item used in other regular ESR BI analyses. This is due to the fact that the data is only calculated at month level, rather than at a lower 'date' level as mentioned above.



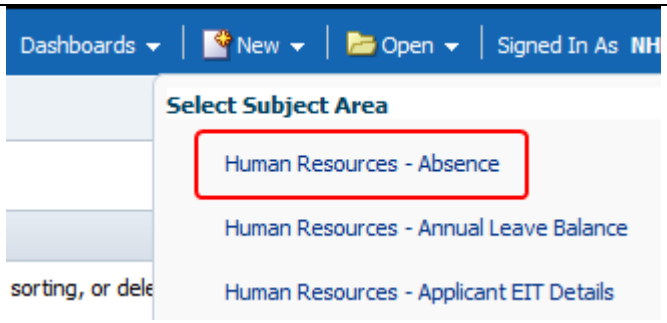
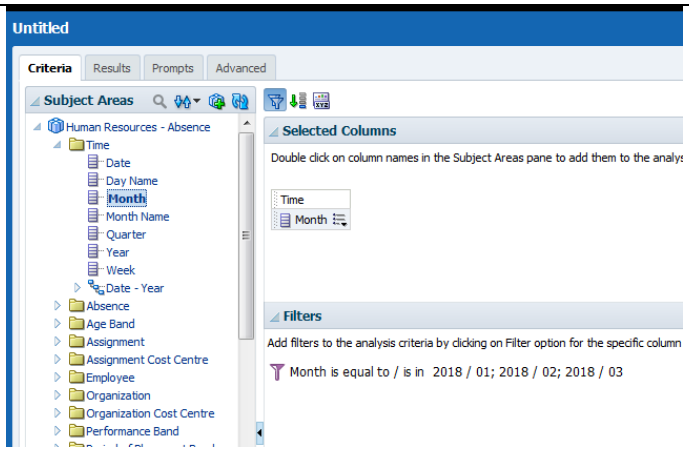
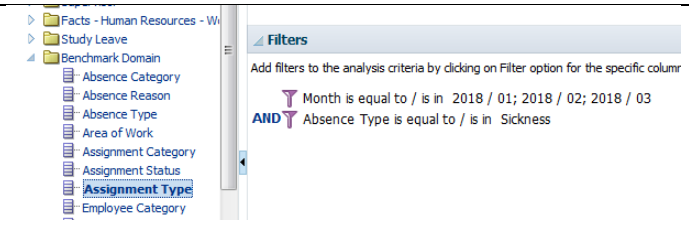
Because the benchmarking figures are calculated at Trust, Region and National level, if users wish to create an analysis to compare their measures against regional or national level figures, this can be done in a single analysis using the trust level measures available in the benchmarking folders (left).

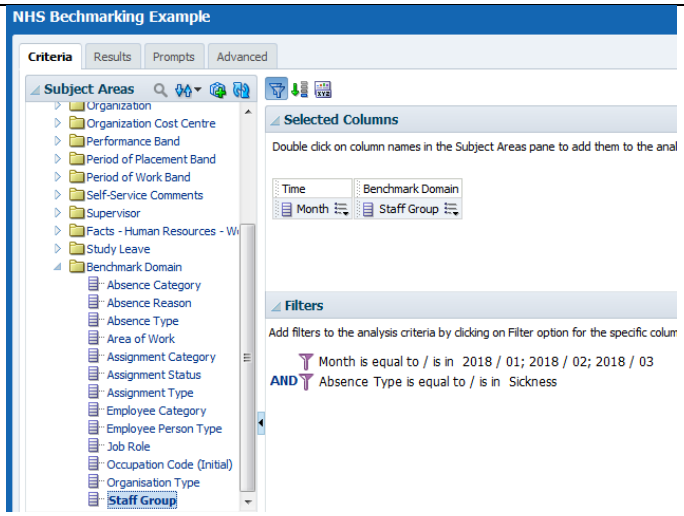
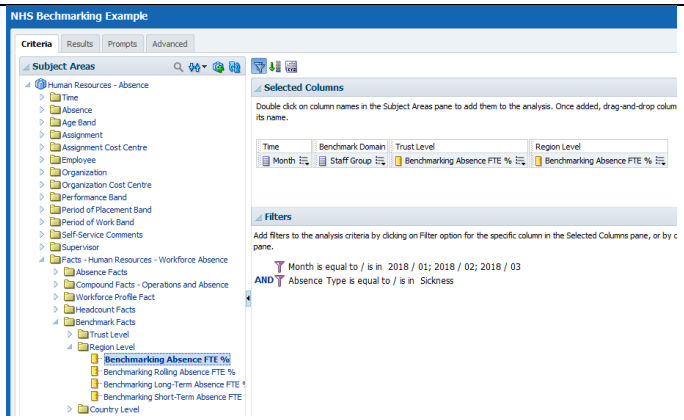
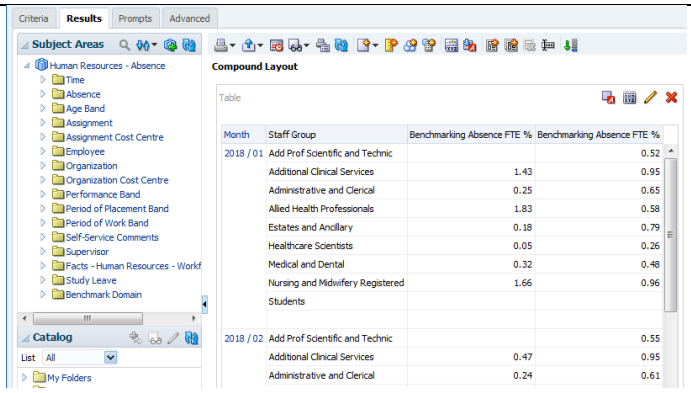


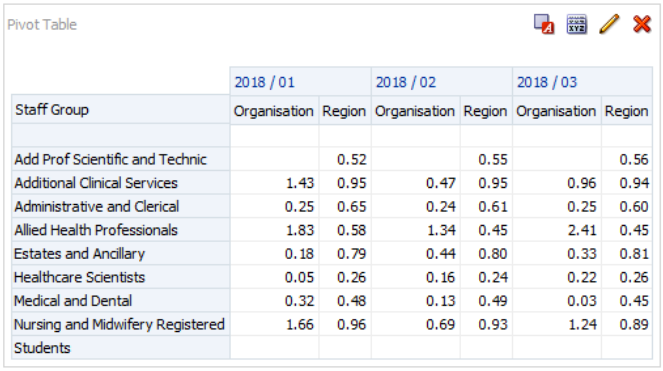
Where organisations wish to allow managers to compare their figures to those of the organisation, it will require two different queries to be run (because the supervisor hierarchy security is not applied on the benchmarking figures). Therefore the 'Set Operation' or 'Union' functionality may be used to create an analysis that runs two queries and combines them into a single analysis to allow the user to compare.

Creating a simple analysis to compare Organisation level measures with regional or national measures

In this example we will use the Absence % FTE measure. We want to compare our organisation's Absence % FTE figure with those of our region.

Step	Screenshot	Description
1		Create a new analysis based on the absence subject area
2		Add a filter for the Time.Month item to filter months required to compare. In this example we wish to compare January – March 2018. Also add the Month item as a column to group the absence % FTE figure by month.
3		Add the 'Absence Type' item from the Benchmark Domain folder as a filter, and filter to a value of 'Sickness' (the data in benchmarking cannot be combined with the regular folders unless in a union/set operation covered later in this document).

Step	Screenshot	Description
4		Add any grouping items required from the Benchmark Domain folder.
5		Expand the facts folder, and expand the Benchmark Facts folder. Add the trust level and regional level absence % FTE measures.
6		Save the analysis, and select the ‘Results’ tab. The analysis will now run.

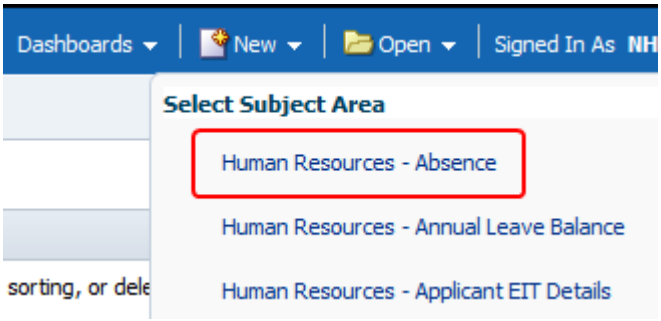
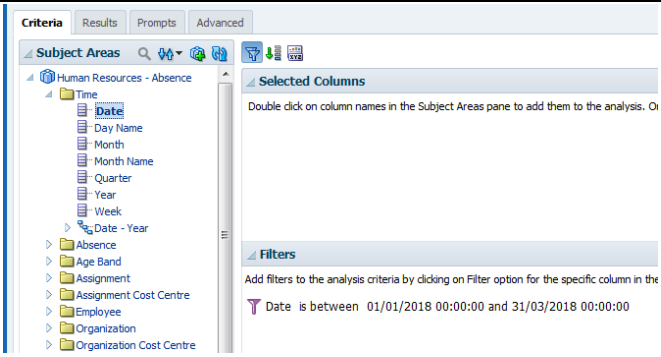
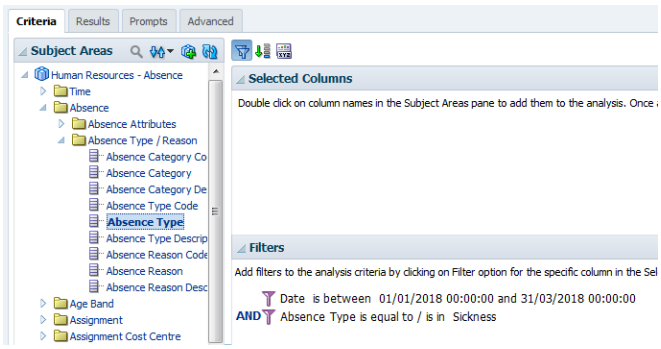
Step	Screenshot	Description
7	Pivot Table 	Add the Pivot view to allow for easier comparison. You may also want to rename the measures to make it clear which measure relates to the organisation level, and which to the regional level.

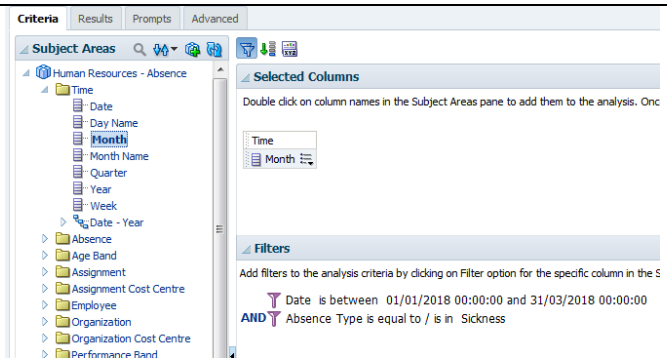
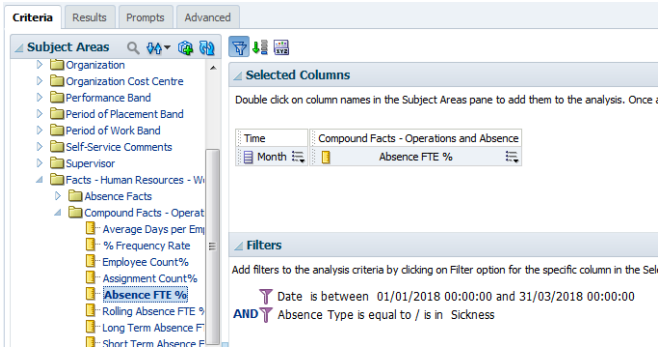
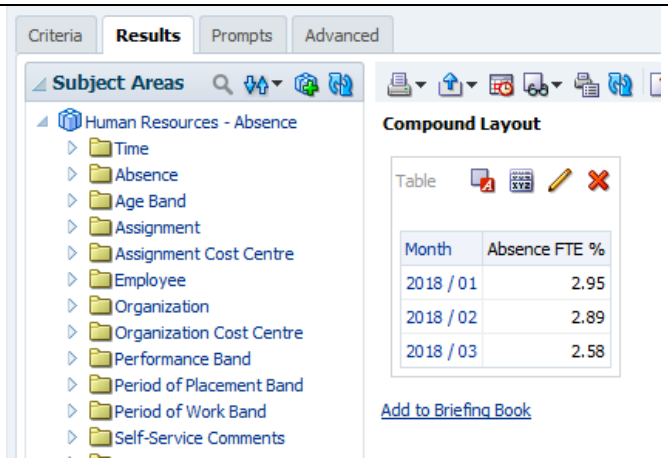
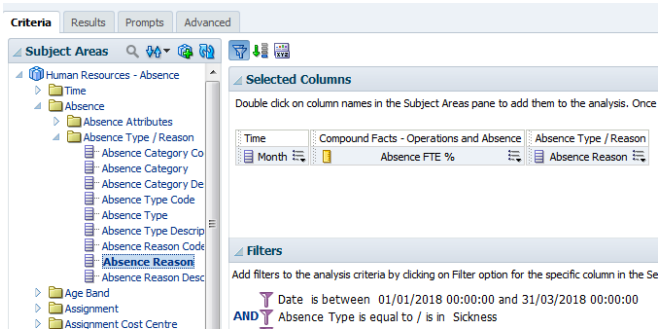
	2018 / 01		2018 / 02		2018 / 03	
Staff Group	Organisation	Region	Organisation	Region	Organisation	Region
Add Prof Scientific and Technic		0.52		0.55		0.56
Additional Clinical Services	1.43	0.95	0.47	0.95	0.96	0.94
Administrative and Clerical	0.25	0.65	0.24	0.61	0.25	0.60
Allied Health Professionals	1.83	0.58	1.34	0.45	2.41	0.45
Estates and Ancillary	0.18	0.79	0.44	0.80	0.33	0.81
Healthcare Scientists	0.05	0.26	0.16	0.24	0.22	0.26
Medical and Dental	0.32	0.48	0.13	0.49	0.03	0.45
Nursing and Midwifery Registered	1.66	0.96	0.69	0.93	1.24	0.89
Students						

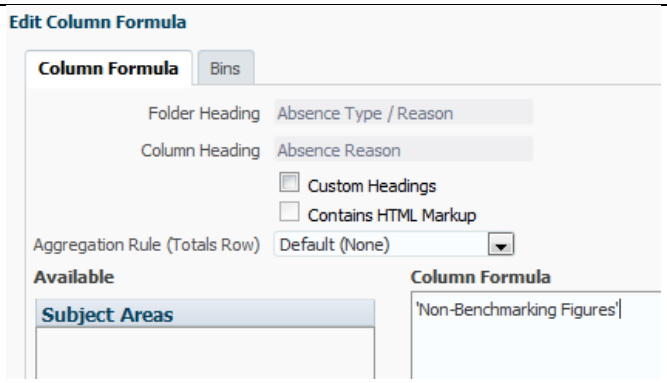
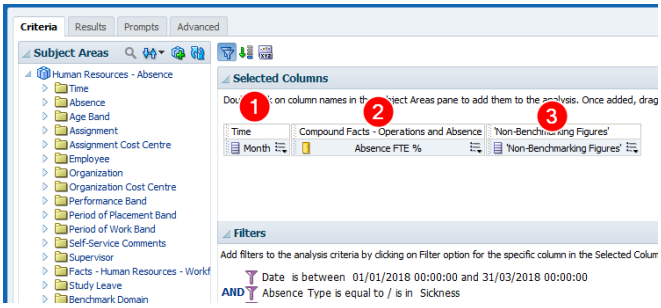
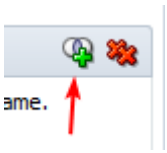
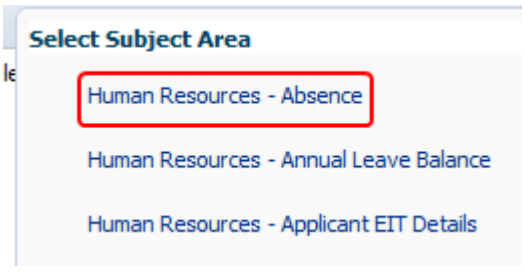
Creating a union-type analysis to return results from benchmarking and comparing with non-benchmarking figures

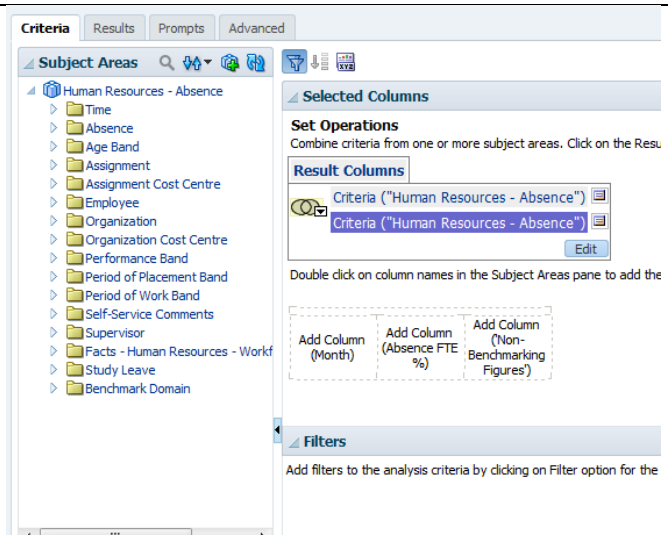
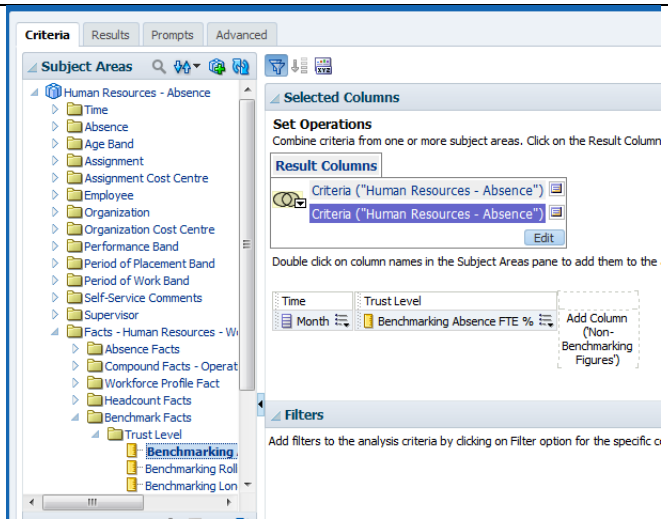
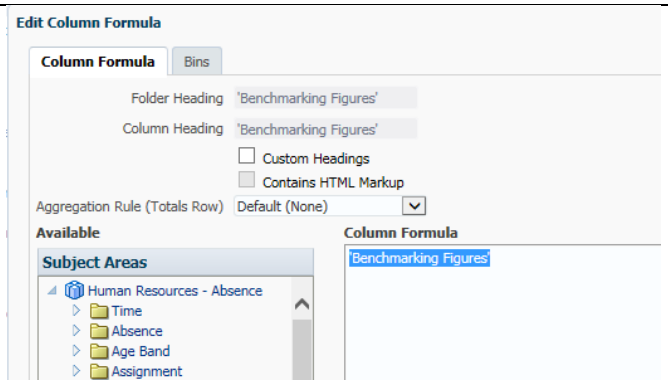
In this example we will create an analysis that calculates the absence % FTE figures from the regular ESR BI subject area, and compare it with the figures for the Organisation calculated in the benchmark folder. This would then allow the analysis to be shared with managers in Manager Self Service. The supervisor hierarchy security will only be applied to the calculations from the 'regular' calculations, and not the Benchmark figures.

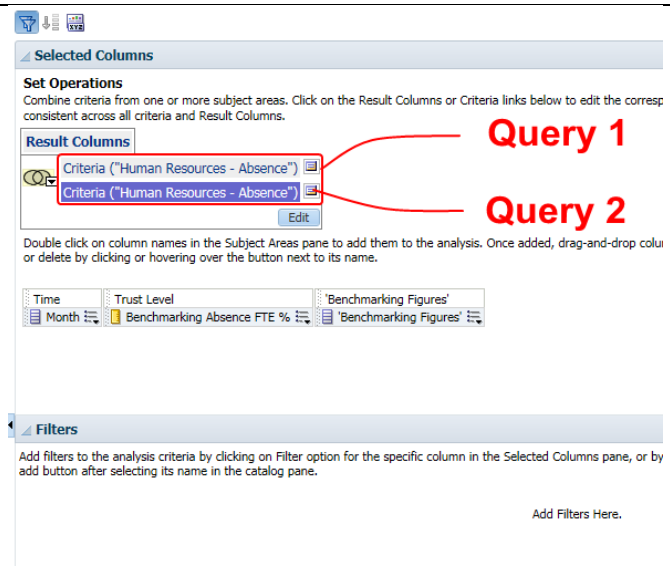
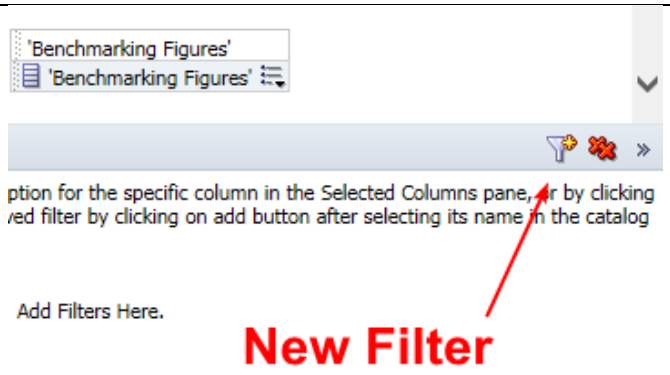
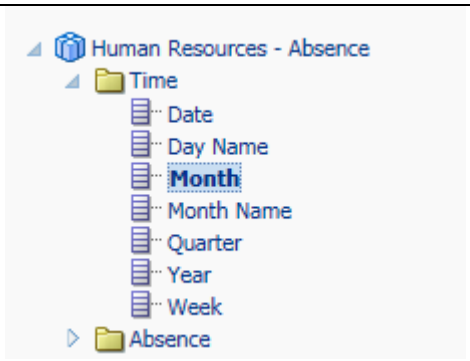
In this example we will return the figures for the period 01-Jan-2018 to 31-Mar-2018

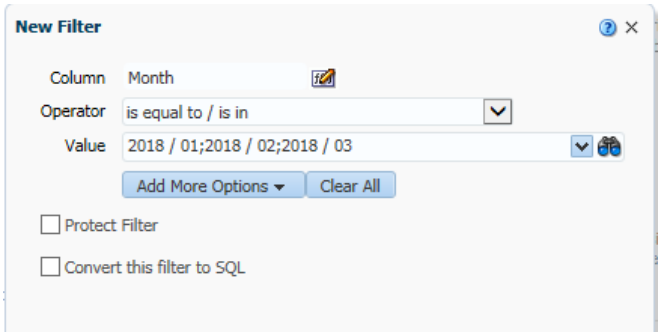
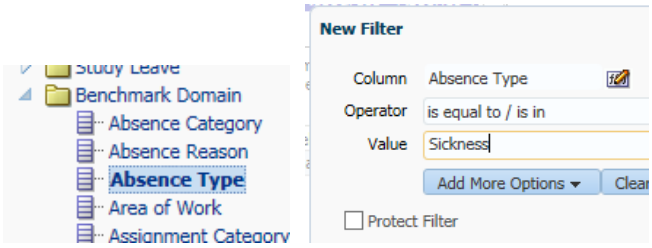
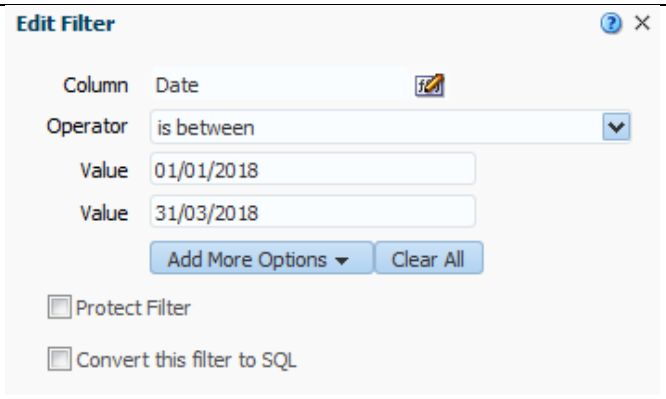
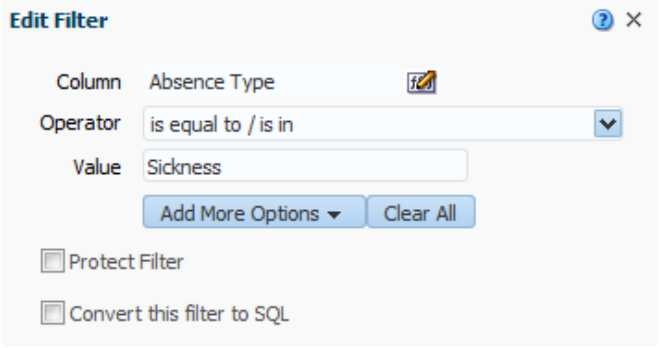
Step	Screenshot	Description
1		First we will create the 'regular' query to return absence figures from the non-benchmark folders. Create a new analysis based on the Absence subject area.
2		Add a filter for Time.Date for the period 01/01/2018 – 31/03/2018
3		Add a filter for Absence Type to only return 'Sickness' absence.

Step	Screenshot	Description
4		Add any grouping items. In this example, we only want to group by Month.
5		Add the Absence % FTE Measure from the facts, compound facts folder.
6		Click the results tab to view the results. You should return the absence FTE % for the organisation. In the following steps, we will create another query similar to the one in the first section of this document to return the benchmark figures to compare against. However once we have done that, we need a method to identify which figures are our Organisation level figures calculated by us, and which are our Benchmark figures.
7		Add a new column to the analysis. It doesn't really matter which item you add as we will be changing it anyway. In this example we have added Absence Reason.

Step	Screenshot	Description
8		Edit the formula of the item added, and replace it with a name, encased in single quotes. In this example we'll use 'Non-Benchmarking Figures'
9		You should now have three columns. The grouping(1), the measure(2) and the name(3).
10		Select the Set Operations icon at the top right. This icon means we'll add another query to the analysis. In this example we'll use the query to obtain the benchmarking figures.
11		In the list of subject areas that is displayed, select the same subject area we used for the first query. In this example – Absence.

Step	Screenshot	Description
12		BI now displays an empty query. Placeholders are displayed – we need to add similar columns to those previously added under the other query, i.e. a grouping, a measure and a name.
13		From the Time folder, add the ‘Month’ item by double-clicking it. Expand the facts folder, then the benchmark facts, then expand the level of benchmark required. We’ll use Trust level in this example. Add the Benchmarking Absence FTE % item by double-clicking it.
14		In the same way as we added a title for this query in step 8, we need to do the same here. Add any column and replace the formula with a title. We’ve used the title ‘Benchmarking Figures’ here.

Step	Screenshot	Description
15		You should now have three columns in each query. You will notice however that we have yet to add any filters to the analysis.
16		With the second query selected (Query 2 in the above diagram), click the 'New Filter' icon on the right of the screen. Select 'More Columns…' from the dialogue.
17		Because this query is for the benchmarking figures, we must use 'Month' as the time filter. Select 'Month' from the list, then click OK.

Step	Screenshot	Description
18		Select the months to include. We've used the first three calendar months of 2018 in this example. Click OK
19		Create another filter in the same way - this time select the 'Absence Type' item within the 'Benchmark Domain' folder. Enter 'Sickness' as the filter value.
20		Select the first query. Then create another new filter based on the 'Date' item within the 'Time' folder.
21		Add another filter for Absence Type within the Absence Type / Reason folder, and enter 'Sickness' as the value.

Step	Screenshot	Description
22	Table Month / Absence FTE % / 'Non-Benchmarking Figures' 2018 / 01 — 4.84 — Benchmarking Figures 3.04 — Non-Benchmarking Figures 2018 / 02 — 4.44 — Benchmarking Figures 2.46 — Non-Benchmarking Figures 2018 / 03 — 3.71 — Benchmarking Figures 1.85 — Non-Benchmarking Figures	We now have two queries defined. The first one is similar to a normal absence query in BI – it filters using Time.Date and uses standard measures. The second query reports benchmarking figures against the Time.Month item, rather than date. It uses measures from the benchmarking facts folder. Click the results tab to run the analysis.
23	'Non-Benchmarking Figures' 'Non-Benchmarking Figures' Sort Column Properties Delete Style | Column Format | Data Format | Co Headings Folder Heading 'Non-Benchmarking Figures' Column Heading Type Custom Headings Contains HTML Markup	You will notice that the title of the final column doesn't make sense. Return to the criteria tab and update it to something more meaningful. We've renamed it to 'Type' here.
24	Month / Absence FTE % / Type 2018 / 01 — 4.84 — Benchmarking Figures 3.04 — Non-Benchmarking Figures 2018 / 02 — 4.44 — Benchmarking Figures 2.46 — Non-Benchmarking Figures 2018 / 03 — 3.71 — Benchmarking Figures 1.85 — Non-Benchmarking Figures	The figures are now returned. In this example we're running as a manager meaning our non-benchmarking figures differ from the benchmarking figures. We can also add another view to compare.
25	Absence FTE % 6.00 5.00 4.00 3.00 2.00 1.00 0.00 Absence FTE % 2018 / 01 2018 / 02 2018 / 03 Month Benchmarking Figures Non-Benchmarking Figures	

Appendix – List of Measures Available via Benchmarking

Below is a list of all the measures and their location in ESR BI for use in benchmarking:

Human Resources – Workforce Profile

Appraisal % (6m)	Professional Registration Matching %
Appraisal % (12m)	Right to Work %
Appraisal % (13m)	Turnover Rate % (12m) FTE
Average Length of Service in Current Org	Turnover Rate % (12m) Headcount
Average Length of Service in NHS	Turnover Rate (FTE) %
DBS Matching %	Turnover Rate (Headcount) %

Human Resources – Absence

Absence FTE %	Long Term Absence FTE %
Rolling Absence FTE%	Short Term Absence FTE %

Human Resources – Learning Enrollment and Completion

DNA Rate %	

Human Resources – Personal Competence and Qualifications Profile

Competency Matching %	