ELECTRONIC STAFF RECORD

ESR-NHS0245 - Creating Standard Measures in ESR BI

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Owner:	Head of Operations and Development
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Approvals:

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Title	NHS ESR Head of Operations and Development

1. DOCUMENT CONTROL

1.1. Change Record

Date	Author	Version	Change Reference
04/10/2016	James Haddon	0.1	Initial Draft
30/01/2017	Chris Holroyd	0.2	Updated to include new measures
22/03/2018	Chris Holroyd	3.0	Updated following R.37
01/04/2021	Chris Holroyd	4.0	Annual Review
01/04/2022	Matt Madya	5.0	Annual Review
12/06/2024	Chris Holroyd	6.0	Annual Review

1.2. Reviewers

Name	Position
NHS Development Team	

1.3. Distribution

Copy No.	Name	Location
	Library Master	Programme Library

2. CONTENTS

3. INTRODUCTION

HR and Workforce professionals use a number of calculations to measure changes within organisations and departments. These include:

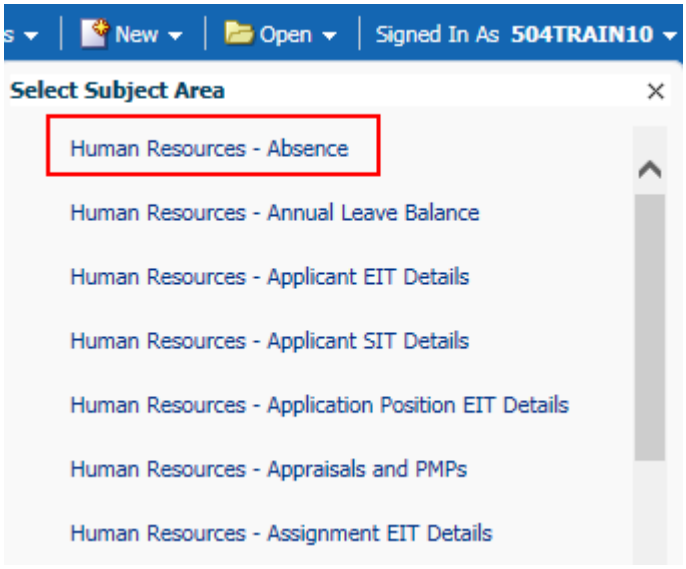
- FTE Days Lost
- FTE % Lost
- Long Term / Short Term Analysis
- # Occurrences

These measures are possible to recreate in ESR BI when creating new analyses from scratch. This document aims to detail the calculation behind each measure, and quickly show how to implement this in ESR BI.

Note: In order to follow this document and create your own reports/analyses in ESR BI, you must have already been allocated the 'BI Administration URP' within ESR.

4. ABSENCE

All of the measures in this section are based on the “Human Resources – Absence” Subject Area in ESR BI:



4.1. Measures

4.1.1. FTE Days Lost

Description

FTE Lost is a measure of the full time equivalent lost within a period (normally due to Sickness absence). This is calculated as:

FTE * Calendar Days Absent.

An example might be where an employee with an FTE of 1 (AfC Assignment who works 37.5 hours / week) is away from work for 2 weeks due to sickness:

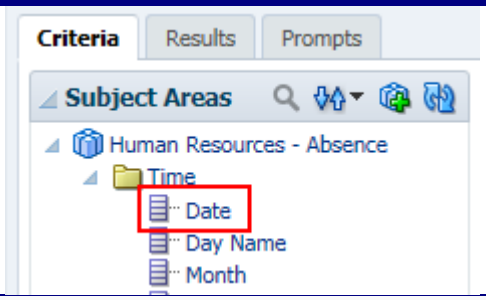
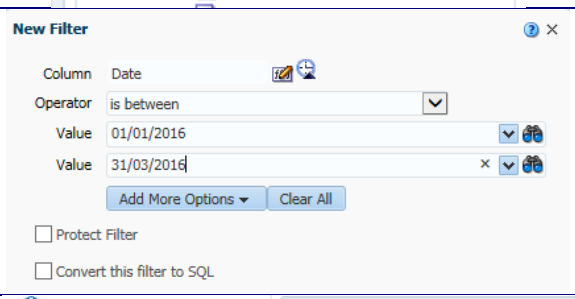
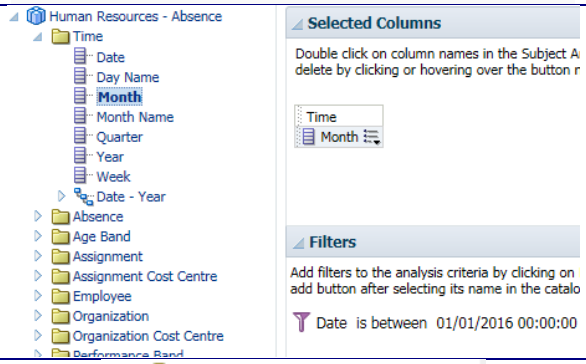
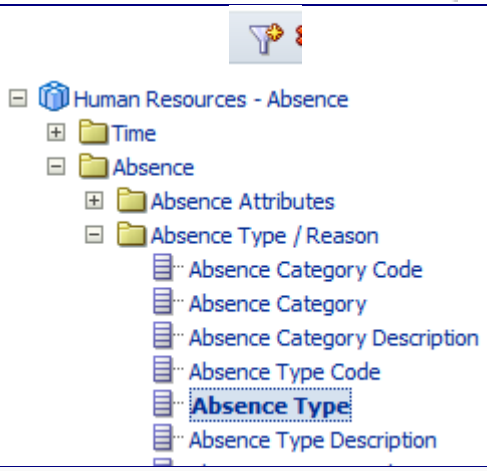
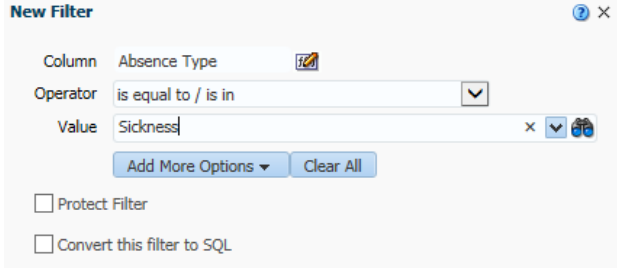
Absence Start Date: 04/01/2016
Absence End Date: 17/01/2016

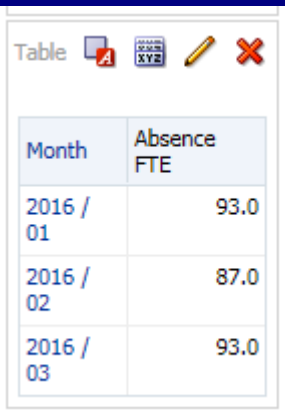
Their FTE Days Lost is measured as ‘14’ since their FTE is 1 and the number of calendar days absent is 14. 14 x 1 = 14.

Were the employee to have an FTE of 0.5, then their FTE Days Lost would be ‘7’.

Implementation in ESR BI

Step	Screenshot	Description
1		Create a new analysis based on the Absence Subject Area
2		Create a new filter on the ‘Date’ item from the ‘Time’ folder.

Step	Screenshot	Description
		
3		Restrict the date to a period of your choosing (use at least 3 months as an example)
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Month').
5		Expand the Facts folder, then the absence facts folder. Within here you will find the Absence FTE measure. Double-click it.
6		Create a new filter to filter for a specific absence type (normally 'Sickness')
7		Enter a value to filter for

Step	Screenshot	Description
8		Click the results tab. You now have the FTE Lost by Month

4.1.2. FTE % Lost

Description

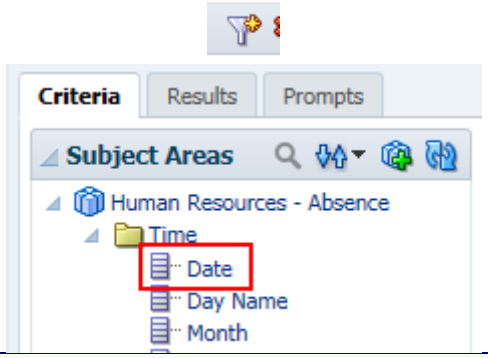
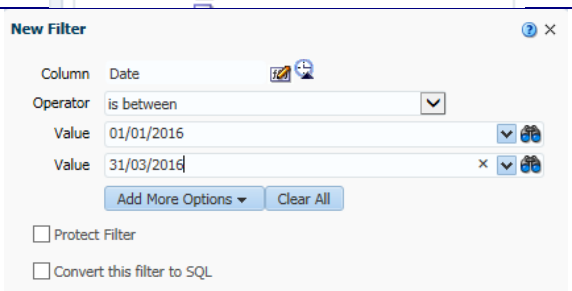
FTE % lost is a measure of the % of working time lost compared to 'available' working time. Since ESR does not record when a person works, both FTE Lost and FTE Available are calculated using calendar days. As an example, take an employee who has an FTE of 1 (37.5 hours / week) who works throughout January. Although they may only work Monday to Friday, their available time is calculated as 31 (31 Days x 1 FTE).

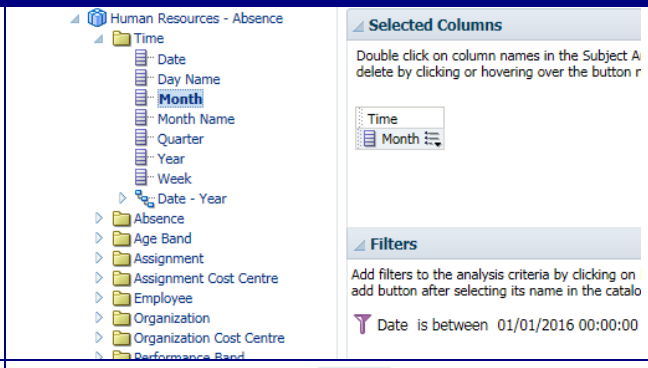
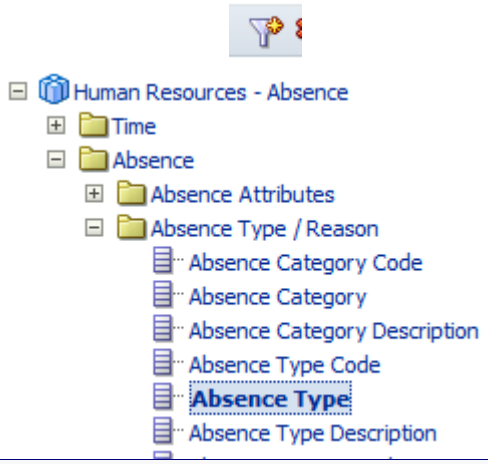
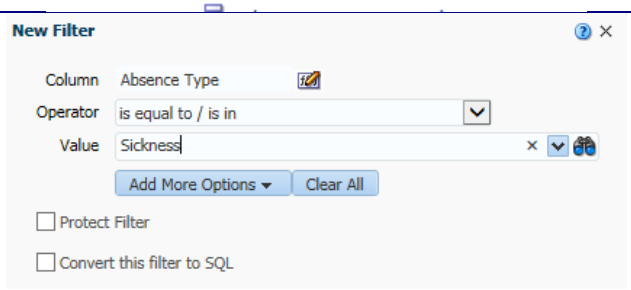
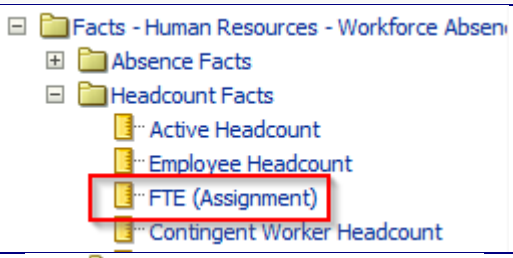
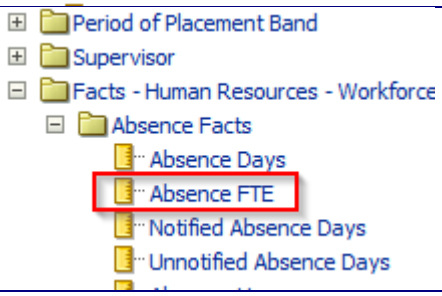
In the same example, let's assume the employee had 3 days off work due to sickness (11/01 – 13/01). For the whole of January, their Available FTE is 31. The FTE lost is 3. To work out the FTE % Lost, simply divide the FTE Lost by Available FTE and multiply the result by 100:

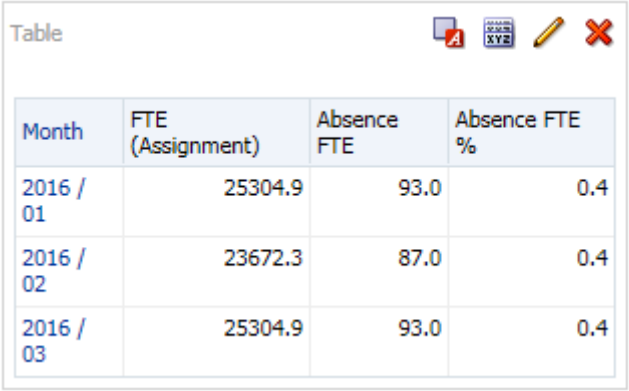
(3/31) * 100 = 9.68 %

This figure is normally calculated for Sickness absence only, and is done at an aggregated level (e.g. Staff Group, Organisation etc).

Implementation in ESR BI

Step	Screenshot	Description
1		Create a new analysis based on the Absence Subject Area
2		Create a new filter on the 'Date' item from the 'Time' folder.
3		Restrict the date to a period of your choosing (use at least 3 months as an example)

Step	Screenshot	Description
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Month').
5		Create a new filter to filter for a specific absence type (normally 'Sickness')
6		Enter a value to filter for (Sickness)
7		Expand the Facts folder, then expand the Headcount Facts folder. Find the FTE (Assignment) item and double click it (This will return 'Available' FTE).
8		Expand the absence facts folder. Find the Absence FTE measure and double-click it.

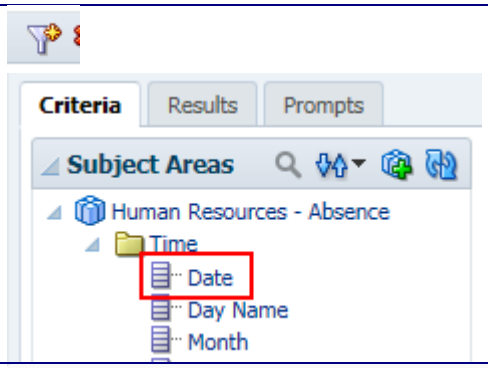
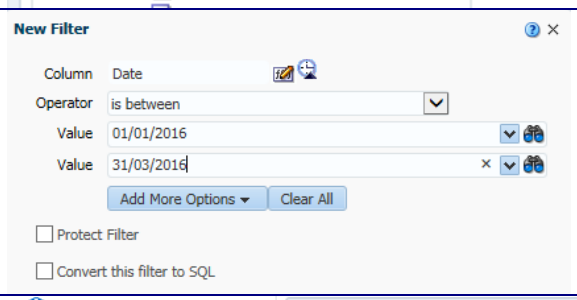
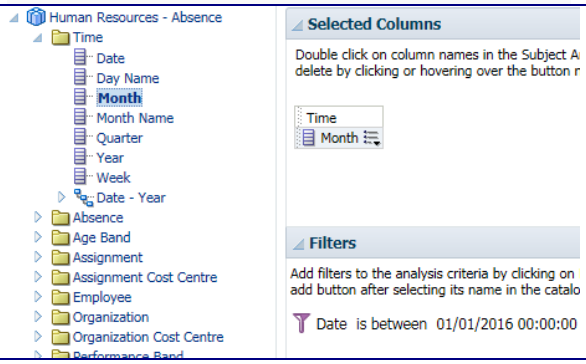
Step	Screenshot	Description
9		Expand the Compound Facts folder and find the 'Absence FTE %' item. Double click it.
10	 Month / FTE (Assignment) / Absence FTE / Absence FTE % 2016 / 01 — 25304.9 — 93.0 — 0.4 2016 / 02 — 23672.3 — 87.0 — 0.4 2016 / 03 — 25304.9 — 93.0 — 0.4	Click the results tab – you now have Available, Lost and % FTE rates.

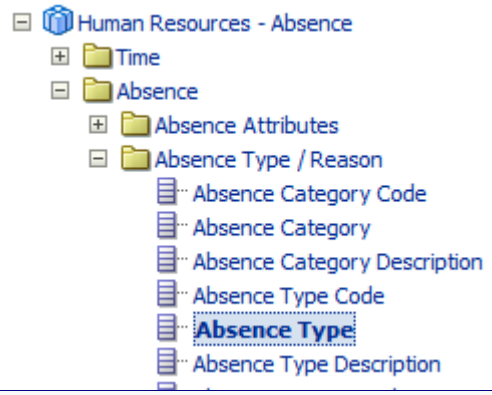
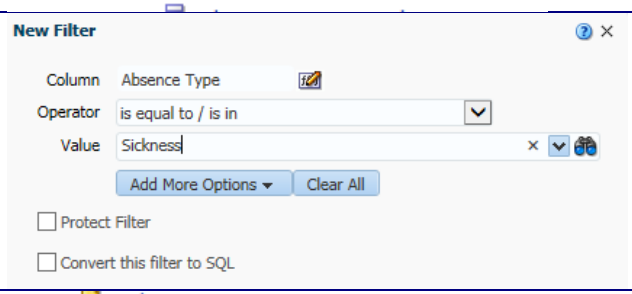
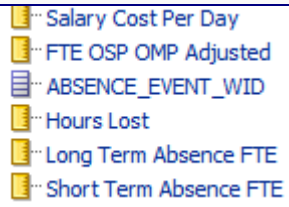
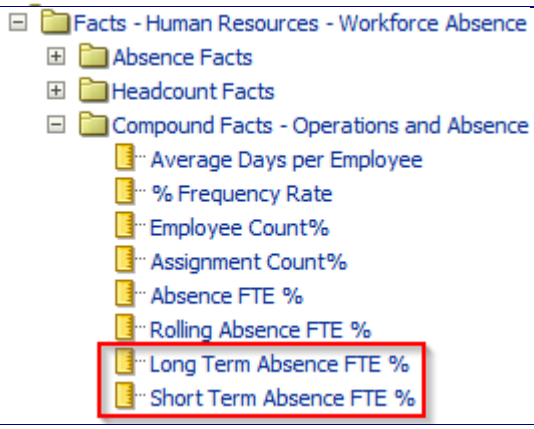
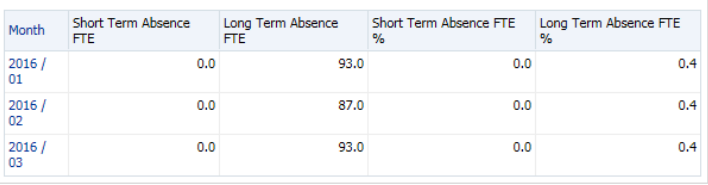
4.1.3. Long Term / Short Term

Description

This measure divides absences by the total length of the absence (even if the absence starts or ends outside of the reporting period). Generally across the NHS the accepted length of a ‘Long Term’ absence is 28 calendar days or greater – anything else is considered ‘Short Term’.

Implementation in ESR BI

Step	Screenshot	Description
1		Create a new analysis based on the Absence Subject Area
2		Create a new filter on the ‘Date’ item from the ‘Time’ folder.
3		Restrict the date to a period of your choosing (use at least 3 months as an example)
4		Add any columns you wish to group on to the analysis (in this example, we will group by ‘Month’).
5		Create a new filter to filter for a specific absence type (normally ‘Sickness’)

Step	Screenshot	Description
		
6		Enter a value to filter for (Sickness)
		Expand the Facts folder and the Absence Facts folder. Add the Long Term Absence FTE and Short Term Absence FTE items to the analysis.
7		Expand the Compound Facts folder. Add the Long Term Absence FTE % and Short Term Absence FTE % items to the analysis.
8		Click the Results tab. You now have all Long Term / Short Term measures on an analysis.

5. ABSENCE WITHIN WORKFORCE

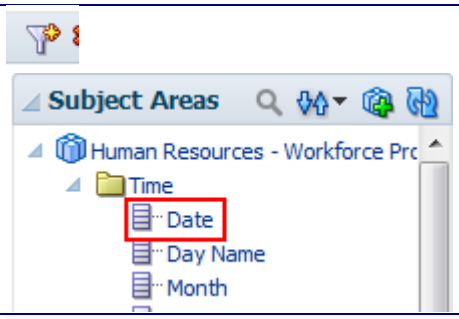
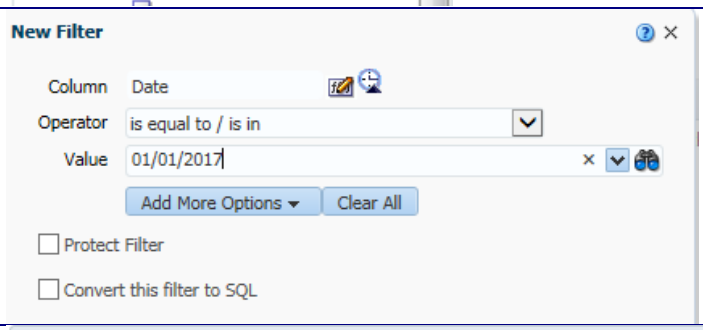
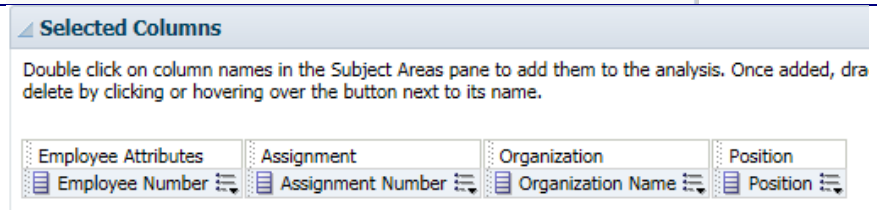
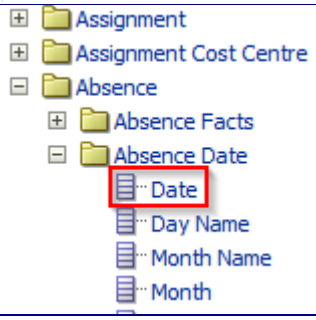
Within the Workforce Subject Area users can return Absence Attributes and Absence Measures in a similar way to using them within the Absence Subject Area. When returning assignment information within the Absence Subject Area, data is returned as at the absence date. Using the Workforce Subject Area allows users to return assignment information as at an effective date alongside absence information.

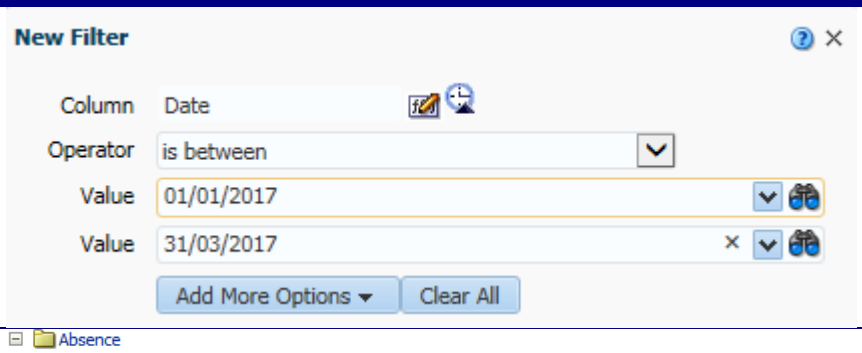
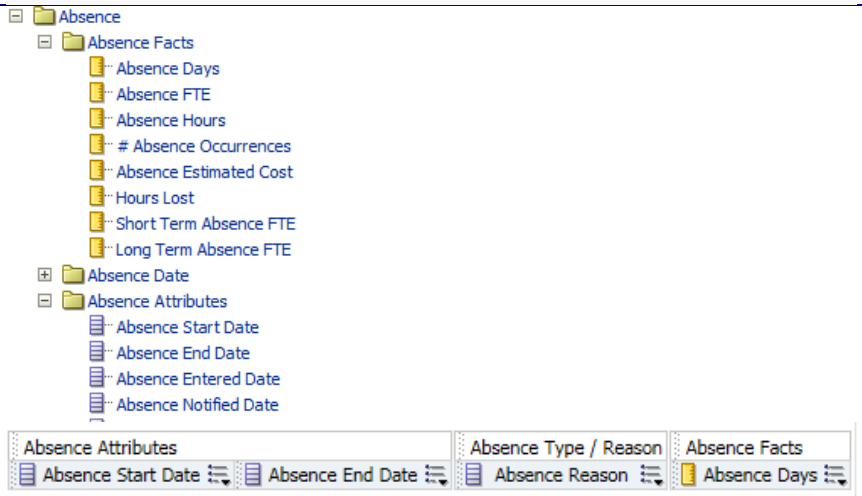
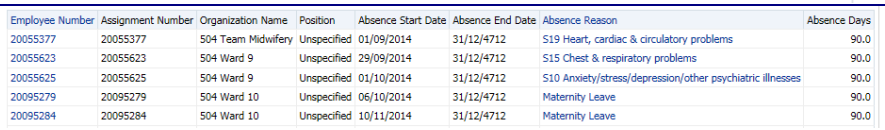
5.1. Using Absence items within Workforce

Description

When using absence within workforce, two separate date filters are required in order to define a workforce effective date and an absence period.

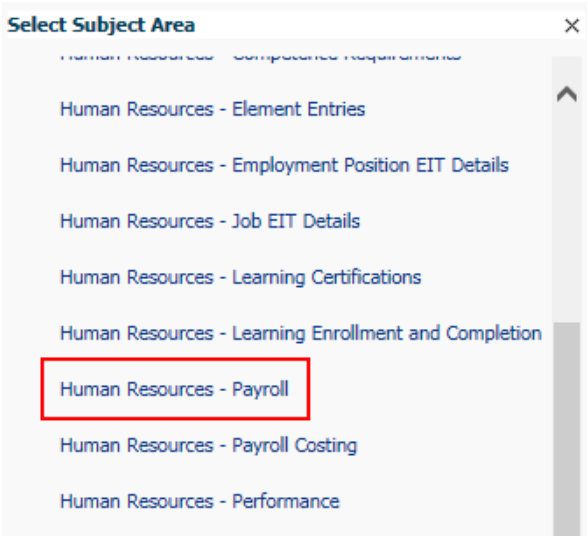
Implementation in ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Workforce Subject Area
2		Create a new filter on the 'Date' item from the 'Time' folder.
3		Restrict the date to an effective date. This will be the effective date of the assignment/employee information included within the analysis.
4		Add any assignment/employee columns to be used within the analysis.
5		Add a new filter based on the Date item from the Absence Date folder.

Step	Screenshot	Description
6		Restrict the Absence Date to a period. This will define the period of absence to return.
7		Include any absence columns to be included within the analysis.
8		Click the Results tab. Assignment details are now returned at an effective date alongside absence information.

6. PAYROLL

All of the items described in this section of the document are based on the 'Human Resources – Payroll' subject area within ESRBI but may be available in multiple subject areas:



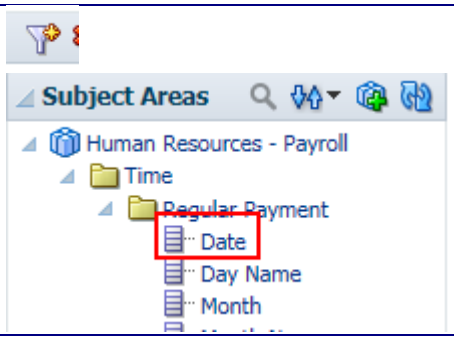
6.1. Measures

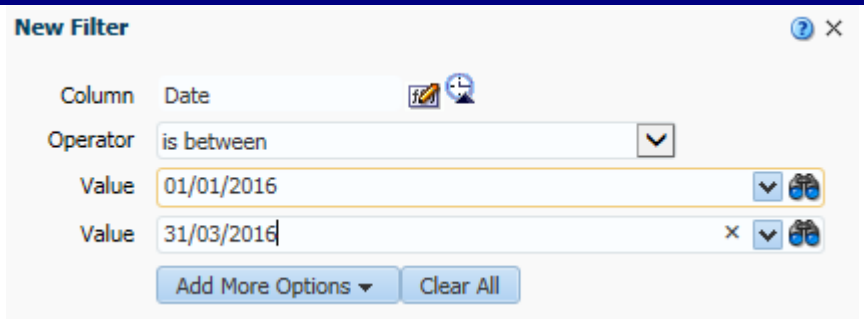
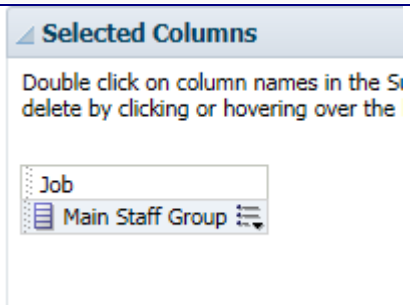
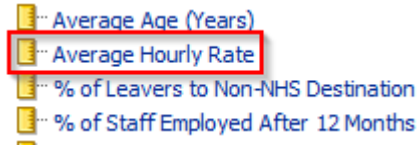
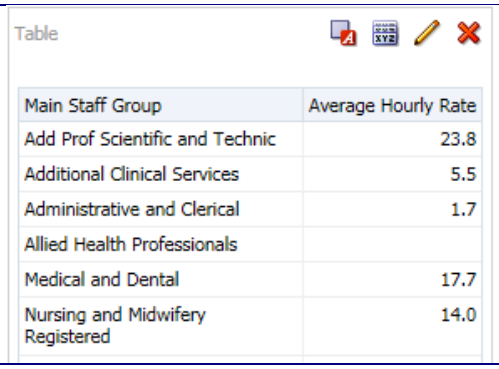
6.1.1. Average Hourly Rate

Description

The Average Hourly Rate is calculated using the following method; (Sum of Full Time Salary multiplied by FTE) divided by (Sum of Contract Hours multiplied by 52.1428 (to provide yearly hours)) with the result then divided by the number of distinct assignments.

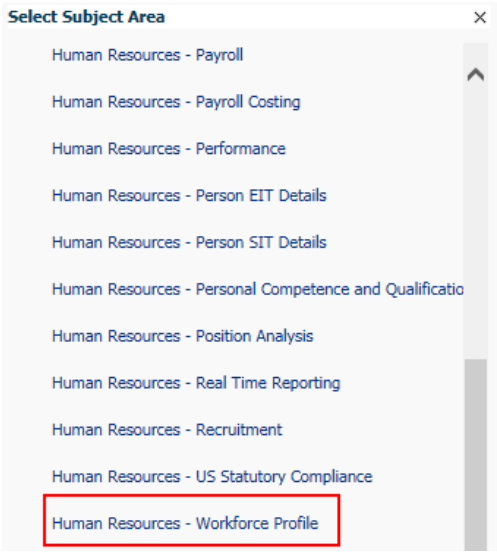
Implementation in ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Payroll Subject Area (although this measure is available across a number of subject areas).
2		Create a new filter based on the Date item from the Time folder.

Step	Screenshot	Description
3		Restrict the date to an effective period.
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Staff Group').
5		Expand the Workforce Profile Facts folder.
6		Scroll down and include the Average Hourly Rate measure in the analysis.
7		Click the Results Tab and the results of the analysis are displayed.

7. STAFF REQUIREMENTS

All of the items described in this section of the document are based on the 'Human Resources – Workforce Profile' subject area within ESRBI but may be available in multiple subject areas:



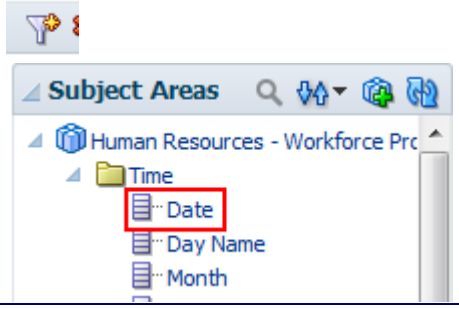
7.1. Measures

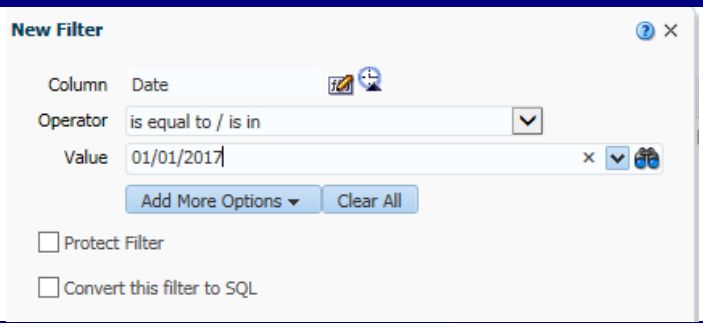
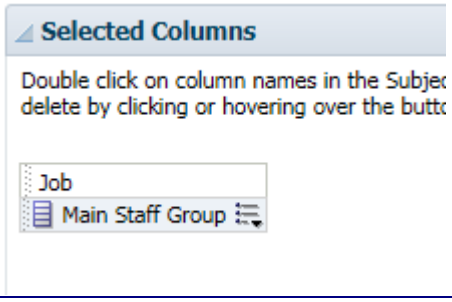
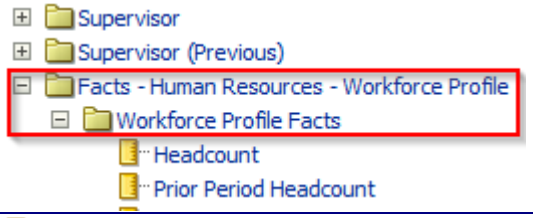
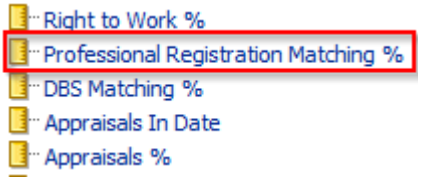
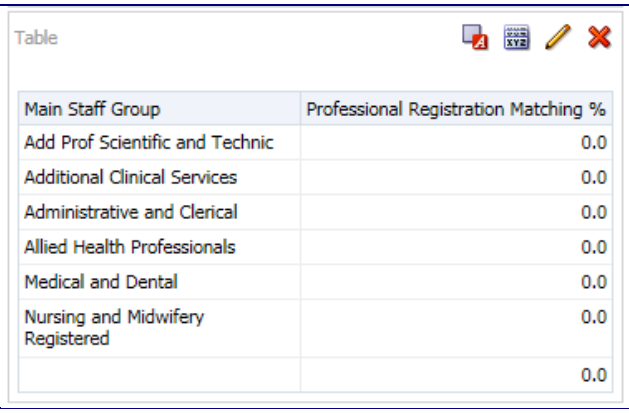
7.1.1. Professional Registration Matching %

Description

Professional Registration Matching % is the number of employees who require a professional registration (as recorded against the position) and who have a valid matching professional registration (recorded against their employee record) as a percentage of the total number of employees that require a professional registration.

Implementation in ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Workforce Subject Area (although this measure is available across a number of subject areas).
2		Create a new filter based on the Date item from the Time folder.

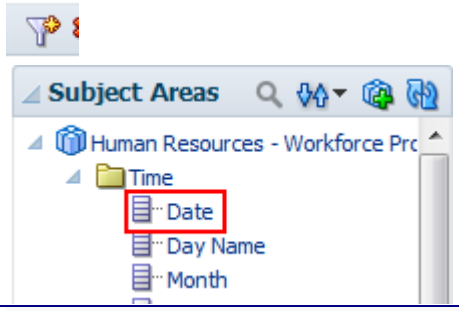
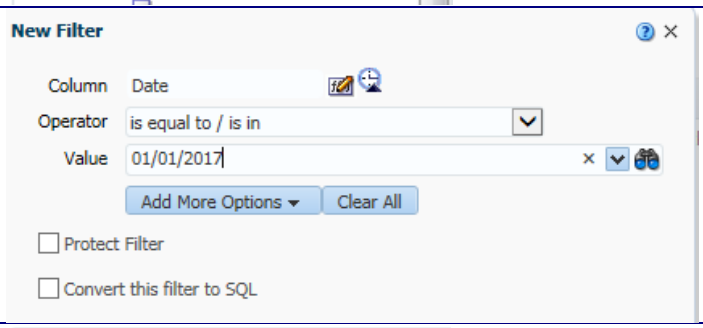
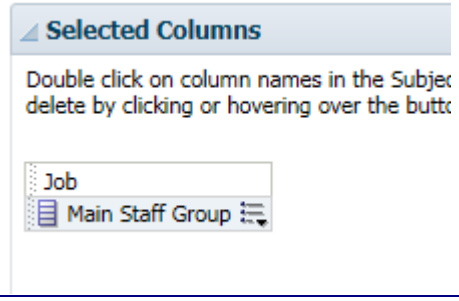
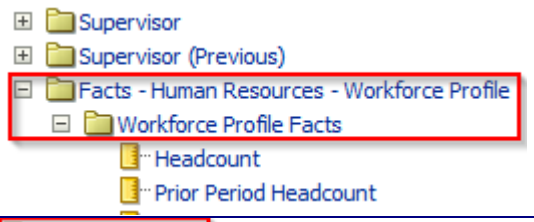
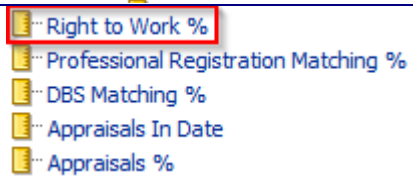
Step	Screenshot	Description
3		Restrict the date to an effective date.
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Staff Group').
5		Expand the Facts – Human Resources - Workforce Profile>Workforce Profile Facts folder.
6		Scroll down and include the Professional Registrations Matching % measure in the analysis.
7		Click the Results Tab and the results of the analysis are displayed.

7.1.2. Right to Work %

Description

All employees within ESR should have a Right to Work recorded within the system. An Employee fulfils the Right to Work criteria if:
(Work Permit Required = 'Yes' AND List B (First Combination) Reference Number IS NOT NULL and Is in Date)
OR (Residency Status = 'Temporary' AND List B Group 1 Source Document Checked IS NOT NULL and Is in Date)
OR (Residency Status = 'Temporary' AND LIST B Group 2 Source Document Checked IS NOT NULL and Is in Date)
OR List A Source Document Checked IS NOT NULL. The number of employees fulfilling the criteria is divided by the total headcount to provide a percentage.

Implementation within ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Workforce Subject Area (although this measure is available across a number of subject areas).
2		Create a new filter based on the Date item from the Time folder.
3		Restrict the date to an effective date.
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Staff Group').
5		Expand the Facts – Human Resources - Workforce Profile>Workforce Profile Facts folder.
6		Scroll down and include the Right to Work % measure in the analysis.

Step	Screenshot	Description
7	Table Main Staff Group / Right to Work % Add Prof Scientific and Technic 0.0 Additional Clinical Services 0.0 Administrative and Clerical 0.0 Allied Health Professionals 0.0 Medical and Dental 0.0 Nursing and Midwifery Registered 0.0 0.0	Click the Results Tab and the results of the analysis are displayed.

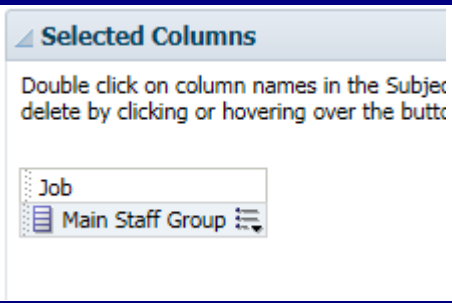
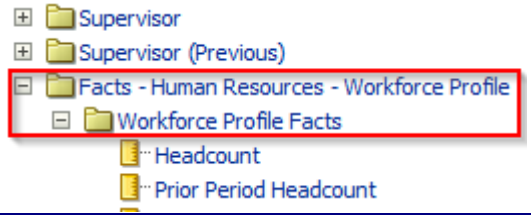
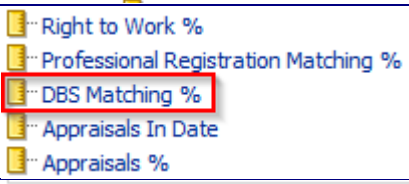
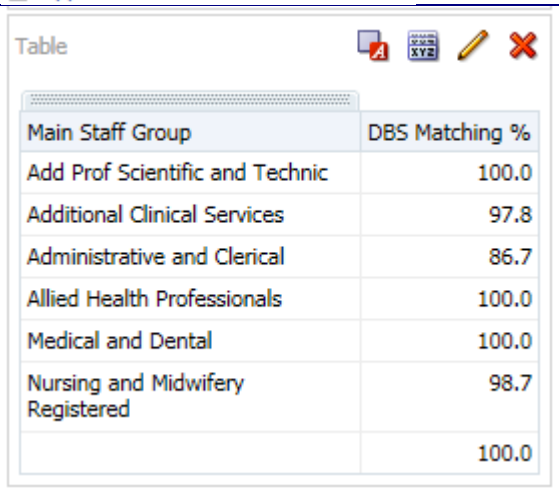
7.1.3. DBS Matching %

Description

The DBS Matching % measure is based on the below formula and provides the % of assignments that have a correct and valid DBS recorded against them. Formula: (Number of assignments that require a DBS (as recorded against the position) with a DBS check at the correct level or higher recorded / Number of assignments with a DBS requirement) * 100

Implementation within ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Workforce Subject Area (although this measure is available across a number of subject areas).
2	Subject Areas Human Resources - Workforce Pro Time Date Day Name Month	Create a new filter based on the Date item from the Time folder.
3	New Filter Column Date Operator is equal to / is in Value 01/01/2017 Add More Options Clear All Protect Filter Convert this filter to SQL	Restrict the date to an effective date.

Step	Screenshot	Description
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Staff Group').
5		Expand the Facts – Human Resources - Workforce Profile>Workforce Profile Facts folder.
6		Scroll down and include the DBS Matching % measure in the analysis.
7		Click the Results Tab and the results of the analysis are displayed.

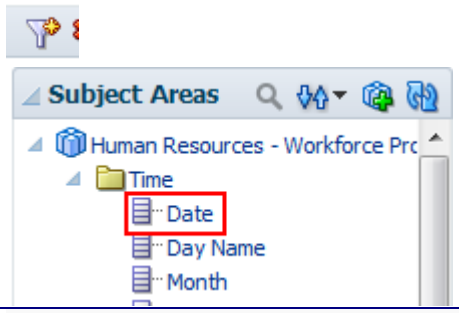
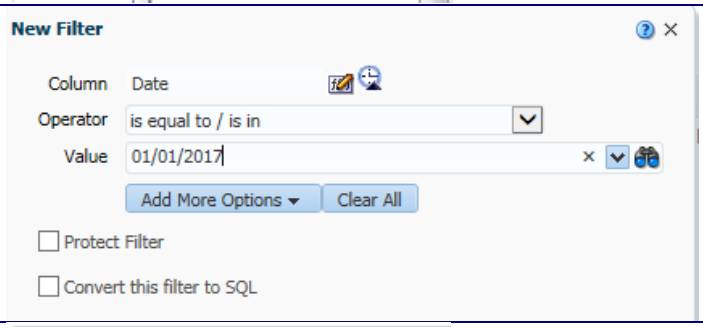
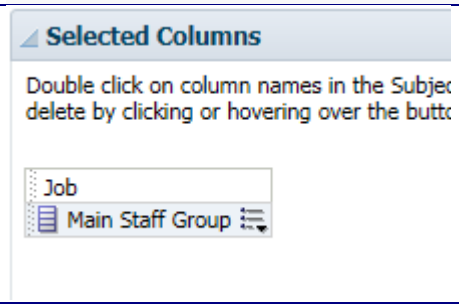
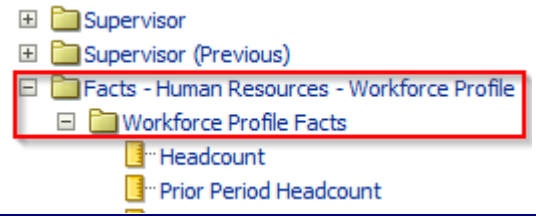
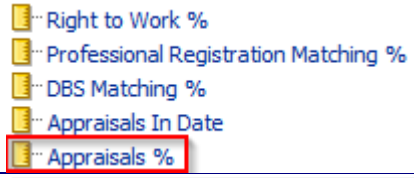
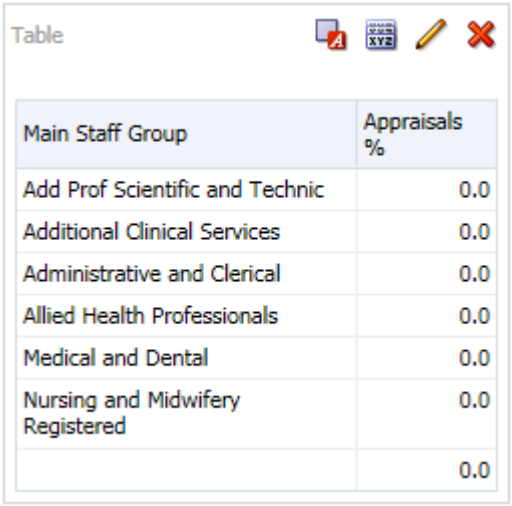
7.1.4. Appraisals %

Description

All employees within ESR should have an Appraisal recorded every 12 months. The Appraisals % measure provides users with the number of Appraisals completed / Headcount * 100. Completed appraisals can be defined as a distinct count of completed appraisals in the last 12 months. (e.g. if a person has 2 completed appraisals in the period, this should be counted only once).

Implementation within ESRBI

Step	Screenshot	Description
1		Create a new analysis based on the Workforce Subject Area (although this measure is available across a number of subject areas).

Step	Screenshot	Description
2		Create a new filter based on the Date item from the Time folder.
3		Restrict the date to an effective date.
4		Add any columns you wish to group on to the analysis (in this example, we will group by 'Staff Group').
5		Expand the Facts – Human Resources - Workforce Profile>Workforce Profile Facts folder.
6		Scroll down and include the Appraisals % measure in the analysis.
7		Click the Results Tab and the results of the analysis are displayed.