



*Improvement*

# Metrics Engine

**User Guide**

**2017/18**

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## 1.) Introduction

The Metrics Engine tool gives stakeholders the ability to see the impact of each step in the calculation process of the National Tariff on the published tariff prices. This means that the Metrics Engine tool gives an end to end view of the journey from raw underlying costs to final published prices.

## 2.) Getting started

In order to make each calculation step visible we have used a software product called Tableau. The tool has been published online and you can use your web browser to access it by opening the following link:

<https://improvement.nhs.uk/resources/metrics-engine>

Select the 'access the metrics engine here' link

You will need to click on Monnet and then input the following username and password:

Username: Tableau.Guest

Password: 1mprov3m3nT – please note it is case sensitive and the first character is the number 1.

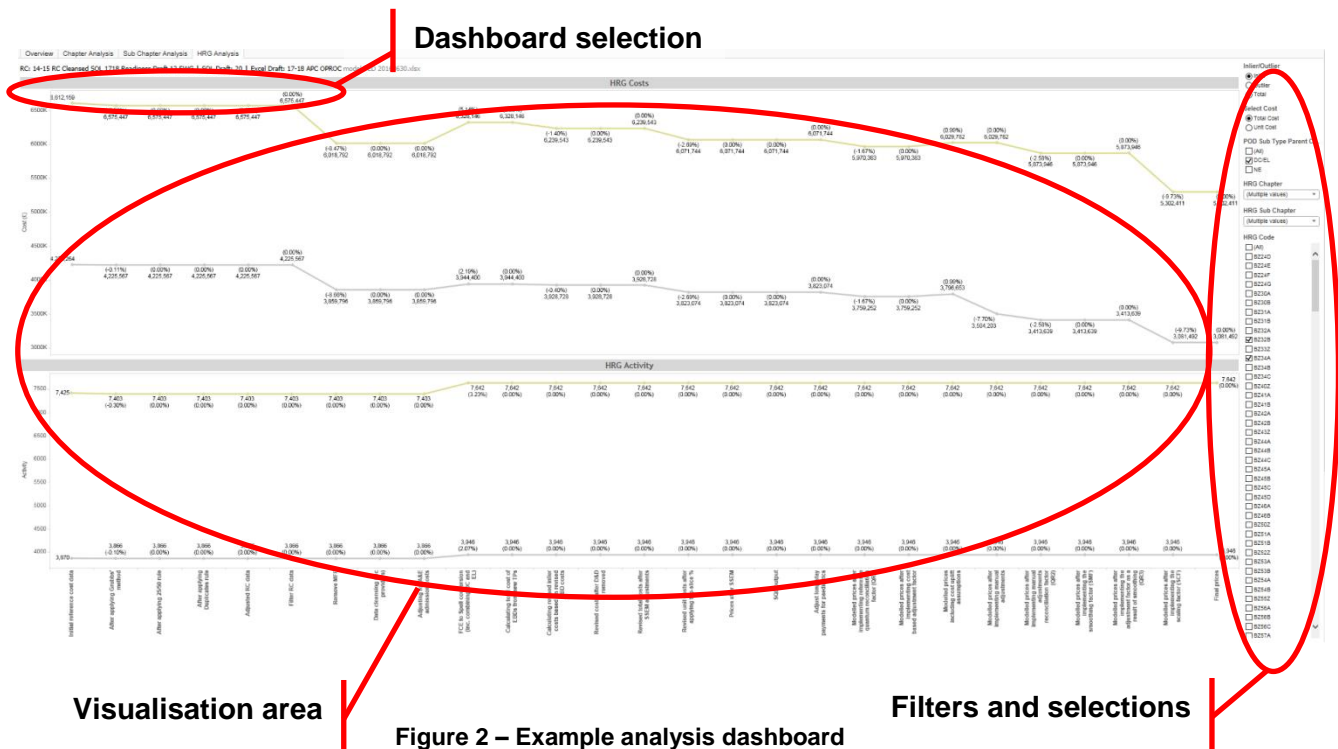
Once you are logged in you should see the entry screen, as shown in figure 1. The entry screen shows an overview of the different views that are available within the tool and from here you can select what you want to look at. Once you are in a view you are still able to select another view to look at, see '3. Browsing between dashboards'.



**Figure 1 – Entry screen for metrics engine**

There is one overview tab and four analysis tabs included within the metrics engine. Figure 2 shows an example and basic breakdown of one of the analysis dashboards.

The remainder of this user guide will explain how to navigate through the Metrics Engine tool and how to use the functionality of the Tableau software.



### 3.) Browsing between dashboards

Each time the report is opened in Tableau, the entry screen in figure 1 will be displayed. To browse to the data dashboards, simply click on the desired tab. Once you are in you can navigate between the dashboards using the tabs at the top (see figure 2).

### 4.) Interacting with views



Within in each data dashboard there are three key ways to interact with the data; filtering, sorting and exporting data. Each is explained in more detail below.

#### 4.1 Filtering

The tool has functionality to filter report data to support your analysis. Where applicable, these filters are positioned on the right side of the page. For more information on what can be filtered see ‘interacting with views’ in the metrics engine overview.

There are two types of filters used in the tool: **Dropdown** and **Radio button**.

#### Dropdown

To use this filter, click on the arrow to initiate the dropdown list, then select or deselect the desired values. This filtering action will include the selected values in the data dashboard. An option to select or deselect all the values in the list is possible by selecting or deselecting the option labelled *(All)*. An alternative is to hover the mouse cursor over the filter and click on the clear filter symbol . It is possible to search for a specific filter value by hovering the mouse cursor over the filter and clicking on the magnifying glass symbol , then entering value to search.

## Radio button

This filter only allows you to select either one of the options available or, where available, all of the options available. If you select *(All)* the results shown are aggregates of the individual options. An example of the filter is shown in figure 3:

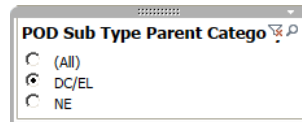


Figure 3: Radio Button filter

## 4.2 Exporting

There are four types of export features from Tableau. These can be accessed by clicking on the graph you want to export and then selecting download in the top right.

- Image: Saves an image file for selected view.
- Data: Exports data to Microsoft Access database file.
- Crosstab: Exports data to a Microsoft Excel file
- PDF: Saves a PDF of the selected view.

To export, click on the graph you want to export, navigate to “Worksheet”, “Export” in the Menu Bar at the top of the page. This will show the three options. Only the selected view within the dashboard is exported. To export the entire dashboard, navigate to “Dashboard”, “Export Image...”

## 4.3 Dynamic Filtering and Sorting

Each view has dynamic functionality (Keep Only, Exclude, Tooltips) – see figure 4. These can be used in any graph or table of data by hovering over a multiple selection of values or a single value. To select multiple values, hold down the left mouse button and drag the mouse pointer OR hold down the Ctrl key and select individual bars or fields using the left mouse button. Hover over the selected values and a tooltip will appear. What they do:

- **Keep Only** – includes only selected values.
- **Exclude** – excludes the selected values.
- **Tooltip** – shows relevant measure values for selected data points on the report.

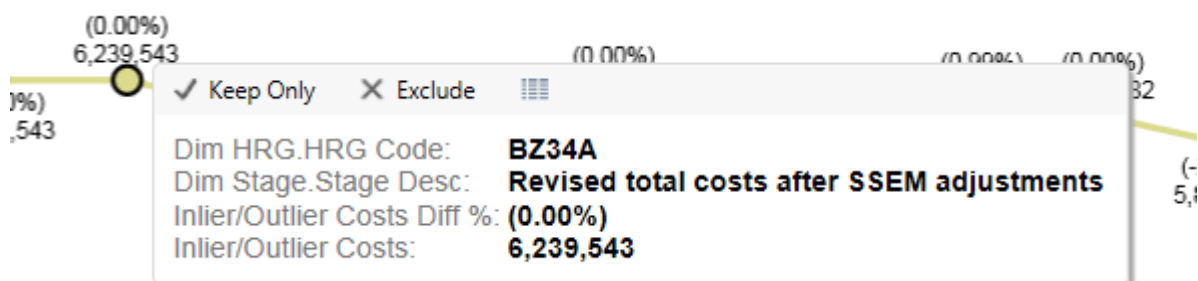


Figure 4: Example tooltip

## 5.) General

### 5.1 Zoom into specific graphics

To zoom into a graph, double click on the area you want to focus on. To revert back to the original view, select the home symbol in the top left.

If you wish to move your area of focus around, hold shift and left click and drag the image.

### 5.2 Highlighting specific report areas based on colour legend

To highlight a specific report item within a graph based on a colour legend, click on the pen symbol at the top right corner of the colour legend (figure 5). Then select the particular entity in colour legend and the report will change accordingly by highlighting only that selected item. The results are displayed in figure 6.

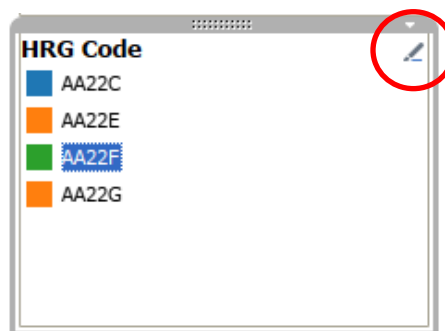


Figure 5 – Graph legend

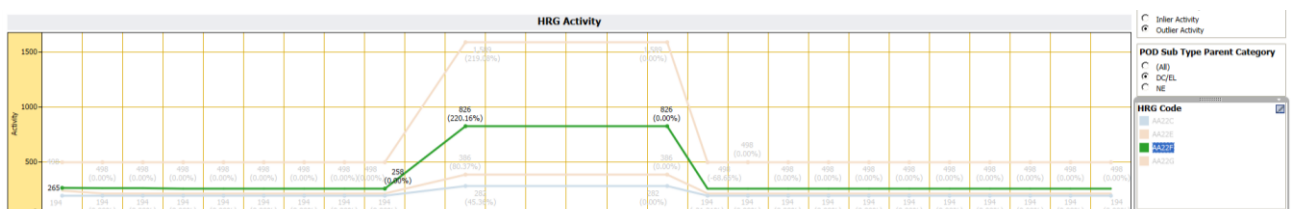


Figure 6 - Example of highlighting

### 5.3 Removing Dashboard Filters and Sorting

To remove all filters and sorting select “Original View” in the top right and select the default view. This function removes all filters and sorting and reverts back to the initial state of the document as when first opened.

To deselect any highlighted or selected report items, filters etc. press the **Esc** key.

### 5.4 Dashboard Description

A brief description of each of the data dashboards is located on the overview tab.

A description of what data is loaded into the metrics engine can be found directly beneath the heading on each of the data dashboards.

## 6.) Further help

For queries or issues you have using the Metrics Engine tool please email [pricing@improvement.nhs.uk](mailto:pricing@improvement.nhs.uk)



***Improvement***

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