

Presenting data – using Power BI as a tool for engagement

Webinar summary

This webinar was very popular for costing practitioners and other NHS staff interested in data analysis and presentation, with over 200 people joining the live session.

It was presented by Jennifer Pennell, Chief Corporate Accountant, Mid Cheshire Hospitals NHS FT and Emma Bowker, Cost Accountant, East Lancashire Hospitals NHS Trust.

Jenny and Emma started the session by asking the audience how many people were using Microsoft Power BI, with just under half saying they did. Around half of those not using Power BI were using Excel instead.

What is Power BI?

For people who are not familiar with Power BI, it is a Microsoft product that can be linked to one or more data sources and is used for analysis and presentation of data in a visual format. It allows the user to customise dashboards which help to bring data to life and can be valuable in collaborative investigatory projects, as well as the provision of routine reporting.

Jenny described how she spent about a day and a half using the free Power BI training resources on the Microsoft website which provided her with the basics needed to start using the tool.

<https://docs.microsoft.com/en-us/power-bi/guided-learning/>

People who are used to Excel will find the commands very familiar, and there is no requirement to be particularly technically minded. This meant Jenny was able to pull together her first dashboard quickly.

Power BI can connect data from different sources such as Excel and SQL, and both presenters agreed that it is straightforward to amend the analysis. The presentation tools in Power BI provide a mechanism to engage clinical colleagues in collaborative projects as well as being a useful way to present visually appealing service dashboards.

Using Power BI with PLICS

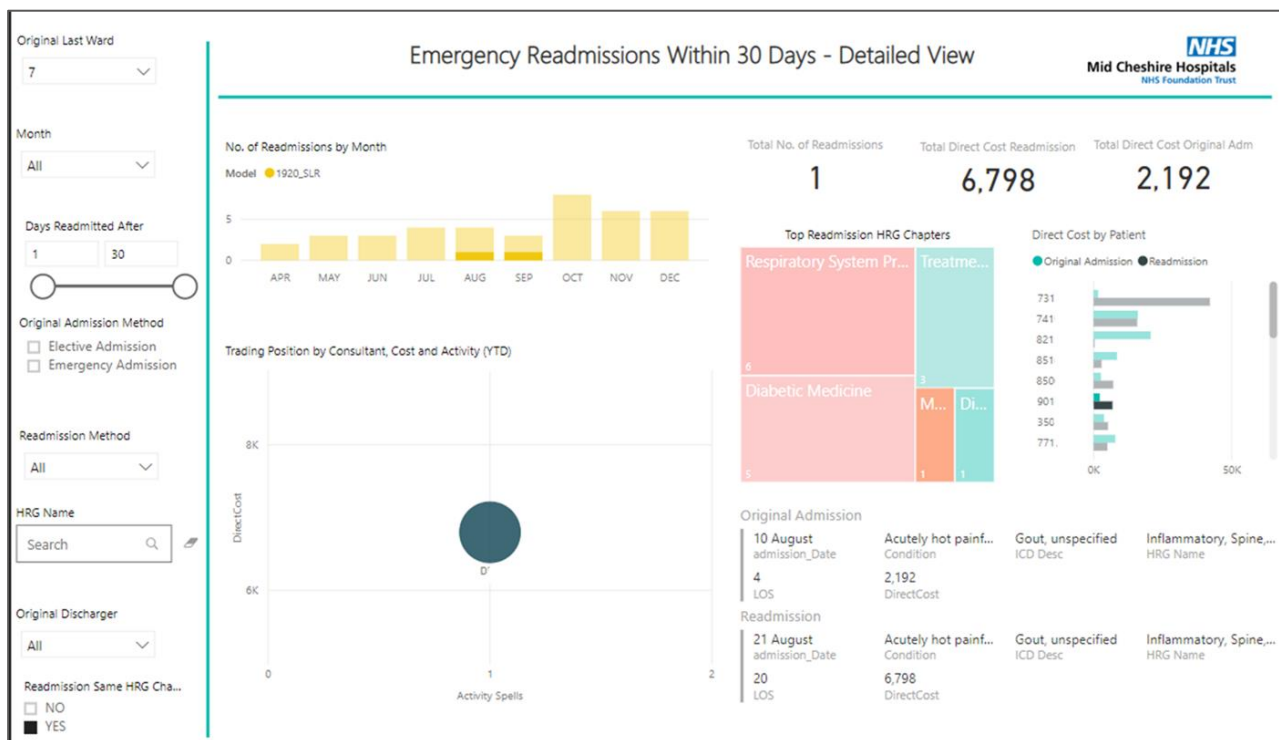
The webinar presenters strongly encouraged costing practitioners to consider using Power BI to help them work with their trusts' patient-level costing (PLICS) data, as the package supports the import of information that might not routinely be held in costing system, such as the names of data fields to supplement the codes. Examples of this might be the descriptions for HRGs or the names for consultant codes. This makes the outputs more useful when shared with clinical services or other intended audiences.

Both Jenny and Emma agreed that the improved visualisation of PLICS data has also helped them identify data quality concerns, and as part of their engagement with services, they ask for feedback to help them improve both the presentation of information and the data used.

An example of a Power BI dashboard was shared in the webinar and is replicated as Figure 1. Model Hospital metrics had shown that the trust was an outlier for the costs of readmissions, and this resulted in a deep dive to investigate the figures in more detail. The Medical Division had only been provided with readmission data by ward by month and this did not provide sufficient information for the clinical lead to identify how these could be reduced.

Jenny developed a dashboard to help clinicians interrogate the data. This included filters to select data by ward, days after original admissions, type of admission, or discharge date. It became apparent that there was a subset of people for whom the costs of being readmitted were higher than those for their original admission. The information derived using Power BI then enabled the clinical staff to focus on how best to avoid this group of patients being readmitted to hospital in the future.

Figure 1 – Power BI dashboard for emergency re-admissions



Emma and Jenny were keen to reassure viewers of the webinar that developing basic Power BI skills should be very achievable for other costing practitioners after undergoing some basis training , and their own initial expertise had been further developed through refining their dashboards and visualisations following engagement with the clinical services they support.

To view the **webinar**, click [here](#) ensuring you are logged into your account on the HFMA website.

[Power BI training pack](#) developed by Emma Bowker – a useful aide for new users of Power BI, particularly finance staff

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