

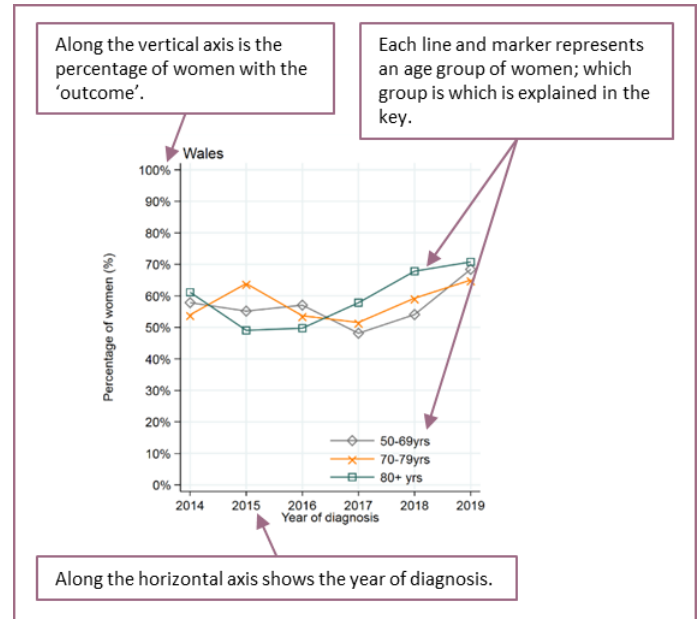


## Interpreting figures within the report

### Connected scatter plots

These types of plots are used in Chapter 3 of the NABCOP 2022 Annual Report to show changes over time across the three age groups.

The examples below are annotated with guidance on interpreting these figures.

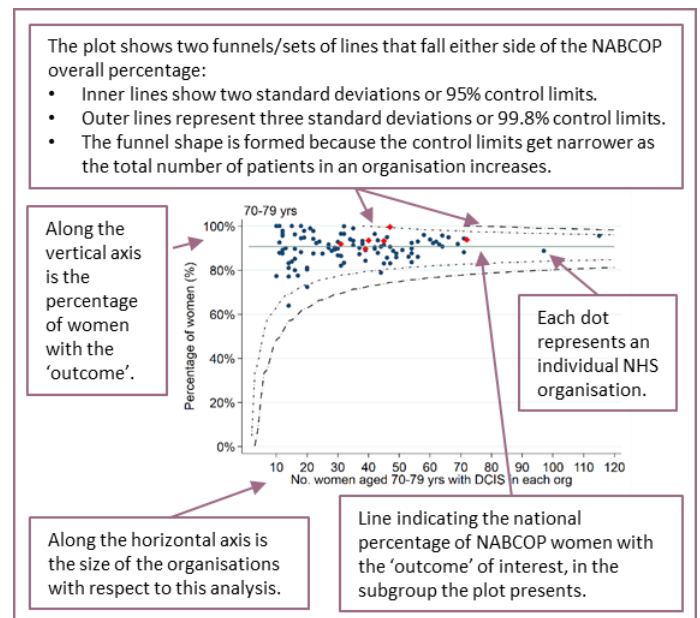


### Funnel plots<sup>1</sup>

These enable the user to assess variation in the results across NHS organisations.

Funnel plots are used to highlight variation in the rate of surgery across organisations and to assess whether this variation is larger than would be expected in any age group.

These types of plots are used in Chapter 3 of the NABCOP 2022 Annual Report to look at variation by NHS organisation. The NHS organisation-level data presented in these plots are published in the NHS Organisation Data Viewer; alongside the annual report.



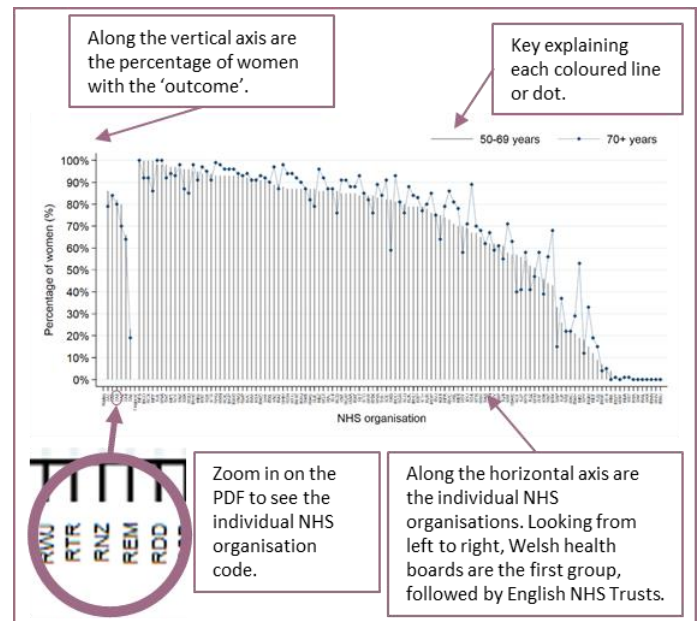
<sup>1</sup> Funnel Plot Source: David Spiegelhalter, Medical Research Council Biostatistics Unit - <https://www.ncbi.nlm.nih.gov/pubmed/15568194>

## Combined line & scatter plots

These are used to show variation for multiple 'outcomes' or age groups across NHS organisations.

For example the percentage of women having surgery, the percentage of women having a certain type of surgery and the percentage of women having a subsequent reoperation, for each NHS organisation.

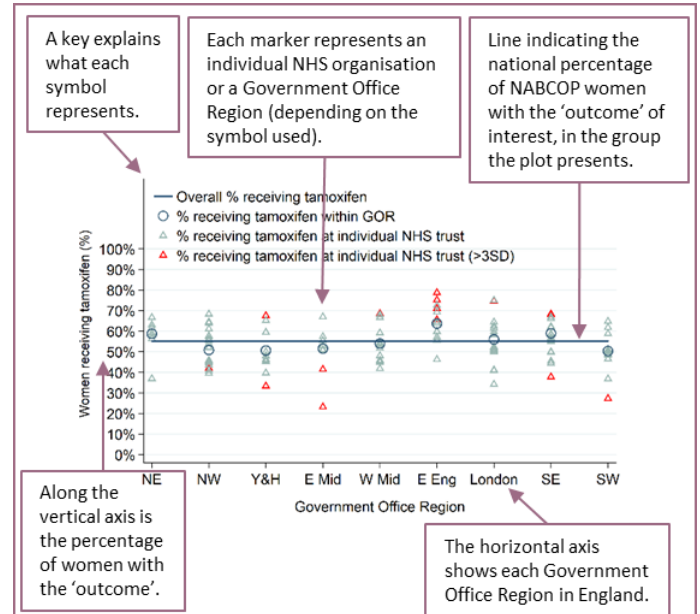
These types of plots are used in Chapter 3 of the NABCOP 2022 Annual Report to look at variation by NHS organisation. The NHS organisation-level data presented in these plots are published in the NHS Organisation Data Viewer; alongside the annual report.



## Scatter plots

These are used to show variation across multiple groupings. For example within NHS organisations in each geographical region (such as Government Office Region) and then also across geographical regions.

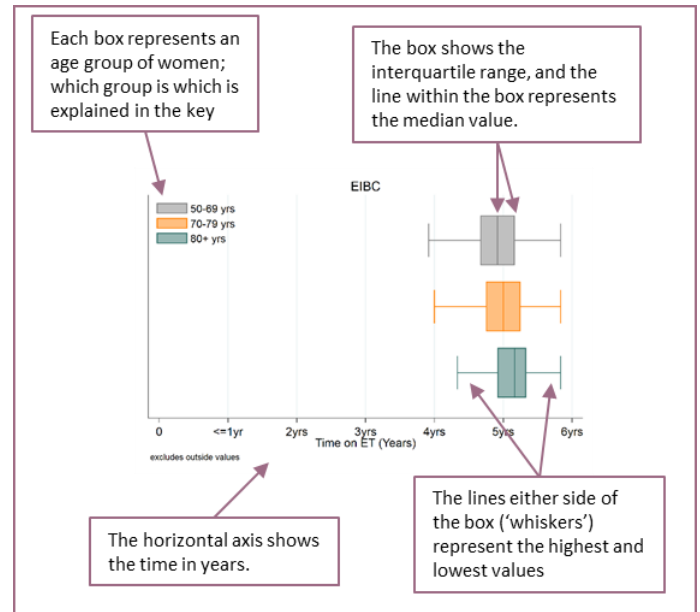
These types of plots are used in Chapter 4 of the NABCOP 2022 Annual Report to look at variation in the prescribing of tamoxifen (endocrine treatment) and bisphosphonates in England.



## Box & whisker plots

These types of plots are used in Chapter 4 of the NABCOP 2022 Annual Report to show differences in the length of endocrine therapy treatment prescribed in primary care across the three age groups.

Each box and whisker plot presents five pieces of information for each; the box shows the interquartile range, with the lower and upper quartiles being the left and right edges of the box and the median shown by the line in the middle of the box. The whiskers to each side of the box are then drawn out to the lower and upper adjacent values (as defined by Tukey, 1977<sup>2</sup>). The plots do not show extremely small or large values.



<sup>2</sup> Tukey, John W. 1977. Exploratory Data Analysis, Reading, Mass.: Addison-Wesley.