

# Guide to reading the NABCOP 2021 Annual Report

This document is for use alongside the NABCOP 2021 Annual Report, as a guide to understanding the report content. It covers:

- Layout of sections within the annual report.
- Interpreting figures within the annual report.

### Layout of sections within the annual report

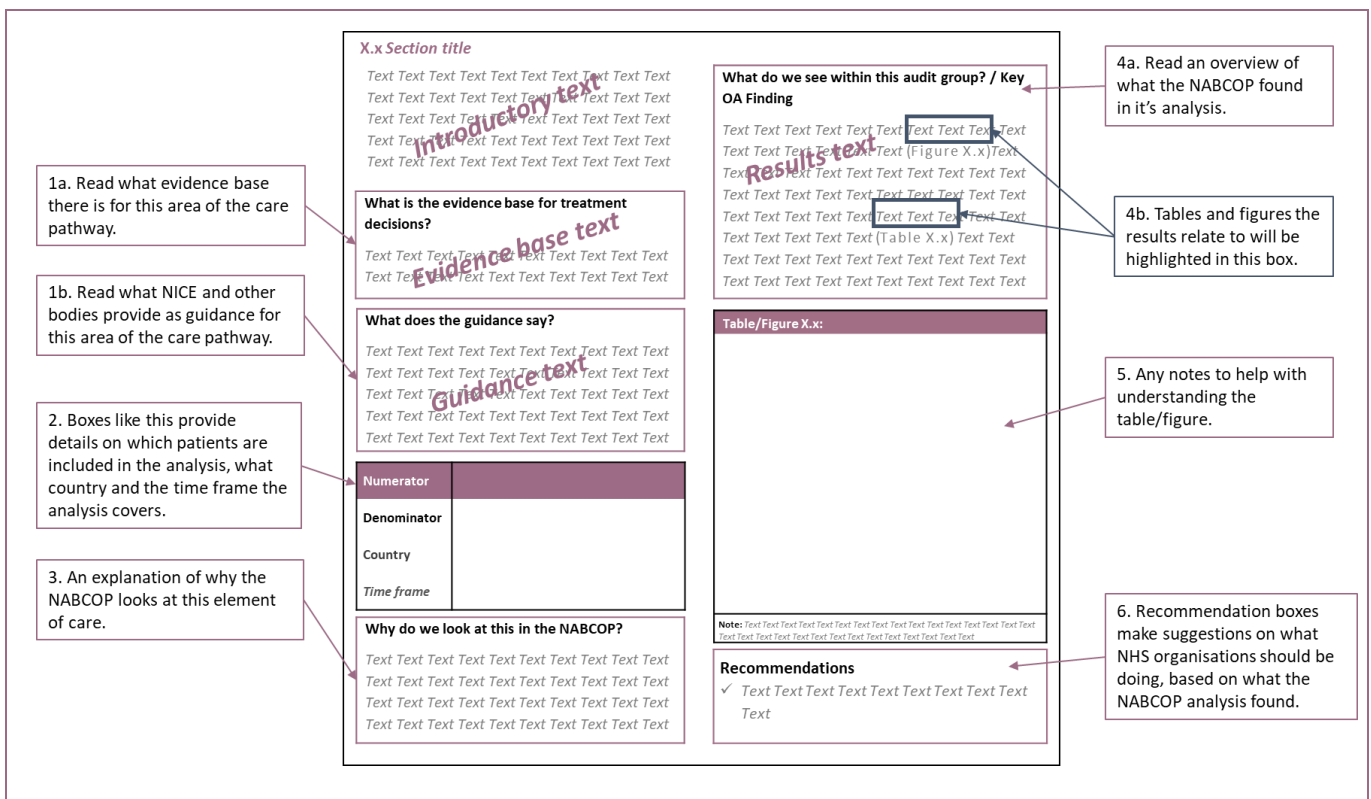
The NABCOP 2021 Annual Report chapters and sections include the following elements (the figure below is annotated with guidance):

- Boxes describing the relevant clinical guidance, where applicable, and the current research evidence (as per 1a and 1b in the figure below),
- Which patients are included in the numerator and denominator for the analysis, and whether they were diagnosed in England or Wales (2),

- The period of diagnosis for patients included (2),
- Details of why we have chosen a particular area of breast cancer care to analyse (3),
- A box summarising what the NABCOP analysis found (or Key OA Findings within Chapter 6 on the 2020 Organisational Audit), along with relevant tables/figures (4a, 4b and 5),
- The resulting recommendation(s) (6).

The primary focus of all analyses within the NABCOP 2021 Annual Report is women aged 70 years and older at diagnosis. In some sections, this is broken down further to look at women aged 70-79 years and women aged 80 years and over. This allows us to investigate age disparity further where possible. Comparison is then made with women aged 50-69 years.

We also look at variation across NHS organisations.



**Interpreting figures within the report**

**Funnel plots<sup>1</sup>**

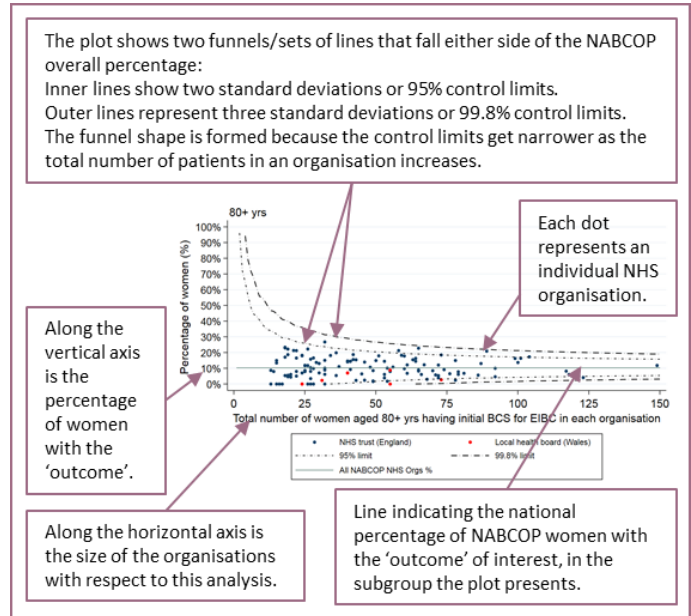
These enable the user to assess variation in the results across NHS organisations.

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 graphs are found in Chapter 5 of the NABCOP 2021 Annual Report.

The NHS organisation-level data presented in these plots are published in the NHS Organisation Data Viewer; alongside the annual report.

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

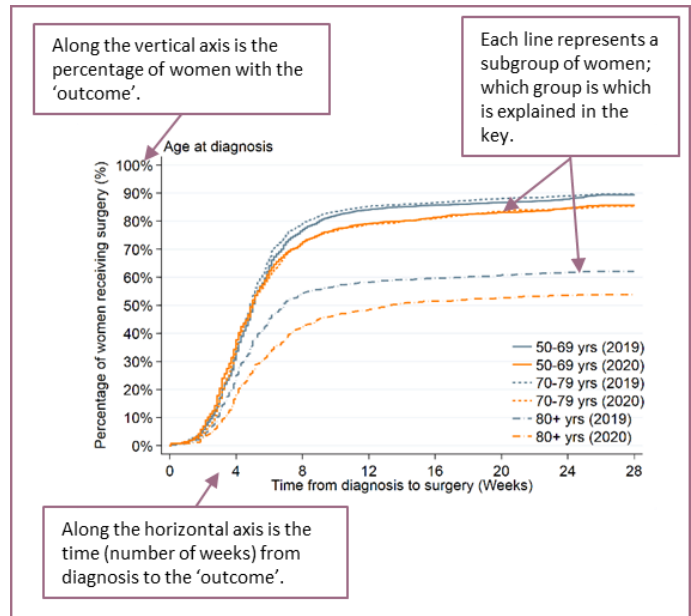


**Time to treatment plots**

These are used to show the time from a specified starting point to a subsequent outcome/event. This type of plot is called a Kaplan-Meier curve. They enable the user to see what percentage of patients had experienced the 'outcome' (for example receiving surgery for breast cancer) by a certain time point.

Lines can be plotted for each of a specified subgroup, and enable the user to assess if there is any difference by patient group (i.e. where the lines plotted do not overlap there is a difference between groups).

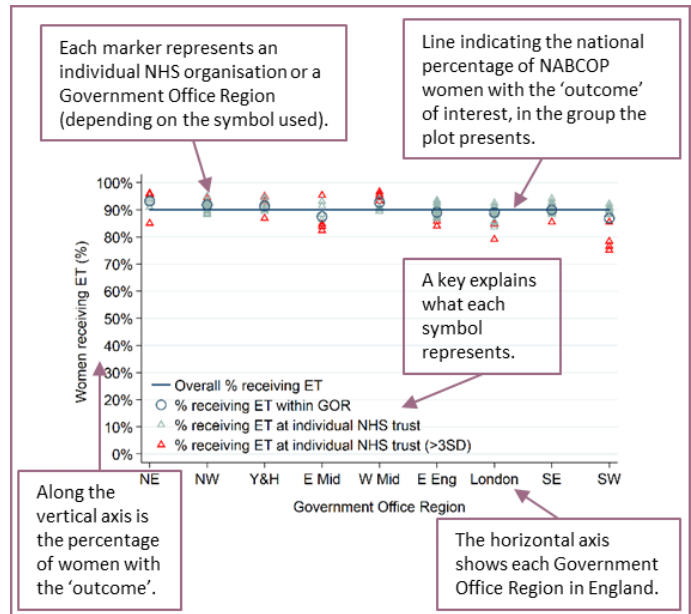
These types of plot are used in Chapter 3 of the NABCOP 2021 Annual Report to show time from diagnosis to having surgery.



**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 2021 Annual Report to look at variation in the prescribing of endocrine treatment in England.

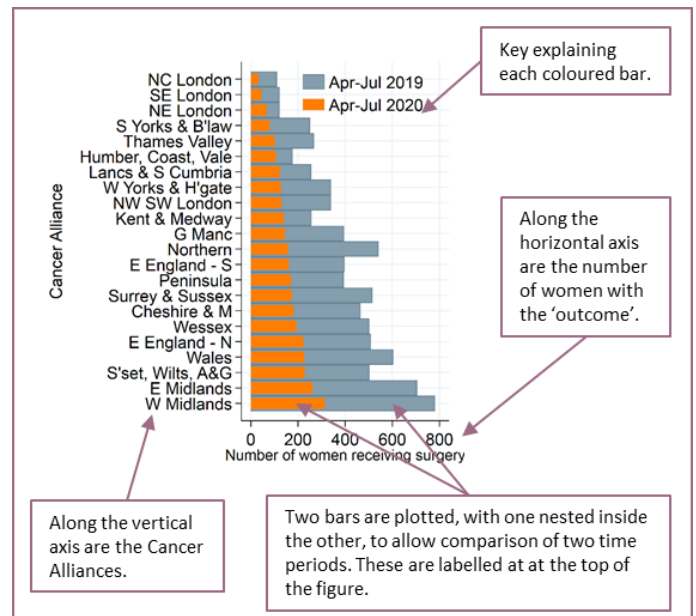


<sup>1</sup> Funnel Plot Source: David Spiegelhalter, Medical Research Council Biostatistics Unit - <https://www.ncbi.nlm.nih.gov/pubmed/15568194>

### Nested bar chart

These are used to compare an 'outcome' across two groupings for the same geographical region, whilst also comparing variation across regions.

This type of plot is used in Chapter 3 of the NABCOP 2021 Annual Report to show variation in numbers of women receiving surgery, by geographical region (Cancer Alliance) and across two time periods.



### Combined line & scatter plots

These are used to show variation for multiple 'outcomes' 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 5 of the NABCOP 2021 Annual Report to look at variation in rates of reoperation following breast conserving surgery and in rates of overnight admissions following chemotherapy.

