

Notes for Interpretation – Funnel plots portal

The Funnel plots portal has been developed by the UK Renal Registry to illustrate a range of indicators from the latest [UKRR Annual Report](#) in a more interactive manner, allowing users to see results more clearly and identify their centre and region.

Funnel plots show a centre's value for an indicator plotted against its size (the number of people with a measurement, or the number of patient years at risk). A horizontal line shows the overall average for the indicator across all centres. The 'funnel' is the 95% and 99.7% control limits, which correspond to two and three standard deviations from the average, respectively. There is evidence that any centres which fall outside the funnel are significantly different from the average. The funnel shape of the limits reflects the fact that for smaller centres, for which the percentage meeting the target is less reliably estimated, a greater observed difference from the average is required for it to be statistically significantly different. For each outcome measure, if no significant inter-centre variation was present, three of 70 adult renal centres would be expected to fall between the 95% and 99.7% limits and no centre should fall outside the 99.7% limit.

FAQs

1. Why are some centres not shown for all indicators?

If a centre has complete data for less than 70% of patients, or if there are fewer than 10 patients in the denominator, then the individual centre will not be included in the funnel plot but their data will be included in the overall mean. Paediatric data was not available or relevant for all indicators. Other exclusions are shown in the title or footnotes of the funnel plot.

2. Why are the paediatric centres not shown individually?

The number of patients is much smaller for paediatric centres, so the estimation of the indicator would be unreliable for individual centres. We have grouped the paediatric centres to give an overall idea of the results in children. This is just for reference, and performance cannot be assessed against the funnel plot limits calculated for the adult data.

3. What are the prevalent and incident cohorts?

The incident population is defined as all patients who started renal replacement therapy (RRT) at UK renal centres, with the exclusion of patients that recovered their renal function for more than 90 days after having had only a short spell of RRT. The adult prevalent population for a year is defined as all RRT patients being treated at centres returning data to the UKRR for that year and who were alive on 31 December of that year.

Functionality

1. How can I download the funnel plot?

Click on the “download” icon (☐) in the bottom right of the Tableau window. You can choose to download the plot as an image, Microsoft PowerPoint or PDF. Viewing in full screen mode (☐ icon at the bottom right of the Tableau window) will make the plots easier to see and navigate.

2. How can I find out more details about each indicator?

The three patient reported experience measures are from the [Kidney PREM](#), and suitability for transplant is part of the [NHS Specialised Services Quality Dashboard](#). All other indicators are included in the [UKRR Annual Report](#) on patients with end-stage kidney disease. Methodological details and data definitions can be found in Appendix A of the Annual Report.

3. If I have any further queries on the portal data, who should I contact?

Please send your query to renalregistry@renalregistry.nhs.uk