

Epilepsy12 2023 Outlier Management and Identification

How we identify outliers

As part of its annual reporting process the Epilepsy12 audit has conducted Trust/Health Board outlier analyses on two audit measures for clinical 'cohort 4' (2021/22) data. The purpose of the outlier process is to identify and highlight variation, enable local review of the causes of that variation and stimulate quality improvement.

In our 2023 analysis, two metrics have been used to define outlier status within the Epilepsy12 audit:

1. **Epilepsy Specialist Input (ESN) input** – Percentage of children and young people with input by an ESN within the first year of care.
2. **Tertiary input** - Percentage of children and young people meeting defined criteria for paediatric neurology referral, with input of tertiary care and/or CESS referral by first year.

**Note that case ascertainment has been suspended from the 2023 outlier analyses due to methodological reasons.*

Epilepsy12 defines outlier status as being outside of **2 or 3 standard deviations** from the national (England and Wales combined) average. Depending on the measure, negative and positive outlier status can be defined. For negative outlier status '**alert**' status is defined as outside 2 standard deviations from the national average and '**alarm**' when outside of 3 standard deviations. For positive outlier status '**excellent**' or '**outstanding**' performance are defined respectively as 2 and 3 standard deviations above the average.

The data submission deadline for cohort 4 clinical data was **10 January 2023**. At which point, a definitive download of data was taken in order to carry out the annual analysis and reporting, including the outlier analysis. Any data submitted after this date was excluded from the analyses.

Health Board/Trust level reports of these data were shared in May 2023, and provisional outlier notifications were shared with the relevant Trusts/Health Boards in June 2023. Following the conclusion of the outlier identification and management process, the results have been confirmed with the relevant Trusts/Health Boards and have been communicated to the Care Quality Commission (CQC) and the Welsh Government in August 2023.

For full details, please see the [Epilepsy12 Outlier Policy](#). Epilepsy12 guidance follows the [Healthcare Quality Improvement Partnership \(HQIP\) outlier guidance for England and Wales](#).

Results

Figure 1 and figure 2 show funnel plots of the results of the outlier analyses. The full results of the 2023 combined clinical and organisational audit, including extended analyses and datasets, can be found on our [website](#).

Figure 1 – Funnel plot for ESN input

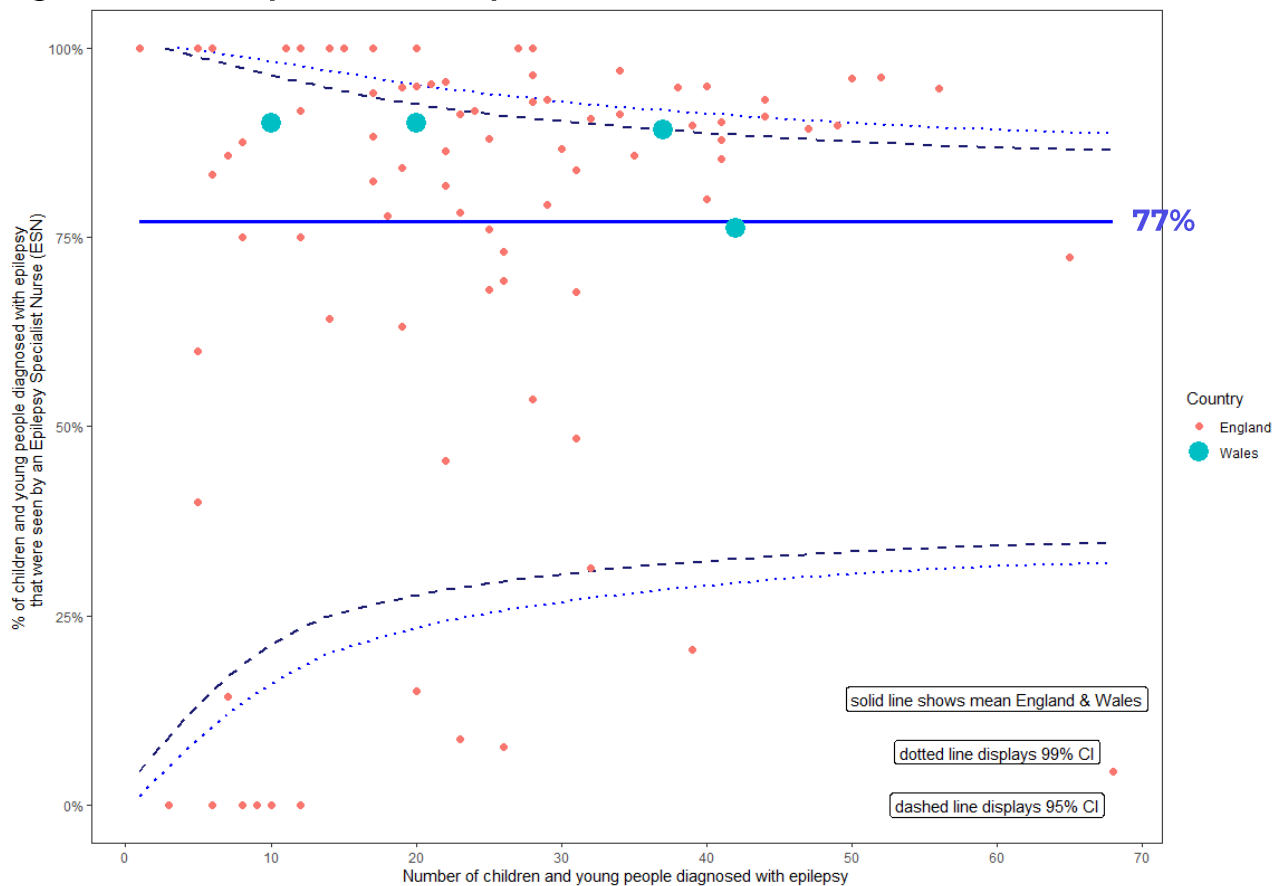


Figure 2 – Funnel Plot for Tertiary Input

