

**NHS BLOOD AND TRANSPLANT  
ORGAN DONATION & TRANSPLANTATION DIRECTORATE**

**HOSPITAL TRUST / BOARD REPORTS  
SUMMARY PDA DATA**

**1. BACKGROUND**

- 1.1 The following information is based on the hospital Trust/Board reports that were sent to Clinical Leads for Organ Donation, Chief Executives and Chairs of the Donation Committees in the UK in July 2011.
- 1.2 Data from the Potential Donor Audit (PDA) covering the financial year 1 April 2010 to 31 March 2011 were extracted from the UK Transplant Registry. Plots of referral rate, approach rate, consent/authorisation rate and conversion rate were produced for donors after brain death (DBD) and donors after circulatory death (DCD). Additionally, a plot of neurological death testing rate was produced for DBD. These graphs are shown as 'funnel plots'.
- 1.3 The data are based on PDA forms completed on or before 1 July 2011. Some information for this time period may be outstanding due to late reporting and difficulties obtaining patient notes so the results summarised in this report are subject to change. Due to the national PDA definitions, patients aged 76 years or over and those that died in a cardiothoracic ICU have been excluded from this report. Emergency Departments have been audited since 1 April 2010.

**2. DEFINITIONS**

- 2.1 The referral rate is the percentage of neurological death suspected, or imminent death anticipated, patients that were discussed with the Specialist Nurse - Organ Donation.
- 2.2 The approach rate is the percentage of potential donor families approached for consent to/authorisation for donation.
- 2.3 The consent/authorisation rate is the percentage of families approached that consented to/gave authorisation for donation.
- 2.4 The conversion rate is the percentage of potential donors that became actual DBD or DCD.
- 2.5 The neurological death (ND) testing rate is the percentage of patients for whom ND was suspected that were tested.

**3. INTERPRETING THE PLOTS**

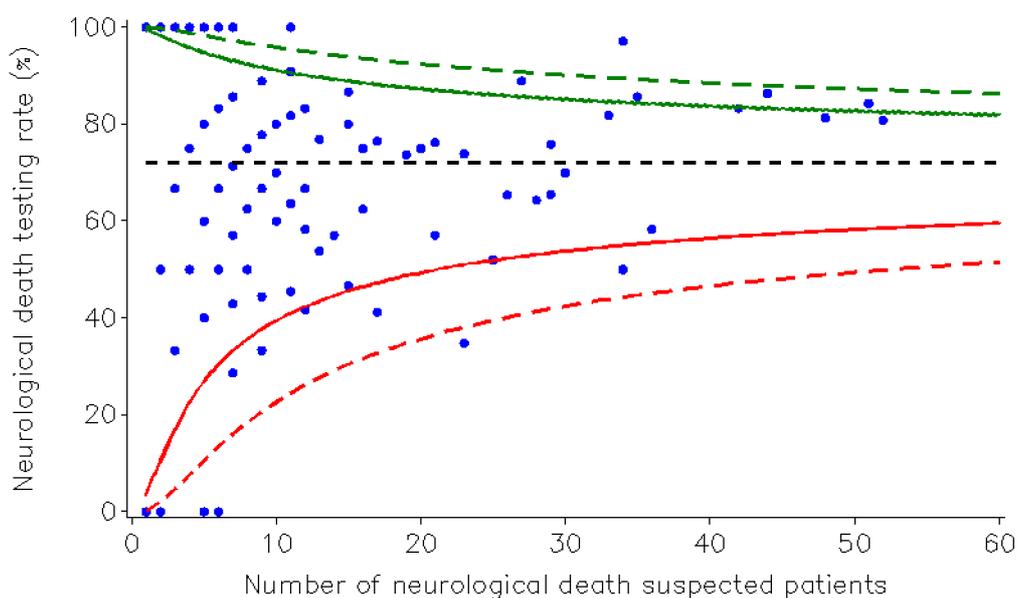
- 3.1 Each Trust/Board is represented on the plot as a dot. The national rate is shown on the plot as a horizontal dotted line, together with 95% and 99.8% confidence limits for this rate. These limits form a 'funnel', with the 95% limits shown as a solid line and the 99.8% limits shown as a dashed line. Graphs obtained in this way are known as funnel plots. One dot may represent more than one Trust/Board, for example, if two Trusts/Boards have the same number of the specified patient type and the same rate presented, only one dot will appear for the two Trusts/Boards.
- 3.2 If a Trust/Board lies within the 95% limits, then that Trust/Board has a rate that is statistically consistent with the national rate. If a Trust/Board lies outside the 95% confidence limits, this serves as an alert that the Trust/Board may have a rate that is significantly different from the national rate.

3.3 When a Trust/Board lies above the upper 99.8% limit, this indicates a rate that is significantly higher than the national rate, while a Trust/Board that lies below the lower limit has a rate that is significantly lower than the national rate. It is important to note that differences in patient mix have not been accounted for in these plots.

#### 4. HOSPITAL TRUST/BOARD FUNNEL PLOTS, 1 APRIL 10 TO 31 MARCH 11

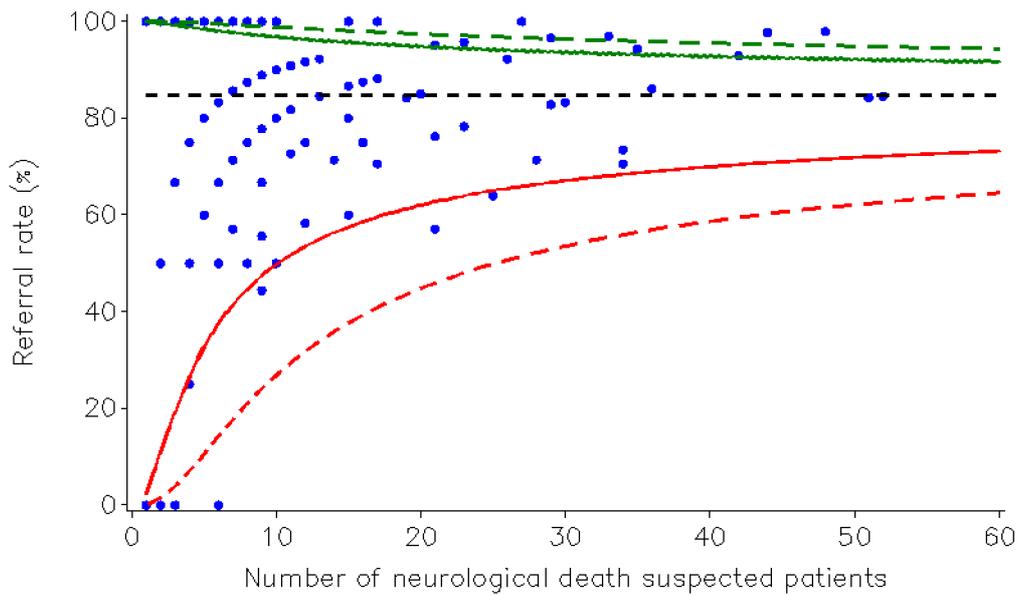
4.1 Neurological death testing rates for patients with a possible diagnosis of ND are shown in Figure 1. Of the Trusts/Boards with more than 10 ND suspected patients, one has a significantly high testing rate and another has a significantly low testing rate. Several other Trusts/Boards fall between the upper and lower 95% and 99.8% confidence limits indicating potentially high and low testing rates.

**Figure 1 ND testing rate by number of ND suspected patients**



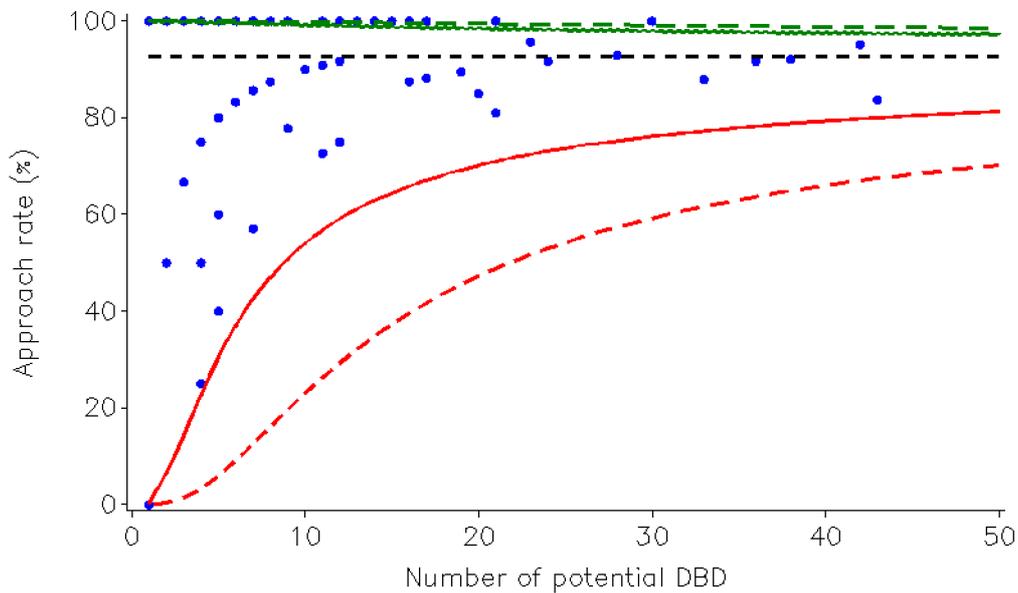
4.2 Figure 2 shows the referral rate for each Trust/Board by the number of ND suspected patients. Compared to the national average, no Trusts/Boards (with more than 10 ND suspected patients) have a significantly low referral rate, although several Trusts/Boards have a significantly high referral rate of 100%.

**Figure 2 DBD referral rate by number of ND suspected patients**



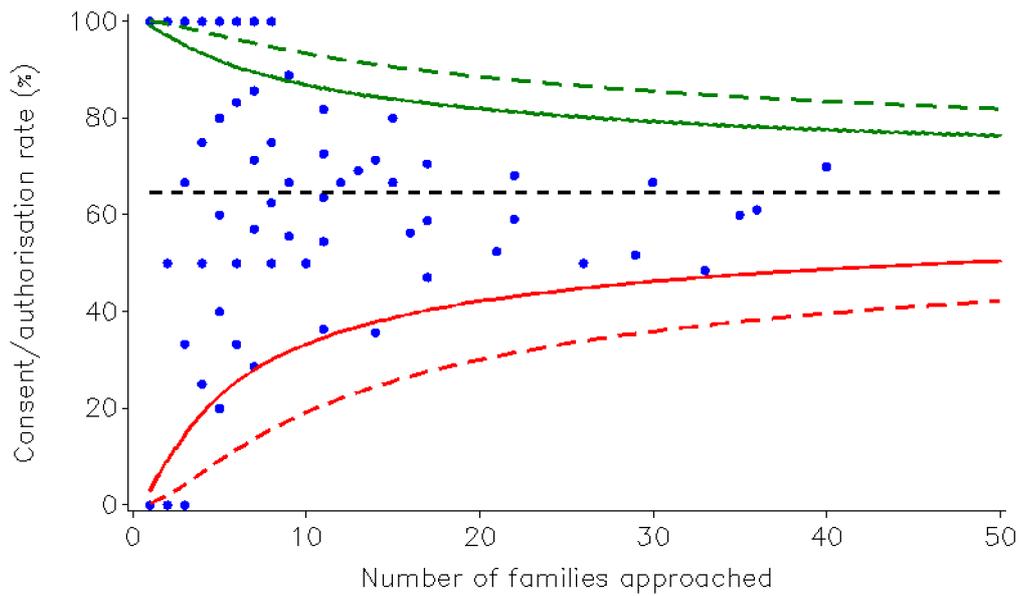
4.3 The approach rate of each Trust/Board against the number of potential DBD is shown in Figure 3. There are several Trusts/Boards that have a significantly high approach rate of 100%. No Trusts/Boards have significantly low approach rates.

**Figure 3 DBD approach rate by number of potential DBD**



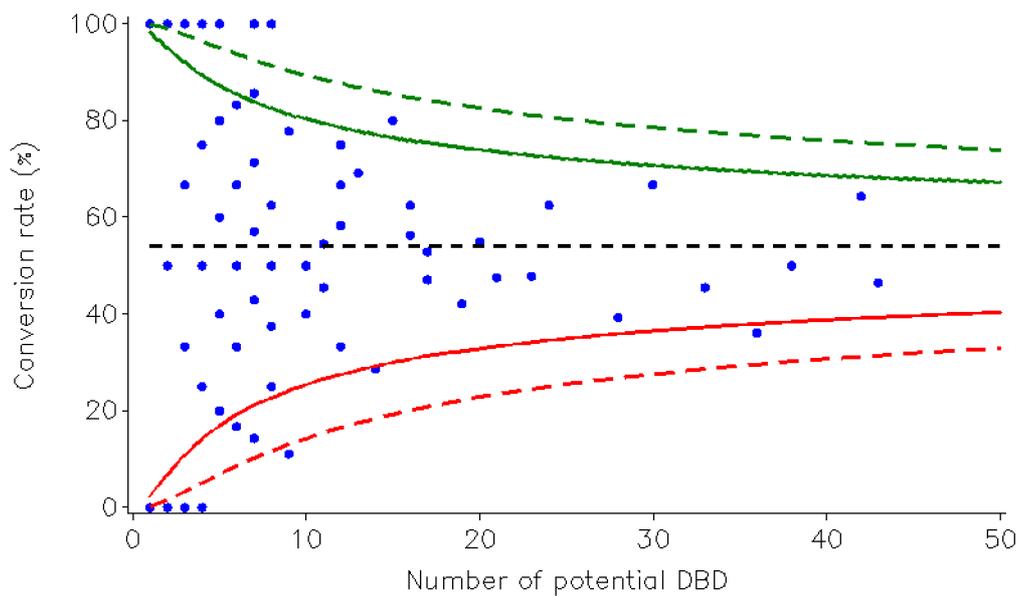
4.4 The consent/authorisation rate of each Trust/Board against the number of families that were approached for consent to/authorisation for DBD donation is shown in Figure 4. There are several Trusts/Boards that have a consent/authorisation rate that falls outside of the 99.8% confidence limits however, due to the small numbers of families approached, no conclusion can be drawn.

**Figure 4 DBD consent/authorisation rate by number of families approached**



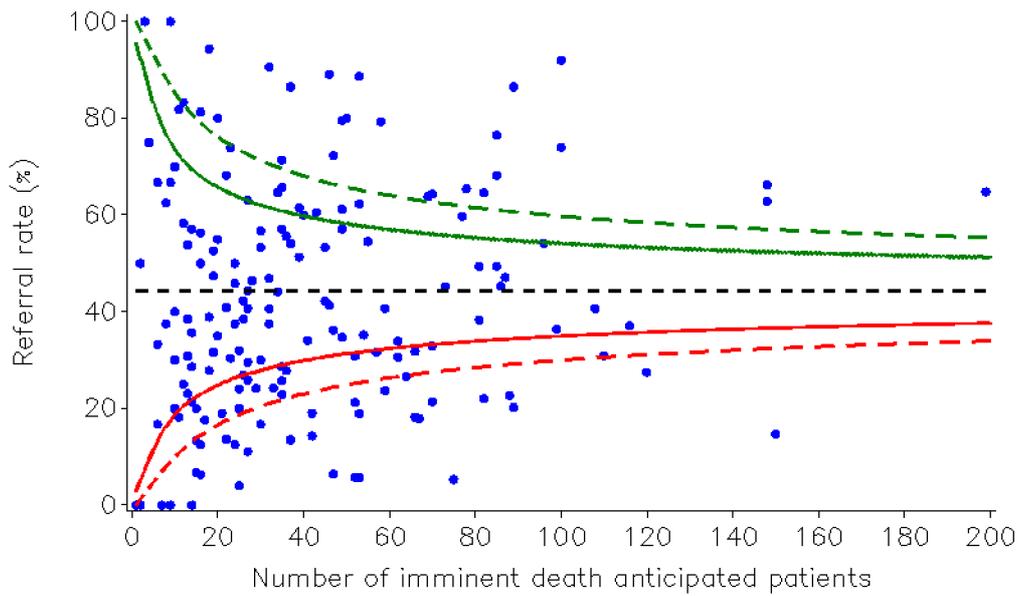
4.5 Figure 5 shows the conversion rate by the number of potential DBD for each Trust/Board. Several Trusts/Boards fall outside of the 99.8% limits however, as the numbers are small no conclusion can be drawn. One Trust/Board which had 36 potential DBD lies below the lower 95% limit indicating that their conversion rate may be significantly lower than the national rate.

**Figure 5 DBD conversion rate by number of potential DBD**



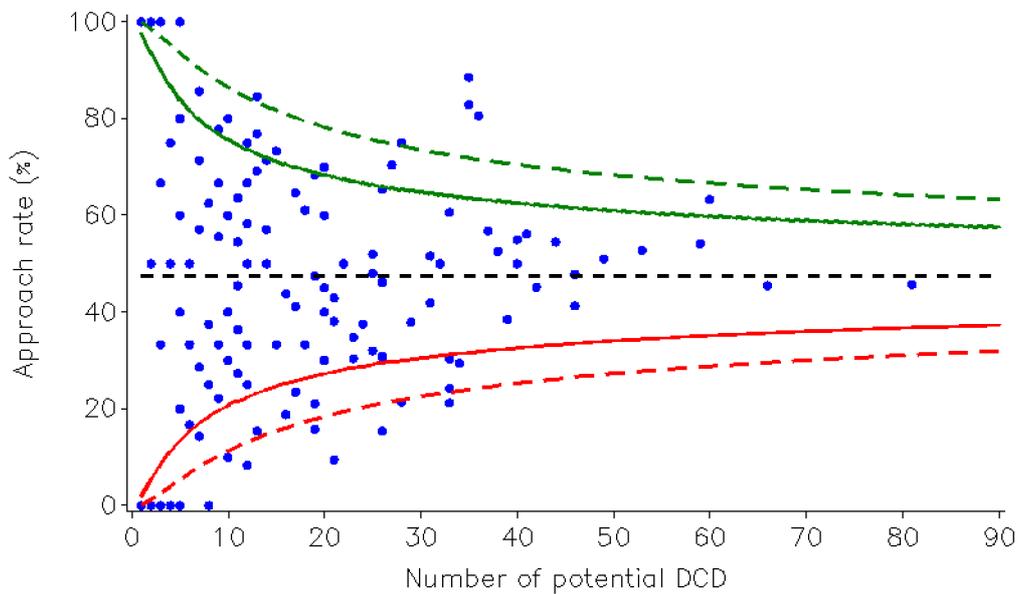
4.6 Figure 6 shows the referral rates of imminent death anticipated patients across the Trusts/Boards. There is a large amount of variation in the referral rates for the Trusts/Boards, many have significantly high referral rates and several have significantly low referral rates.

**Figure 6 DCD referral rate by number of imminent death anticipated patients**



4.7 The approach rate of potential DCD families approached for consent to/ authorisation for donation is shown in Figure 7. There are five Trusts/Boards with more than 10 potential DCD patients with significantly high approach rates. Several Trusts/Boards fall below the lower 95% confidence limit and therefore may have approach rates which are lower than the national average.

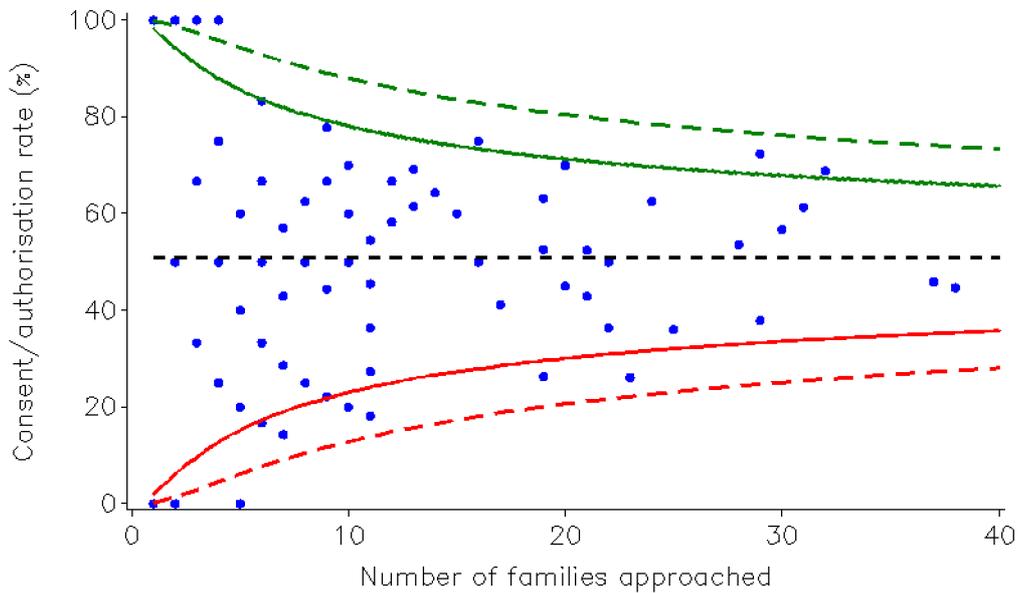
**Figure 7 DCD approach rate by number of potential DCD**



4.8 The consent/authorisation rate of families approached for consent to/ authorisation for DCD donation is shown in Figure 8. No Trusts/Boards which approached more than 10 families have significantly high or low consent/authorisation rates compared to the national average, however there are several Trusts/Boards that fall between the 95% and 99.8% confidence limits and

therefore may have significantly higher or lower testing rates than the national average.

**Figure 8 DCD consent/authorisation rate by number of families approached**



4.9 Figure 9 shows the DCD conversion rate for each Trust/Board by the number of potential DCD. Compared to the national average, several Trusts/Boards have significantly low conversion rates. Two Trusts/Boards have a conversion rate that falls between the upper 95% and 99.8% confidence limits indicating that their conversion rates may be higher than the national conversion rate.

**Figure 9 DCD conversion rate by number of potential DCD**

