NHS BLOOD AND TRANSPLANT ORGAN DONATION & TRANSPLANTATION DIRECTORATE

HOSPITAL TRUST / BOARD REPORTS SUMMARY PDA DATA

1. BACKGROUND

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 May 2014.

This report covers the 12 months from 1 April 2013 to 31 March 2014 using data from the Potential Donor Audit (PDA). Plots of referral rate, approach rate, the proportion of approaches involving a Specialist Nurse - Organ Donation (SN-OD) and consent/ authorisation 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 data are presented as 'funnel plots'.

The data are based on PDA forms completed before 12 May 2014. 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 during the time period, patients aged over 80 years and those who did not die in critical or emergency care have been excluded from this report.

2. **DEFINITIONS**

The referral rate is the percentage of neurological death suspected, or imminent death anticipated, patients who were discussed with the SN-OD.

The approach rate is the percentage of eligible donor families approached for consent to/authorisation for donation.

The SN-OD involved rate is the percentage of families approached where the Specialist Nurse - Organ Donation was involved.

The consent/authorisation rate is the percentage of families approached that consented to/gave authorisation for donation.

The neurological death testing rate is the percentage of patients for whom neurological death was suspected who were tested.

3. INTERPRETING THE PLOTS

Each Trust/Board is represented on the plot as a blue dot. The national target is shown on the plot as a pink horizontal dotted line. The national rate is shown on the plot as a black horizontal dashed 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.

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.

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 2013 - 31 March 2014

Neurological death testing rates for patients with suspected neurological death are shown in **Figure 1**. Of the Trusts/Boards with more than 10 patients with suspected neurological death, one is below the lower 95% confidence limit, but none are below the 99.8% limit. Four Trusts/Boards have a significantly high testing rate, and one is between the upper 95% and 99.8% confidence limits indicating a potentially high testing rate.

Figure 1 Testing rate by number of patients with suspected neurological death

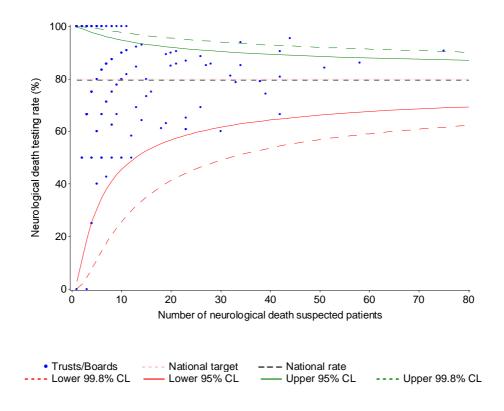
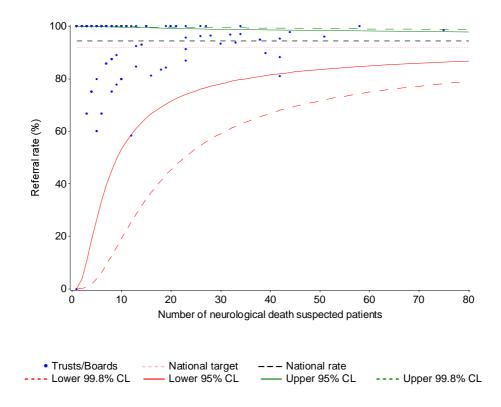


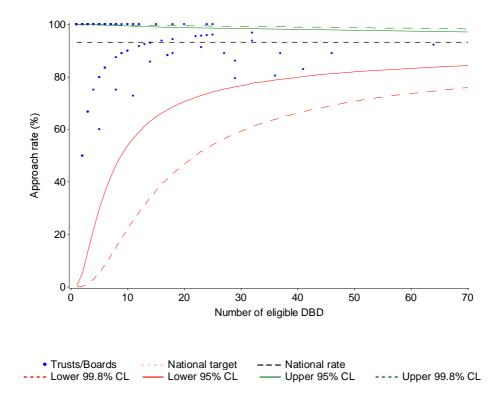
Figure 2 shows the referral rate for each Trust/Board by the number of patients with suspected neurological death. Compared with the national average, no Trusts/Boards with more than 10 patients with suspected neurological death have a significantly low referral rate, but one Trust/Board is between the lower 95% and 99.8% confidence limits, indicating a potentially low referral rate. Many Trusts/Boards have a significantly high referral rate of 100%.

Figure 2 DBD referral rate by number of patients with suspected neurological death



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

Figure 3 DBD approach rate by number of eligible DBD donors



The proportion of approaches that involved a SN-OD at each Trust/Board against the number of families that were approached for consent to/authorisation for DBD donation is shown in **Figure 4**. Of the Trusts/Boards with more than 10 families approached, several have a significantly high SN-OD involved rate, but none are significantly low. There are several Trusts/Boards that have a SN-OD involved rate between the upper 95% and 99.8% confidence limits, and between the lower 95% and 99.8% confidence limits.

Figure 4 DBD SN-OD involved rate by number of families approached

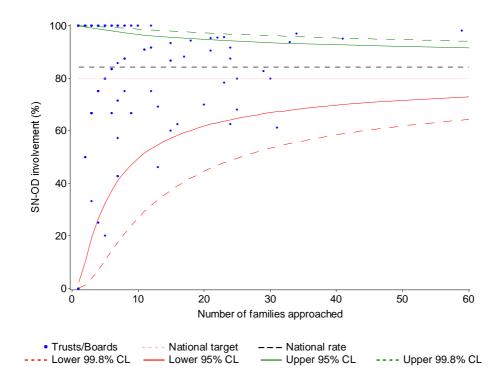
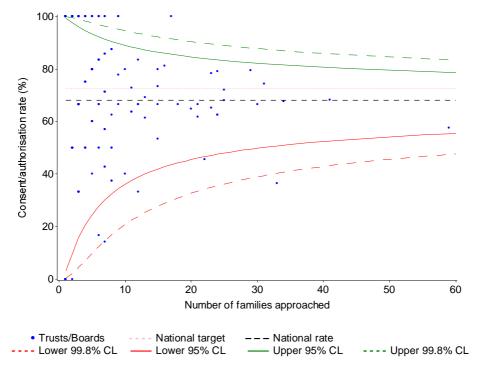


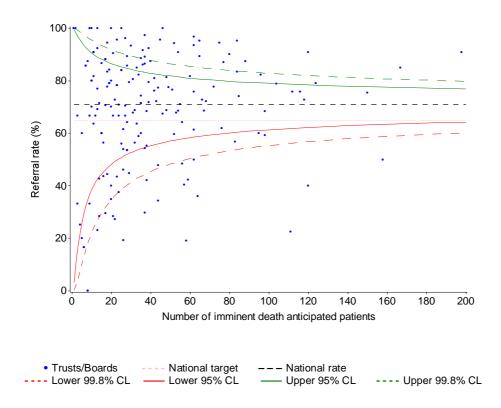
Figure 5 DBD consent/authorisation rate by number of families approached



The consent/authorisation rate for each Trust/Board against the number of families that were approached for consent to/authorisation for DBD donation is shown in **Figure 5**. Of the Trusts/Boards with more than 10 families approached, one has a significantly high consent/authorisation rate and one has a significantly low rate. There are two Trusts/Boards that have a consent/authorisation rate between the lower 95% and 99.8% confidence limits.

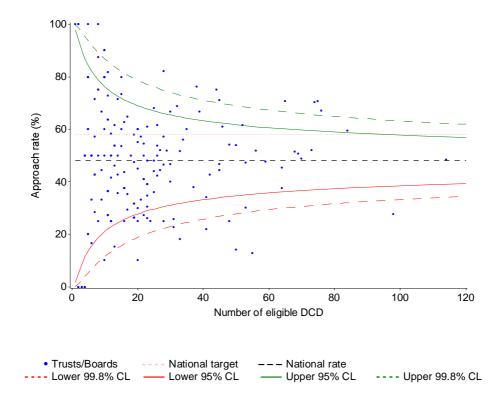
Figure 6 shows the referral rates of imminent death anticipated patients across the Trusts/Boards (ie patients receiving assisted ventilation, a clinical decision to withdraw treatment has been made and death is anticipated within four hours). There is a large amount of variation in the referral rates for the Trusts/Boards, many have significantly high referral rates and many have significantly low referral rates.

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



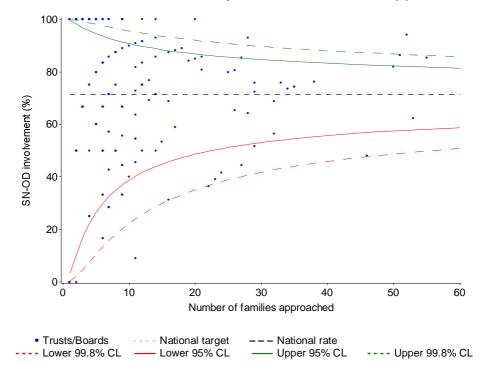
The approach rate of eligible DCD donor families approached for consent to/authorisation for donation is shown in **Figure 7**. There are several Trusts/Boards with more than 10 eligible DCD donors with signficantly high and low approach rates.

Figure 7 DCD approach rate by number of eligible DCD donors



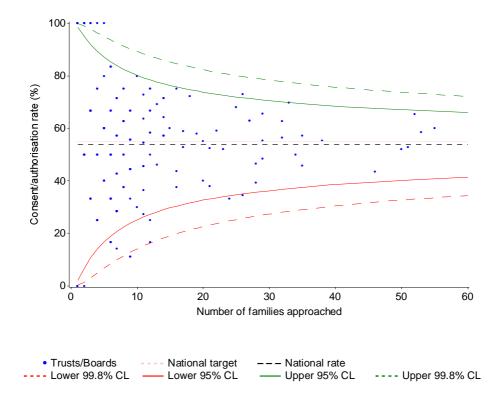
The proportion of DCD family approaches involving a SN-OD against the number of families approached for DCD donation is shown in **Figure 8**. There are several Trusts/Boards (who have approached more than 10 families) that have significantly high SN-OD involved rates compared with the national average and one with a significantly low rate. There are also several Trusts/Boards between the 95% and 99.8% confidence limits.

Figure 8 DCD SN-OD involved rate by number of families approached



The consent/authorisation rate of families approached for consent to/authorisation for DCD donation is shown in **Figure 9**. Of the Trusts/Boards that approached more than 10 families, none have a significantly high or low DCD consent/authorisation rate compared with the national average. Several Trusts/Boards are between the 95% and 99.8% confidence limits.

Figure 9 DCD consent/authorisation rate by number of families approached



Joanne Allen and William Hulme Statistics and Clinical Studies

July 2014