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 2016.

This report covers the 12 months from 1 April 2015 to 31 March 2016 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 on or before 9 May 2016. 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 80 years or over and those who did not die in critical or emergency care have been excluded from this report.

On 1 December 2015, the Human Transplantation (Wales) Act 2013 became operational in Wales, introducing new legislation for a soft opt-out system for organ donation (deemed consent). More information can be found here http://organdonationwales.org/

2. DEFINITIONS

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

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

Deemed consent applies if a person has not registered an organ donation decision to either opt-in or opt-out or appoint a representative, is aged 18 or over, has lived for longer than 12 months and is ordinarily resident and also died in Wales, and had the capacity to understand the notion of deemed consent for a significant period before their death.

The consent/authorisation rate is the percentage of families approached that consented to/gave authorisation for donation. In Wales, a family member is only able to formally consent to organ donation when the patient has not expressed a decision in life and does not meet the criteria for deemed consent. The consent rate in Wales is calculated including all expressed decisions, deemed consent and family consent.
3. INTERPRETING THE PLOTS

Each Trust/Board is represented on the plot as a blue dot, although one dot may represent more than one Trust/Board if two Trusts/Boards have the same number of the specified patient type and the same rate presented. The national target is shown on the plot as a green horizontal dashed 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’, which is shaded using the gold, silver, bronze, amber, and red (GoSBAR) colour scheme. Graphs obtained in this way are known as funnel plots.

If a Trust/Board lies within the 95% limits, shaded bronze, 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, shaded silver or amber, 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, shaded gold, this indicates a rate that is significantly higher than the national rate, while a Trust/Board that lies below the lower limit, shaded red, 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.
Neurological death testing rates for patients with suspected neurological death (ND) are shown in Figure 1. Of the Trusts/Boards with more than 10 patients with suspected neurological death, there are none that fall below the lower 99.8% confidence limit. A number of Trusts/Boards have a significantly high testing rate (gold area), and a number fall between the upper 95% and 99.8% confidence limits indicating potentially high testing rates (silver area). There are also three Trusts/Boards that fall between the lower 95% and 99.8% confidence limits (amber area) indicating potentially low testing rates.

Figure 1  Testing rate by number of ND suspected patients
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, although many Trusts/Boards have a significantly high referral rate (gold area) of 100%.

Figure 2  DBD referral rate by number of ND suspected patients
The approach rate of each Trust/Board against the number of eligible DBD is shown in Figure 3. There are several Trusts/Boards that have a significantly high approach rate of 100%. No Trusts/Boards feature in the amber or red areas indicating no significantly low DBD approach rates.

**Figure 3** DBD approach rate by number of eligible DBD
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 involvement rate (gold area), but none are significantly low (red area). There are a number of Trusts/Boards that have a SN-OD involvement rate between the upper 95% and 99.8% confidence limits (silver area), and one between the lower 95% and 99.8% confidence limits (amber area).

**Figure 4  DBD SN-OD involvement rate by number of families approached**
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 5. Of the Trusts/Boards with more than 10 families approached, two have a significantly high consent/authorisation rate (gold area). There are no Trusts/Boards with significantly low consent/authorisation rates. There are a small number of Trusts/Boards that have a consent/authorisation rate falling between the 95% and 99.8% confidence limits.

Figure 5  DBD consent/authorisation rate by number of families approached
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 many have significantly low referral rates.

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

![Referral rate (%) vs. Number of imminent death anticipated patients graph](chart.png)

- **Trusts/Boards**
- **National target**
- **National rate**

Greater than Upper 99.8% CL
Between Upper 95% CL and Upper 99.8% CL
Between Lower 95% CL and Lower 99.8% CL
Below Lower 99.8% CL
The approach rate of eligible DCD families approached for consent to/authorisation for donation is shown in **Figure 7**. There are several Trusts/Boards with more than 10 eligible DCD patients with significantly high and low approach rates.

**Figure 7**  
DCD approach rate by number of eligible DCD
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 involvement rates compared with the national average (gold area) and one with a significantly low rate (red area). There are also several Trusts/Boards that fall between the 95% and 99.8% confidence limits.

**Figure 8**  
DCD SN-OD involvement 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 Trust/Boards that approached more than 10 families, one had a significantly low consent/authorisation rate compared with the national average but none were significantly high. Also, of the Trust/Boards that approached more than 10 families, several Trusts/Boards lie between each of the upper and lower 95% and 99.8% confidence limits.

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