

## NHS BLOOD AND TRANSPLANT

### National Organ Donation Committee

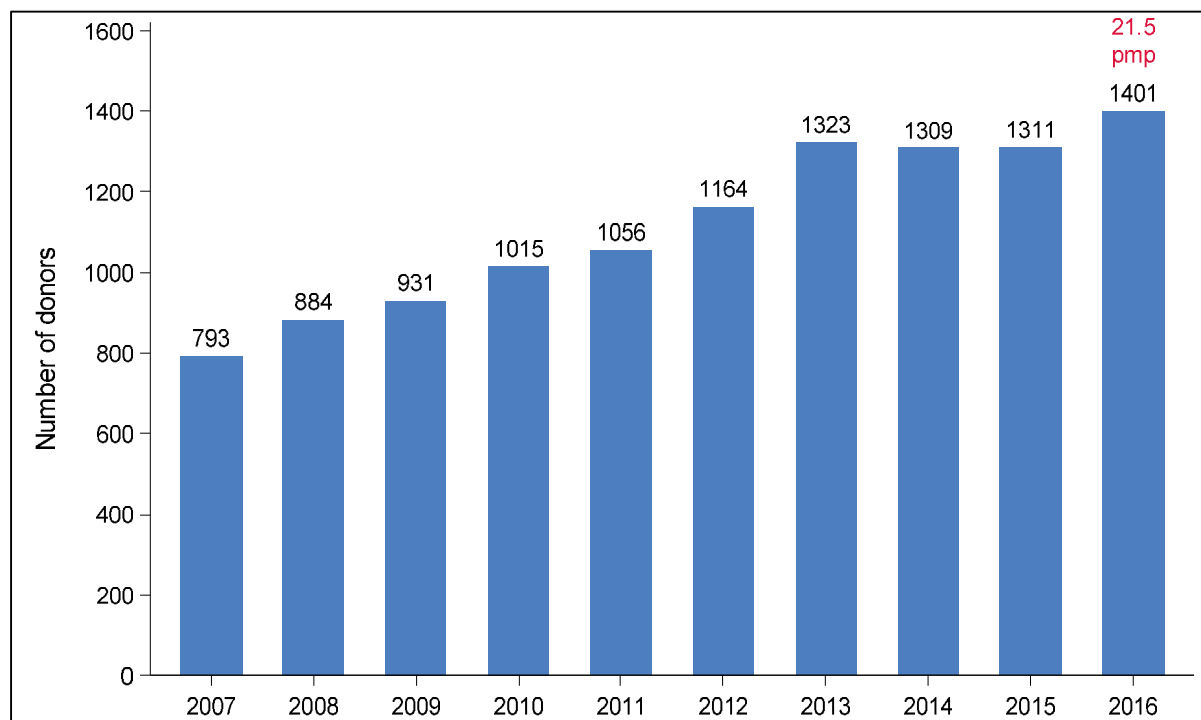
#### The impact of matching best performance across the UK

##### Background

- 1 The UK Strategy, Taking Organ Transplantation to 2020 (TOT2020), was released in 2013. Within this strategy four specific measures of success are described, one being the number of deceased organ donors per million population (pmp). This measure was recorded as 19.1 donors pmp when the strategy was released; one of the aims of the strategy was to reach 26 donors pmp by 2020.

##### Current performance

- 2 In the calendar year 2016 there were 1401 deceased organ donors equating to 21.5 donors pmp, as shown in **Figure 1**. This shows an improvement since the release of TOT2020, however this rate is still much lower than the 2020 target of 26 deceased organ donors pmp.



**Figure 1 – Deceased organ donors by calendar year, 1 January 2007 – 31 December 2016**

- 3 There are 12 Organ Donation Services Teams (ODSTs) within the UK for which performance indicators are regularly reported. There are seven key rates associated with potential deceased organ donors proceeding to become actual deceased solid organ donors. The highest performing ODST teams for each key rate are presented in **Table 1**, along with the lowest value for each rate of interest.

**Table 1 – Highest and lowest recorded performance rates,  
1 January – 31 December 2016**

| Rate                            | Highest value | ODST achieving highest value | Lowest value |
|---------------------------------|---------------|------------------------------|--------------|
| Neurological death testing rate | 95%           | Northern                     | 75%          |
| DBD referral rate               | 100%          | Yorkshire                    | 93%          |
| DCD referral rate               | 92%           | Northern                     | 77%          |
| DBD approach rate               | 97%           | South Central                | 86%          |
| DCD approach rate               | 58%           | South West                   | 30%          |
| DBD consent/authorisation rate  | 78%           | South West                   | 58%          |
| DCD consent/authorisation rate  | 68%           | South East                   | 44%          |

- 4 In addition to the rates presented in **Table 1**, there are a couple of other elements that affect the total deceased donor numbers in the UK. These are not reviewed as performance measures as they are not considered to be within the ODST's control.
- 5 The first of these is the proportion of referred donors which become eligible donors; a referred patient is screened out of the donation process if they have any absolute medical contraindications to organ donation. For the DBD process, in 2016, 83% of patients referred went on to become eligible donors and within the DCD process, 79% of patients referred became eligible donors.
- 6 The second proportion of interest is the number of eligible consented donors that become actual solid organ donors. There are a number of reasons that could be recorded why a consented donor does not proceed to donate any solid organs, for example, this could be due to medical unsuitability, positive virology, or Coroner/Procurator Fiscal refusal. In the DBD process, 90% of eligible consented patients went on to become solid organ donors whereas in the DCD process this was much lower at 54%.

### Best performance

- 7 Taking into account the values recorded in **Table 1**, and also the proportions of interest, the number of donors achieved if best performance is followed everywhere, can be calculated for both the DBD and DCD process. The number of patients that could be recorded at each stage in the donation process are calculated in **Tables 2 and 3** for DBD and DCD, respectively.

**Table 2 – Best and current performance DBD process values**

|                  | Neurological death suspected | DBD referrals | Neurological death tests carried out | Eligible DBD donors | Eligible DBDs approached | Eligible DBDs consenting | Actual DBD donors* |
|------------------|------------------------------|---------------|--------------------------------------|---------------------|--------------------------|--------------------------|--------------------|
| 2016 performance | 1754                         | 1705          | 1494                                 | 1417                | 1298                     | 883                      | 795                |
| Best performance | 1754                         | 1754          | 1666                                 | 1383                | 1342                     | 1047                     | 942                |

**Table 3 – Best and current performance DCD process values**

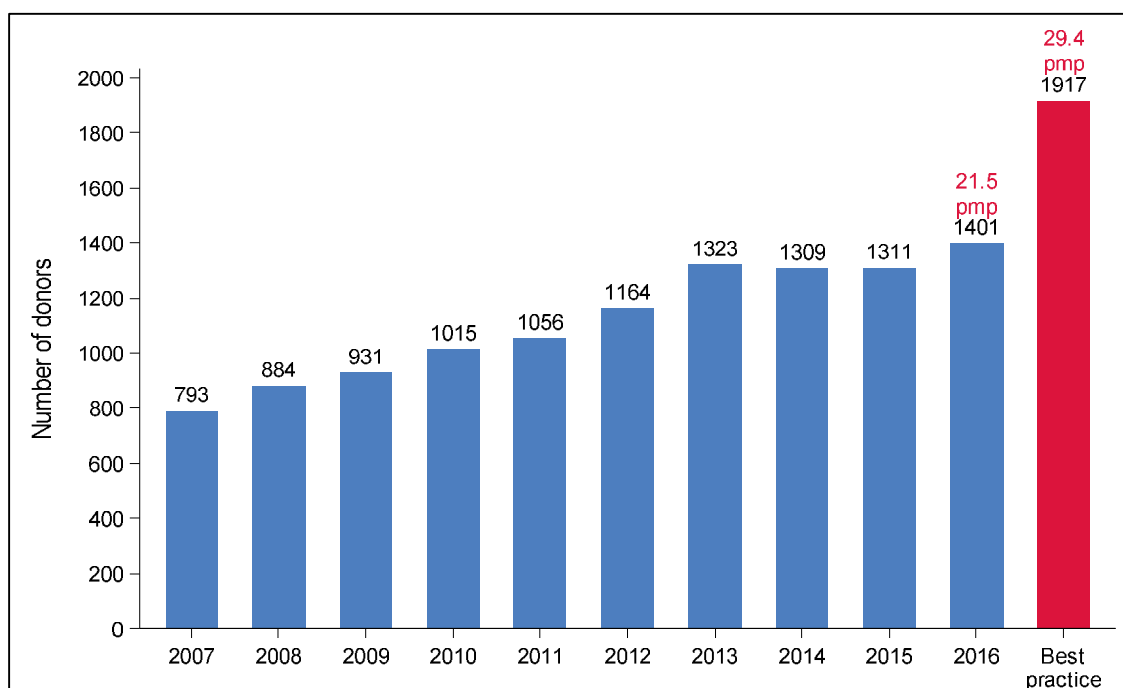
|                  | Imminent death anticipated | DCD referrals | Eligible DCD donors | Eligible DCDs approached | Eligible DCDs consenting | Actual DCD donors* |
|------------------|----------------------------|---------------|---------------------|--------------------------|--------------------------|--------------------|
| 2016 performance | 6295                       | 5386          | 4276                | 1828                     | 1082                     | 580                |

**Table 3 – Best and current performance DCD process values**

|                  | Imminent death anticipated | DCD referrals | Eligible DCD donors | Eligible DCDs approached | Eligible DCDs consenting | Actual DCD donors* |
|------------------|----------------------------|---------------|---------------------|--------------------------|--------------------------|--------------------|
| Best performance | 6295                       | 5791          | 4575                | 2654                     | 1805                     | 975                |

*\*Note that there were additional donors in 2016 that are not recorded in Tables 2 or 3 due to not falling within the inclusion criteria for the Potential Donor Audit.*

- 8 If the best performance for each rate was followed by all teams in 2016, it is estimated that there would have been 1917 deceased solid organ donors, equivalent to 29.4 deceased organ donors pmp. This is an increase of 516 donors in comparison to actual data recorded in 2016. These theoretical values far exceed the targets set out by the TOT2020 strategy.



**Figure 2 – Deceased organ donors by calendar year 1 January 2007 – 31 December 2016, including “best performance” rate based on 2016**

**Conclusion**

- 9 If all ODSTs were to match the best performance in each of the key performance indicators there would be a considerable increase in the number of deceased donor numbers in the UK and as a result the TOT2020 target for deceased donors pmp would be achievable.