

NHSBT Board
September 29 2016

Organ Donation and Transplantation Activity report 2015/16

1. Status – Public

2. Executive Summary

The *Organ Donation and Transplantation Activity Report 2015/16*, published on 1 September, showed an increase in organ donation and transplantation numbers in the UK following the drop in 2014/15. There were 1,364 deceased donors; the highest number in any financial year. 4,601 transplants were undertaken, a 4% increase in the number of transplants compared to 2014/15, made possible by the 1,364 people who donated their organs after death and 1,075 living donors.

Unfortunately living donor numbers have fallen in the last two years, to 1,075 in 2015/16. However with the introduction of longer altruistic donor chains than carried out previously in the UK, more patients have the potential to benefit from a living donor kidney transplant than ever before.

Although the figures show that more lives than ever were saved or transformed through transplantation in 2015/16, the report also reveals that more work needs to be done to support deceased organ donation.

The full report and accompanying slide set are available at www.odt.nhs.uk/uk-transplant-registry/annual-activity-report/.

3. Action Requested

The Board is asked to:

- **Note the key messages from the *Organ Donation and Transplantation Activity Report 2015/16* in the context of ‘*Taking Organ Transplantation to 2020: a UK Strategy*’.**
- **Note the new supplementary report to be read alongside this Activity Report - *Organ Donation and Transplantation data for Black, Asian and Minority Ethnic (BAME) communities*.**

4. Purpose of the paper

This paper presents a summary of key information in the *Organ Donation and Transplantation Activity Report 2015/16*, as published on 1 September 2016, for the Board’s information.

ORGAN DONATION AND TRANSPLANTATION ACTIVITY REPORT 2015/16

INTRODUCTION

2015/16 saw an increase in organ donation and transplantation numbers, with the highest number of deceased donors (1,364) ever seen in the UK. The figures, which reflect a 4% increase on the number of transplants performed in 2014/15, were reported in the *Organ Donation and Transplantation Activity Report 2015/16*, published on 1 September. 1,074¹ of the transplants were made possible by living donors who gave a kidney or part of their liver, while 3527 patients benefitted from organs donated after death.

Although the figures show more lives than ever were saved or transformed through transplantation, the report also shows that more work needs to be done to support organ transplantation through increased organ donation and utilisation.

The report provides a valuable information resource for many different audiences: NHSBT staff, clinicians involved in donation and transplantation, commissioners, the four UK Health Departments, Human Tissue Authority, the media and the public. The slide set in particular is well received by clinicians who often use them in presentations both nationally and internationally, acknowledging NHSBT and the UK's incredibly valuable Transplant Registry. The figures in this report are all from that slide set.

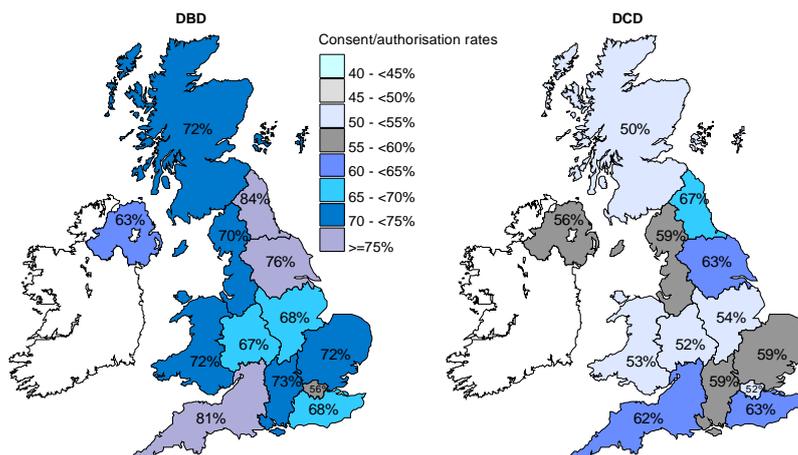
¹ One of 1075 donors donated a liver which was not transplanted due to anatomical reasons

POTENTIAL ORGAN DONORS, THE ORGAN DONOR REGISTER AND CONSENT FOR ORGAN DONATION

Data from the Potential Donor Audit reveal a positive increase in the last year in many key steps in the donation pathway. The overall referral rate of potential donors increased from 80% to 86%; the proportion of approaches involving a Specialist Nurse for Organ Donation (SNOD) increased from 78% to 83%, and the consent/authorisation rate increased from 58% to 62%. The National Institute for Health and Clinical Excellence's guidance published in December 2011: *Organ donation for transplantation: improving donor identification and consent rates for deceased donation* recognised the need for hospitals to identify all potential donors and to involve the specialist nurse in organ donation as quickly as possible. The guidance has helped drive change in practice but there is still room for improvement and efforts need to continue to address important steps to increasing donor numbers.

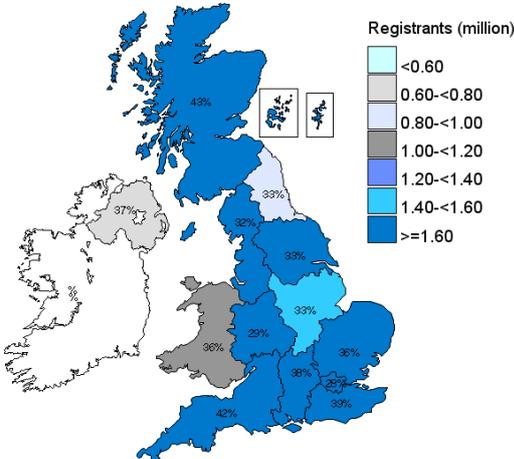
The consent rate for organ donation remains lower than targeted, at 62%. It is clear that there are regional variations in consent rates (see figure below), with the highest consent rates for donors seen in the North East (DBD: 84% compared with 69% nationally; DCD 67% compared with 57% nationally).

Consent/authorisation rates by English SHA/country, 1 April 2015 – 31 March 2016



Figures published in the Activity Report confirm that families are much more likely to agree to donation if they know it is what their loved one wanted. In contrast to the overall rate of 62% consent last year, 89% of families said yes when their relative's decision to donate was recorded via the NHS Organ Donor Register (ODR). There were just under 22.5 million names opted-in on the ODR at the end of March 2016, but again there is regional variation (see figure below). On 1 December 2015, Wales became the first UK country to introduce a soft opt-out system for organ and tissue donation. Those who have not registered a decision to opt-in or opt-out of organ donation will be treated as having deemed consent for organ donation. Since 1 December 2015, there have been 9 cases where consent was deemed and organ donation took place, out of 13 cases where deemed consent applied.

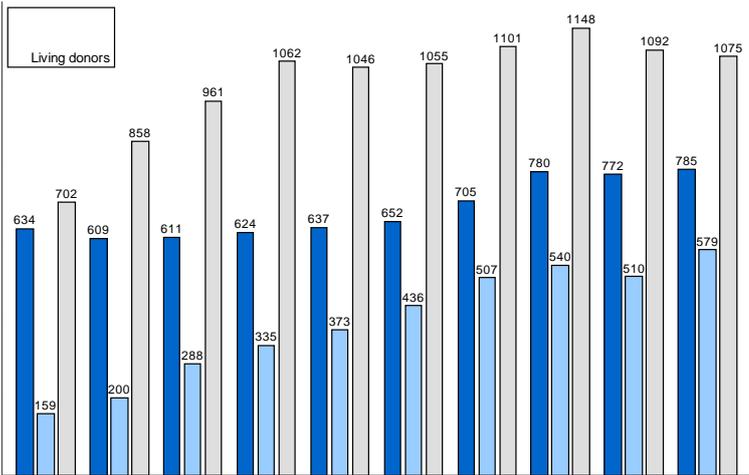
Proportion of people who opted-in on the NHS Organ Donor Register by 31 March 2016, by Strategic Health Authority



Another challenge is increasing the numbers who consent to organ donation from the black, Asian and ethnic minority (BAME) population. Patients from these communities receiving kidney transplants continue to rise, representing 28% of all kidney transplant patients, yet relatively few people from these communities give consent for organ donation. In 2015/16, the consent rate for BAME patients was almost half that of white patients. This presents real challenges for the BAME patients who make up 33% of the active kidney transplant waiting list. These issues are highlighted in the supplementary report *Organ Donation and Transplantation data for Black, Asian and Minority Ethnic (BAME) communities, 2015/16* (<http://www.odt.nhs.uk/uk-transplant-registry/annual-activity-report/>).

ORGAN DONATION

In 2015/16, 1364 people donated organs after death and there were 1075 living organ donors. Living donor numbers have fallen in the last two years but paired and altruistic living kidney donors continue to make a significant contribution (giving rise to 21% of living donor kidney transplants in 2015/16).



Most of the additional donors each year are in the older age groups. In 2006/07, only 17% of deceased donors were aged 60 years or more, compared with 36% last year. In particular, the proportion of donors aged at least 70 years has increased from 3% to 13% over this time. The changing donor demographics reflect changes in practice of transplant surgeons, who find new ways of making older and other more ‘marginal’ donor organs viable (eg donor optimisation, transplantation of double kidneys, novel methods of organ perfusion). The strategy Taking Organ Transplantation to 2020 aims to achieve a 5% increase in transplantation of organs offered from consented actual donors. This may seem a small increase, but in the face of the changing donor profile, is challenging. It is hoped that donor optimisation will have a significant impact over coming years, and certainly coupled with the cardiothoracic ‘Scout’ project, we have seen a 34% increase in the number of heart transplants in 2015/16, compared with 2012/13.

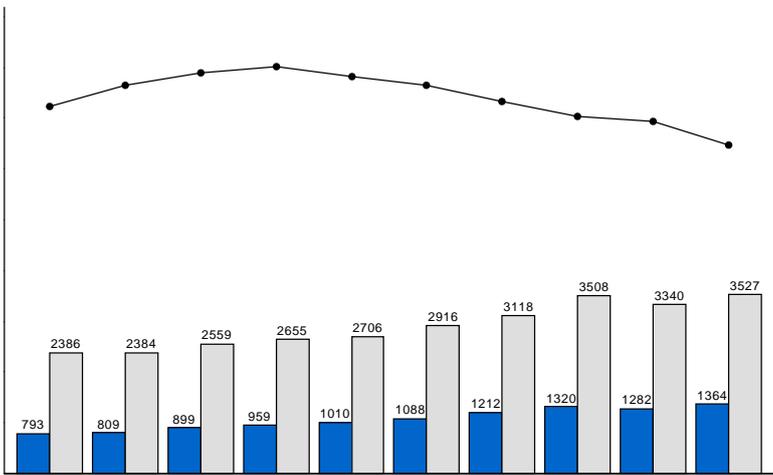
It is important to understand that while the increase in DCD donation enables more transplants, the outcomes are less certain than for DBD donor organs, with the exception of kidney transplantation. It remains very important that DBD donation is maximised as these donors provide more and better organs for transplant.

ORGAN TRANSPLANTATION

As a result of 2015/16 being a record year for deceased organ donation, a record number of transplants were also performed: 3527 deceased donor transplants and 1074 living donor transplants, giving a total of 4601.

The deceased donor transplant rate in the UK is currently 54 per million of population. The strategic aim is to increase the deceased donor transplant rate to 74 per million of population. If achieved, the lives of approximately 1500 more patients could be saved by deceased donor transplants per year, compared with the 2012/13 transplant rate.

There has been a sixth successive fall in the number of patients on the active transplant waiting list (see figure below). This largely reflects the change in the kidney transplant list which is dominant in terms of numbers. The number of patients being added to the active kidney transplant list has not increased while more are being removed after receiving a transplant. It is likely that many more patients than are being listed could benefit from a transplant and it may be that listing criteria will be relaxed if this trend continues and the shortfall in donors significantly lessens. The number of patients on the suspended kidney waiting list is increasing, however, and the NHSBT Kidney Advisory Group is investigating the reasons for this.



Despite the increasing number of people benefiting from transplantation, many people die while waiting for an organ. The Activity Report clearly shows for each waiting list the outcomes for patients at given intervals after joining the list. For example, 9% of patients

joining the liver waiting list die, or are removed due to deteriorating health (and almost certain death), within one year. This is a stark reminder of why it is so important to increase organ donor numbers.

SUMMARY AND KEY MESSAGES

Although the *Organ Donation and Transplantation Activity Report 2015/16* shows that more lives than ever were saved or transformed through transplantation last year, the report also demonstrates that patients are still dying while waiting for a suitable organ and emphasises the need for more to be done to increase organ donation and transplantation as the strategy takes us through to 2020.

POTENTIAL ORGAN DONORS AND THE ODR

- There has been an increase in overall referral rate (86%), proportion of approaches involving a Specialist Nurse – Organ donation (83%), and in consent/authorisation rate (62%)
- 17% of approaches to families of eligible donors did not include a specialist nurse in organ donation, despite evidence of a benefit of their involvement
- 38% of families approached about organ donation did not give consent/authorisation
- Consent rates are highest when the patient is on the Organ Donor Register and there are regional variations in ODR sign up
- On 1 December 2015, Wales became the first UK country to introduce a soft opt-out system for organ and tissue donation. The effect of this on number of registrations and solid organ donations will be seen in time.

ORGAN DONATION

- The deceased donor pool is changing:
 - more donors are DCD which means fewer organs for transplant with less certain outcomes (except for kidney transplantation), and
 - donors are increasingly older and transplant surgeons are seeking new ways to use the more 'marginal' organs available (eg donor optimisation, novel methods of organ perfusion)
- Living donor numbers have fallen in the last two years but paired and altruistic living kidney donors continue to make a significant contribution (giving rise to 21% of living donor kidney transplants in 2015/16).

ORGAN TRANSPLANTATION

- Transplant numbers continue to increase and the number of patients on the active transplant waiting list has fallen for the sixth successive year (to 6476 patients)
- There remains a significant shortfall of organs available for transplant and many patients die while waiting for an organ: 9% of liver patients die or are removed from the transplant list due to deteriorating health (and almost certain death) within one year and a total of 466 patients died in need of an organ and a further 881 were removed from the transplant list before an organ could be found for them.

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