# The Renal Association UK Renal Registry

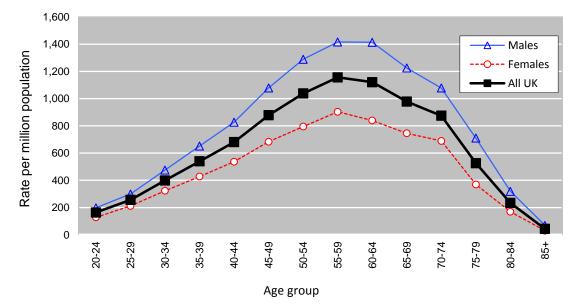


## How Many People have a Kidney Transplant in the UK in 2016?

### Plain English Summary

At the end of December 2016, 34,286 adults in the UK had a functioning kidney transplant. This group account for just over half (54%) of all adults receiving renal replacement therapy (RRT). RRT is a term used to describe treatments that take over the role of the kidneys. These are needed when a person's kidney(s) has failed. RRT treatments include dialysis (blood cleaning) and kidney transplantation.

A greater proportion of men have kidney transplants compared with women. This difference occurs across all age groups and reflects the higher rate of kidney disease in men (figure 1). The average age at transplantation has been slowly increasing, and in 2016 was 51.4 years.



#### Figure 1. Number of adults with a transplant per million population on 31<sup>st</sup> December 2016

In recent years (table 1), the number of adults with a working kidney transplant has risen by around 1,500 patients each year. This is probably due to a combination of factors such as:

- The number of transplants occurring each year has risen to and remained around 3,000
- The number of failing kidney transplants is not increasing
- Fewer patients are dying than in previous years

Patients with a new transplant in that year			Patients with a functioning transplant at the end of that year			
Fatients with a new transplant in that year			UT that year			
Year	Ν	Median age	M:F ratio	N	Median age	M:F ratio
2011	2,626	49.1	1.7	26,165	51.7	1.6
2012	2,783	50.4	1.6	27,531	52.3	1.5
2013	3,129	50.3	1.6	29,436	52.8	1.6
2014	3,032	50.6	1.5	31,025	53.3	1.5
2015	2,898	50.9	1.5	31,643	53.8	1.5
2016	2,995	51.4	1.6	33,187	54.3	1.5

#### Table 1. Number, median age and gender ratio of transplant patients 2011-16

Median= middle value in a set of numbers arranged from lowest to highest

This table excludes Cambridge which could only supply total numbers of patients and not the age or sex of patients

#### **Outcomes in kidney transplant patients**

Transplant function is measured by calculating the <u>estimated glomerular filtration rate (eGFR)</u>. This is a measure of how well the kidney is cleaning the blood. A normal eGFR is greater than 90ml/min/1.73m<sup>2</sup>; a mildly reduced eGFR is 60-90ml/min/1.73m<sup>2</sup> (CKD stage 2); a moderately reduced eGFR is between 30 and 60ml/min/1.73m<sup>2</sup> (CKD stage 3) and severely reduced is less than 30ml/min/1.73m<sup>2</sup> (CKD stage 4). A failing kidney transplant will have an eGFR of <15ml/min/1.73m<sup>2</sup> (CKD stage 5).

Looking at new and existing transplant patients together, we see that in general, transplanted kidney function appears very similar to previous years. The median eGFR in all transplant patients at the end of 2016 was 52.2ml/min/1.73m<sup>2</sup>. Of this group, approximately 13 in every 100 patients had severely reduced function (CKD stage 4) or failing transplants (CKD stage 5).

If we look at new patients who have had their kidney transplant for one year, there was a difference in the kidney function depending on the type of transplant they received. For patients who received a living donor transplant, the median eGFR was 57.2ml/min/1.73m<sup>2</sup> at one year; for patients receiving a deceased donor transplant (heart beating), the median eGFR was 52.4ml/min/1.73m<sup>2</sup> and for post-circulatory deceased donors (non-heart beating), the median was eGFR was 48.4ml/min/1.73m<sup>2</sup>.

Patients who have a kidney transplant are generally not anaemic, with only 1 in 20 patients having a haemoglobin value less than 100g/L. This tends to be in patients whose transplant is not working very well. For patients with available data, blood pressure control was poor, with only a quarter of patients achieving a normal blood pressure (less than 130/80). Given the large amount of missing data, this was difficult to interpret.

#### Cause of death in kidney transplant patients

Around one in 40 patients who had a working kidney transplant passed away during 2016 while their transplant was still functioning. As in previous years, the commonest causes of death in these patients were cancer and infection, each accounting for around one quarter of these deaths.

#### Conclusion

Although the number of people with a transplant has been increasing over time, there is still much work to be done to increase kidney donation, as many are still on the waiting list. Improving the health and well-being of kidney transplant patients, preventing loss of kidney function and timely planning for a return to dialysis, where necessary, remain important areas of care for our patients.

For the full annual report chapters, please visit <u>www.renalreg.org/reports/2017-twentieth-annual-report/</u>