

The Renal Association

UK Renal Registry



Centre Variation in Access to Kidney Transplantation (2011-2013 incident patients)

Plain English Summary

People with kidney failure can be given dialysis or a kidney transplant to replace the function of their kidneys, with the aim of keeping them alive. A kidney transplant requires an operation and strong drugs, so for some patients with kidney failure, transplantation is not recommended because it would be unsafe for them. However, for patients who are well enough to have a kidney transplant, transplantation is thought to be better than dialysis, because people with a transplant tend to live longer than those on dialysis and have an improved quality of life.

In the UK, patients can receive a transplant from:

- 1) someone who is brain dead but whose heart hasn't stopped (donor after brainstem death)
- 2) someone whose heart has stopped (donor after cardiac death), or
- 3) a living donor.

In cases 1 and 2, kidneys are allocated to people with kidney failure ("recipients") from a waiting list, using an agreed system. In case 1, the kidney could go to a patient from anywhere in the country, but in case 2, kidneys are offered to patients living nearby first, to reduce the time taken to transport the kidney. A combination of factors including recipient age, the immune 'match' of the kidney to the recipient, and the time that the recipient has spent on the waiting list are used to decide who will be offered the kidney. In case 3 (living donor), the transplant is organised by the patient's local kidney doctors along with the regional kidney transplant hospital. Before being added to the waiting list, potential recipients need to have tests to make sure they are fit to have the transplant operation. Being on the waiting list for longer increases the chance of transplantation, so getting on to the waiting list earlier gives a patient an advantage.

The purpose of the analysis was to investigate if the process of wait-listing and allocating transplants is fair, or if different treatment was available for people attending different renal centres. All patients from 71 renal centres in the UK who started dialysis or had a kidney transplant before starting dialysis between 2011 and 2013 were included.

Older patients or those with diabetes were less likely to be wait-listed. This would be expected, because such patients would be less likely to be suitable for transplantation. Older patients were also less likely to be transplanted within two years of wait-listing. Non-White patients had similar chance to be transplant wait-listed as White patients, but they were less likely to receive a transplant within two years from listing.

The percentage of patients at each renal centre who were on the waiting list two years after starting dialysis was measured and compared to the national average. Most renal centres wait-listed between four

and seven out of every ten patients aged less than 65 within two years, but around 7% of centres wait-listed fewer patients. Two years after being added to the transplant waiting list, around six out of ten patients nationwide had received a kidney transplant (from any of the donor types listed above). From our records, there was a lot of variation between renal centres in the proportion who had been transplanted by this time. Also, not all renal centres perform transplants: there are some 'non-transplanting' centres and some 'transplanting centres'. There appeared to be a higher percentage of patients wait-listed in transplanting centres compared to non-transplanting centres. Once on the waiting list, there was no difference in the percentage of patients receiving a kidney from a donor after brainstem death in transplanting centres compared to non-transplanting centres (number 1 above), but these kidneys are allocated using a national system, so this is an expected result. Receiving a kidney from the other donor types (cases 2 or 3) was more likely for recipients at transplanting centres. This might tell us that patients at non-transplanting centres are at a disadvantage.

These results suggest that there could be unfairness in the system of transplant allocation. However, the information available to make adjustments for the type of patient at each centre was not very detailed (for instance, it was not known if there were patients with multiple illnesses at some centres which could prevent transplantation). For this reason, these results may still be inaccurate. More research is needed to investigate this in more detail and a very detailed analysis has been performed as part of a national study called 'ATTOM'. The results from this analysis are being processed and should be published during 2018.

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