UK RENAL REGISTRY

SUMMARY OF ANNUAL REPORT

Analyses of adult data to the end of 2021
INTRODUCTION

This latest Summary of the UK Renal Registry Annual Report analyses data to the end of 2021 – the second year of the COVID-19 pandemic. There are some signs of recovery, but the pandemic continued to have a significant impact on both kidney services and people with kidney disease.

In 2021, prevalence - the number of people already on kidney replacement treatment (KRT) - returned to its annual pre-pandemic growth of 1.5-2.5%, increasing to 69,500 from 68,000 in 2020. More people continued to start KRT with home treatment with peritoneal dialysis (PD), though prevalence remained the same, possibly due to the return of transplantation. Increasing numbers of people starting dialysis or already on dialysis had definitive haemodialysis access with a fistula or graft in 2021 than in 2020, indicating recovery of these treatment pathways.

Incidence - or the number of people newly starting KRT - also recovered to pre-pandemic levels in 2021. However, more people (18%) presented late to their kidney centre - i.e. within 90 days of starting KRT – compared to 15.5-16.4 % during the previous five years.

In 2021 there was a 15% overall increase in the number of kidney transplants compared to 2020, but the number was still lower than in 2019 - likely due to ongoing disruption to treatment pathways and a generally more conservative approach to transplantation at a time when COVID-19 case numbers and hospital admissions remained high. In addition, fewer (6%) people received pre-emptive transplants (i.e. before they needed dialysis) compared to 8-9% before the pandemic.

In May 2023, as this report approached publication, the World Health Organization determined that COVID-19 no longer constitutes a public health emergency of international concern, but remains an established and ongoing health issue. Vaccination and novel treatments offer some reassurance, but COVID-19 is still a potential threat to people with kidney disease, many of whom have other chronic health conditions. On behalf of the Patient Council, my thanks to everyone at the UK Renal Registry for helping to keep us safe as we learn to live with our ‘new normal’.
By the end of 2021, 18 out of 68 kidney centres told us about 21,334 adults with advanced chronic kidney disease (CKD) who did not have a transplant or dialysis.

These people represent only a small proportion of all those who are receiving care from a GP or specialist for advanced CKD.

**Characteristics of people with advanced chronic kidney disease not on kidney replacement treatment reported to the UKRR in 2021**

- **CKD stage 5** (4,477 people)
  - 21%

- **CKD stage 4** (16,857 people)
  - 79%

*eGFR is a blood test that measures kidney function. In young healthy adults, this typically exceeds 90 mL/min/1.73m², but it does tend to decline with age.

**People with stage 5 CKD include those who have opted not to start dialysis when their kidneys fail, but instead have kidney care focused on symptom control and quality of life, also known as conservative care.
STARTING KIDNEY REPLACEMENT TREATMENT

Just under **8,200 adults** started kidney replacement treatment in 2021.

**Their average eGFR* was 7.0 mL/min/1.73m²**

Most people started on **in-centre haemodialysis**.

- **In-centre haemodialysis** (5,938 people) 72.6%
- **Peritoneal dialysis** (1,715 people) 21.0%
- **Transplant** (469 people) 5.7%
- **Home haemodialysis** (53 people) 0.7%

*eGFR is a blood test that measures kidney function. In young healthy adults, this typically exceeds 90 mL/min/1.73m² but it does tend to decline with age.*
ALREADY ON KIDNEY REPLACEMENT TREATMENT

Just under **69,500 adults** were on kidney replacement treatment in 2021. This includes people with kidney transplants and those on dialysis.

Most people had a **transplant**.

Characteristics of all people with a kidney transplant or receiving dialysis treatment in 2021

- **Transplant** (39,189 people) 56.4%
- **In-centre haemodialysis** (25,009 people) 36.0%
- **Peritoneal dialysis** (3,903 people) 5.6%
- **Home haemodialysis** (1,396 people) 2.0%

6/10 MALE
6/10 YEARS average age
PEOPLE WITH A TRANSPLANT

Around **39,000 adults** had a working **transplant** at the end of 2021 - almost **6 in 10** of all those on **kidney replacement treatments**.

In 2021 the number of adults who started kidney replacement treatment with a transplant varied between 0 in 10 at some centres to 3 in 10 at others.

![Bar chart showing percentage of people with a transplant by ethnicity]

**Characteristics of all people with a transplant in 2021**

- **6/10 MALE**
- **57 YEARS average age**

Around **half** of all people with a kidney transplant were not at the blood pressure target*

The average **eGFR** for a person with a transplant 1 year after transplant was **54 mL/min/1.73m²** **

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*Blood pressure target for transplant patients is below 140/90.

**eGFR is a blood test that measures kidney function. In young healthy adults, this typically exceeds 90 mL/min/1.73m², but it does tend to decline with age.
PEOPLE ON HOME HAEMODIALYSIS

Around **1,400 adults** were on **home haemodialysis** at the end of 2021, around **1 in 50** of all those on **kidney replacement treatments**.

In 2021 the number of adults who started kidney replacement treatment on home haemodialysis varied between 0 in 20 at some centres to 1 in 20 at others.

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**Characteristics of all people on home haemodialysis in 2021**

- **6/10 MALE**
- **56 YEARS average age**

- **100**
- **75**
- **50**
- **25**
- **0**

- **Black**
- **Asian**
- **White**
- **Others**
PEOPLE ON PERITONEAL DIALYSIS

Peritoneal dialysis is one of the ways a person can manage their treatment at home.

Around **3,900 adults** were on peritoneal dialysis at the end of 2021 - around **1 in 20** of all those on kidney replacement treatments.

In 2021 the number of adults who started kidney replacement treatment on peritoneal dialysis varied between 1 in 20 at some centres to 8 in 20 at others.

**Characteristics of all people on peritoneal dialysis in 2021**

- **6/10 MALE**
- **63 YEARS average age**

- **75%**
- **50%**
- **25%**
- **0%**
Most people receiving haemodialysis are treated in a kidney centre or a satellite dialysis unit.

Around 25,000 adults were on in-centre haemodialysis at the end of 2021 - around 4 in 10 of all those on kidney replacement treatments.

In 2021 the number of adults who started kidney replacement treatment on in-centre haemodialysis varied between 5 in 10 at some centres to all at others.

 Characteristics of all people on in-centre haemodialysis in 2021

- 2/3 of people dialysed for 4-5 hours per session.
- The vast majority of people dialysed 3 times per week.
Life expectancy* of people on kidney replacement treatment depends on a number of factors, for example, a person’s age and other health problems.

**Older adults** over the age of 70 years, who are on dialysis, have an average life expectancy which is about half of that of people with a kidney transplant, and about 3 times less than people of the same age in the general population. The difference in average life expectancy increases with decreasing age.

Across all age groups under 80 years, patients with a working transplant have a higher remaining life span than those on dialysis. This difference is particularly noticeable in younger people under 50 years of age.

During 2021 and the second year of the pandemic, average life expectancy* returned to almost pre-pandemic levels for those on dialysis.

There was an ongoing reduction in average life expectancy amongst younger transplant recipients.

*Life expectancy is defined as the average number of years remaining for an individual or a group of people at a given age. However, as life expectancy is calculated based on averages, a person may live for many years more or less than expected. For example, life expectancy may also be affected by other illnesses as well as kidney disease.

This analysis is based on data collected in 2021. It has been produced for this summary and it is not reported in the UKRR Annual Report.
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Kidney Patient Reported Experience Measure (PREM) reports are available from:
ukkidney.org/kidney-patient-reported-experience-measure

The UK Renal Registry Data Portals, with information on the Annual Report, are available from:
ukkidney.org/audit-research/data-portals