

Chapter 1: Summary of findings

- In 2002 the annual acceptance rate and prevalence of RRT for adults in the UK continued to increase at 101 patients per million population (p.m.p.). and 626 patients p.m.p. respectively. The annual acceptance for children is 2.0 p.m.p. Of adults, 50% of new patients were aged over 65 years.
- The number of satellite units has increased by 41% (83 to 117) since 1998, accommodating 43% of unit-based HD patients.
- The majority of units reported a wide variety of resource constraints preventing the appropriate development of services.
- Annual acceptance varied from 52 p.m.p. in Calderdale to 165 p.m.p. in Wolverhampton. Standardised acceptance ratios correlate with social deprivation and ethnicity.
- 46% of the prevalent patients had a functioning transplant. Of dialysis patients, 73% were on HD. APD increased to 26% of PD patients. All CAPD is disconnect.
- 78% of HD patients achieve a URR > 65%, a continuing improvement. High flux dialysis was used in 25% of HD patients in N Ireland compared with 12% for other UK countries.
- Improvement in Hb of dialysis patients continued. 82% of HD patients and 88% of PD patients had an Hb above the Renal Association target of 10g/dl. The European guideline of 11 g/dl was achieved in 63% of HD and 73% of PD patients.
- Serum phosphate control in dialysis patients is poor, and the variation between units is wide and significant. Only 60% of dialysis patients have serum phosphate under 1.8mmol/L. Registry data show that both poor serum phosphate control for HD or PD, and poor calcium phosphate product control, correlate with poor survival.
- In England & Wales, the combined blood pressure standard was achieved in 39% of patients pre-HD (inter unit range 14-64%), 48% of patients post-HD (range 32-67%), 32% of PD patients (range 15-55%) and 27% of transplant patients (range 12-47%). There has been no improvement in 4 years.
- Serum cholesterol levels continue to fall for RRT patients on HD or PD or with a transplant. Cholesterol levels are consistently lower in HD patients than in PD or transplant patients.
- 30% of patients are referred less than 3 months before starting RRT, and 20% less than a month prior to start of RRT. The late referral group tend to be older.
- Acceptance rates for renal replacement therapy appeared to be higher in more deprived areas. This is partly due to patients on RRT from ethnic minorities being from more socially deprived areas. Patients from the most deprived areas are younger and have more co-morbidity. Social deprivation was a significant factor associated with 1-year survival on RRT after adjusting for age and primary renal diagnosis, but it was not significant after adjusting for cardiovascular co-morbidity.
- Patients on RRT have a higher relative risk of death compared with the general population. This is more pronounced in

the young (42 fold increase) than in 80-84 year olds (4 fold).

- The UK distribution of causes of death was similar when compared with other international Renal Registries. When assessing rates of death however, UK RRT patients had significantly lower death rates in all age groups than those in the USA.
- The Renal Association has recommended HbA1c levels of <7% in ERF patients. This is only achieved in 47% of HD, 25% of PD and 33% of transplanted patients with diabetes.
- Cardio-vascular, cerebrovascular and peripheral vascular disease were more common in diabetics than in non-diabetics, $p < 0.001$. After adjusting survival for age, ethnicity, social deprivation and co-morbidity, diabetes remained a significant additional factor.
- Within the cohort of 6599 incident patients starting RRT in 27 units with good data returns, 87% were White, 7% Indo-Asian and 2% African-Caribbean. There was considerable variation in ethnicity breakdown between units from 44% White to 100%. Indo-Asian and African-Caribbean patients were significantly younger than Whites.
- The annual acceptance rate for new paediatric patients in the UK in 2002 was 9 patients per million child population. 15% of these new patients required dialysis as an emergency.
- In the paediatric population, there is a disproportionately large proportion of patients from the Asian subcontinent with 18% of Indo-Asian origin, and white (78%).
- There are significant differences in the distribution of diseases causing ERF in childhood across the ethnic groups with three autosomal recessive conditions accounting for 19.2% of all Asian patients starting RRT.
- 50% of patients with developing ERF in early life were diagnosed antenatally.
- Of paediatric patients presenting with chronic kidney disease progressing to ERF, 50% do so within two years of presentation, leaving little time for intervention with regard to growth and nutrition. For the remaining 50% there is a fall in height SDS from presentation to ERF, though this is limited to those presenting in the first 4 years of life.
- Five year survival of the paediatric ERF population is 92%, but is only 66% in those starting RRT in the first year of life.
- Of the prevalent cohort of paediatric patients, 76% have a functioning allograft, with 15% on PD and 9% on HD. Of those with functioning allografts, 81% are cadaveric.
- Each Whole Time Equivalent (WTE) consultant paediatric nephrologist was, on average, responsible for 21 paediatric RRT patients, compared to 160 adult RRT patients for each WTE consultant adult nephrologist.
- Patient survival in the UK is improving year by year: the 5 year survival is 43% overall, 64% in those under 65 and 14% in those over 65. Survival is average for Europe and better than reported figures for the USA.
- The Registry has been given permission to continue collecting the Registry data set through exemption from the Data Protection Act granted on behalf of the Secretary of State under section 60 of the Health and Social Care Act 2001.