

Chapter 1: Summary of Findings

All acronyms can be found in appendix G.

- A UK survey of CKD patients under the care of nephrologists estimates that there are about 140,000 CKD patients under the care of nephrologists from UK renal units, of whom approximately 23,000 are CKD stage 4 and 5 (not on dialysis).
- In the CKD survey the median CKD/prevalent RRT ratio was calculated as 3.7 and the median CKD stage 4 and 5/prevalent RRT ratio was 0.6.

- In 2003, the minimum estimated adult acceptance rate for RRT in the UK is 104 pmp (6,069 patients). In addition 88 children started RRT.
- Of the 2003 patient cohort, the established modality at 90 days was haemodialysis in 67.5% and peritoneal dialysis in 29.2%; only 3.3% had received a transplant.
- After 3 years, of patients first established on PD, 29% remain on PD, 23% converted to HD, 21% were transplanted and 25% had died. These results were similar in centres with both large and small PD programmes.
- The minimum estimated prevalence of RRT in the UK at the end of 2003 was 632 pmp. The local authority prevalence varies considerably from 227 to 950 pmp.
- The annual increase in prevalence in the 27 English and Welsh units participating in the Registry since 2000 is around 5%.
- In men the RRT prevalence peaked at 1,837 pmp in the 80–85 year band; this contrasts with a peak prevalence for women in the 65–74 year age band of 985 pmp.
- From 1998–2003 the median age of prevalent patients on HD increased, the median age of those on PD decreased.
- Twenty-two percent of new patients starting RRT are ≥ 75 years old and 12% of all prevalent patients are ≥ 75 years old.

- 84% of HD and 88% of PD patients had an Hb of >10 g/dl. In total, 85% of all dialysis patients achieved an Hb ≥ 10 g/dl. Only 6% of prevalent HD patients and 4% of PD patients had an Hb <9 g/dl.
- More patients were treated with EPO than in 2001 for both HD (91% vs 83%) and PD (77% vs 65%). EPO doses were higher in patients on HD (mean 9,197 units/wk; median 8,000 units/wk) than in PD (mean 5,831 units/wk; median 5,000 units/wk).
- An analysis to assess the contribution of inter-laboratory variation to the ‘between-centre performance’ indicates that there is no evidence to suggest that laboratory variation influences Registry data for serum phosphate or calcium, but there is an influence on serum albumin.
- Achievement of the phosphate target of <1.8 mmol/L is better on PD (68% of patients) compared with HD (59% of patients). Using KDOQI guidelines for calcium phosphate product (<4.4 mmol²/L²), 67% of dialysis patients achieve this target, although control is better on PD (75%) than on HD (64%).
- A lower percentage of younger dialysis patients achieved a serum phosphate <1.8 mmol/L than of the elderly age groups (<65 years – 54%, 65–74 years – 67%, ≥ 75 years – 73%; $p < 0.0001$), with the most elderly significantly the highest in achievement. Achievement of the serum calcium Standard was similar in all ages.
- Interpretation of iPTH data is complicated by large analytical differences between centres. There is large between-centre variation in the apparent ability of renal centres to achieve the RA Standard of <32 pmol/L (48% to 88%) with an average for E&W of 66%.

- Over the last 7 years there has been no significant change in systolic or diastolic blood pressure achievement.
 - Serum cholesterol continues to improve. In E&W, 77% of HD patients achieved a cholesterol <5mmol/L compared with 64% on PD and 53% of transplant patients.
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- The age adjusted (60years) survival for the 1 year after 90 day period is 86%.
 - The one year prevalent transplant patient survival was 97.5% and the prevalent dialysis patient survival was 83.4%.
 - The hazard of death does not increase with length of time on dialysis, at least in the first 6 years. The 'vintage effect' of increasing hazard of death with length of time on RRT, noted in the US, is not apparent in UK survival data.
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- Transplant function analysed by CKD stage 1–2 (eGFR <60), 3 (eGFR 30–59), 4 (eGFR 15–29) and 5 (eGFR <15), shows that these categories account for 26%, 57%, 15% and 2.7% of patients respectively. With over 17% of prevalent transplant recipients being classified as CKD stage 4–5; this has implications in the planning of services for these patients.
- In transplant patients Hb falls with decreasing eGFR, such that of the 2.7% of transplant patients with an eGFR <15ml/min, 30% had an Hb <10 g/dl and 41% <11 g/dl.
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- The increase of the paediatric ERF population has plateaued. There remains a high incidence and prevalence of ERF in South Asian children, accounted for by an increased incidence of genetic diseases with autosomal recessive inheritance.
 - Blood pressure control in the paediatric renal transplant population was sub-optimal; many were also overweight, or had hyperlipidaemia and 38% were anaemic.
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- Comparisons of national registries show that age distribution of dialysis patients in the UK and the USA is similar.
 - In the UK, history of a previous MI is found in 50% more patients starting RRT over age 65 years than in the USA. In the UK, patients starting RRT have a much higher incidence of cerebrovascular disease than the USA (18% v 12% in patients aged 75+). The incidence of peripheral vascular disease and COPD is similar in the UK and the USA, across all age bands.
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