

Chapter 6

Adults on peritoneal dialysis (PD) in the UK at the end of 2024

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Introduction

This chapter describes the population of adult patients with end-stage kidney disease (ESKD) who were receiving regular peritoneal dialysis (PD) in the UK at the end of 2024 (figure 6.1). This population comprises patients who were on PD at the end of 2023 and remained on PD throughout 2024, as well as patients who commenced/re-commenced PD in 2024. This latter group includes both incident kidney replacement therapy (KRT) patients who ended 2024 on PD and prevalent KRT patients who switched to PD from in-centre haemodialysis (ICHD), home haemodialysis (HHD) or a transplant (Tx) in 2024. Consequently, the cohort of patients receiving PD in a centre not only reflects differences in underlying population case-mix, but also differences in the rates of acceptance onto KRT, survival on PD, transplantation and haemodialysis (ICHD and HHD), and the care of patients on those other modalities, as described in other chapters of this report.

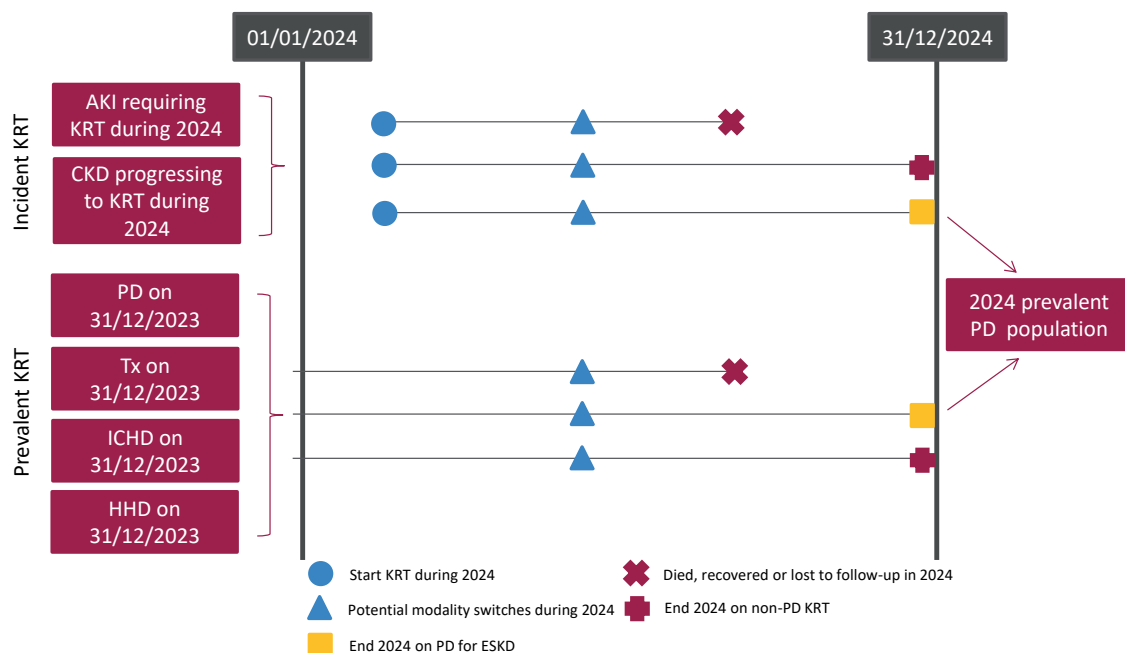


Figure 6.1 Pathways adult patients could follow to be included in the UK 2024 prevalent PD population

Note that patients receiving dialysis for acute kidney injury (AKI) are only included in this chapter if they had a timeline or KRT modality code for chronic PD at the end of 2024 or if they had been on KRT for ≥ 90 days and were on PD at the end of 2024
CKD – chronic kidney disease

The cause of death analyses were undertaken on historic prevalent cohorts to allow sufficient follow-up time.

This chapter addresses the following key aspects of the care of patients on PD for which there are UK Kidney Association guidelines (table 6.1):

- **Complications associated with ESKD and PD:** these include anaemia, mineral bone disorders and metabolic acidosis.
- **Infections associated with PD:** rates of PD peritonitis are reported in this chapter. The four infections subject to mandatory reporting to the UK Health Security Agency (UKHSA) - methicillin-resistant *Staphylococcus aureus* (MRSA), methicillin-sensitive *Staphylococcus aureus* (MSSA), *Escherichia coli* bacteraemia and *Clostridium difficile* - will be added to the UKRR data portal (ukkidney.org/audit-research/data-portals) as new data become available.

Rationale for analyses

The analyses begin with a description of the 2024 prevalent adult PD population, including the number on PD per million population (pmp).

The UK Kidney Association guidelines (ukkidney.org/health-professionals/guidelines/guidelines-commentaries) provide audit measures relevant to the care of patients on PD, and the guidelines available during 2024 were used for this audit. Where data permit, attainment of these measures by UK kidney centres in 2024 is reported in this chapter (table 6.1). Audit measures in guidelines that have been archived are not included.

Some audit measures – for example, the target for glycated haemoglobin (HbA1c) in those on hypoglycaemia-inducing treatment – cannot be reported because the completeness of the required data items is too low. Detail about the completeness of data returned to the UK Renal Registry (UKRR) is available through the UKRR data portal (ukkidney.org/audit-research/data-portals). Audit measures that cannot be reported because the required data items were not collected by the UKRR are omitted.

For definitions and methods relating to this chapter see appendix A. Centres were excluded from caterpillar plots and cells were blanked in tables where data completeness for a biochemical variable was <70% and/or the number of patients reported was <10. The number preceding the centre name in each caterpillar plot indicates the percentage of missing data for that centre.

As Colchester kidney centre did not have any PD patients they were excluded from some of the analyses, although their dialysis patients were included in the relevant dialysis population denominators.

Table 6.1 The UK Kidney Association audit measures relevant to PD that are reported in this chapter

The UK Kidney Association guideline	Audit criteria	Related analysis/analyses
CKD mineral bone disorder (2018)	Percentage of patients with serum calcium above the normal reference range of 2.2–2.5 mmol/L	Table 6.5, figure 6.3
PD (2017)	Plasma bicarbonate should be maintained in the normal reference range 22–30 mmol/L – 100%	Table 6.5, figure 6.5
Anaemia (2020)	Proportion of patients with serum ferritin <100 µg/L at start of treatment with erythropoiesis stimulating agent (ESA)	Table 6.6, figure 6.9 (the UKRR does not hold treatment with ESA start dates)
	Proportion of patients with haemoglobin 100–120 g/L	Table 6.6
Commentary on the NICE Guideline on Renal Replacement Therapy and Conservative Management (2020)	Number of patients withdrawing from PD as a proportion of all deaths on PD	Table 6.8, figure 6.13

ESA – erythropoiesis stimulating agent

Key findings

- 3,891 adult patients were receiving PD for ESKD in the UK on 31/12/2024, compared to 3,692 in 2023, which represented 5.2% of the KRT population.
- The median age of PD patients was 63.5 years and 60.9% were male.
- The median adjusted calcium for PD patients was 2.4 mmol/L and 12.2% were above the target range of 2.2–2.5 mmol/L.
- The median bicarbonate for PD patients was 24 mmol/L and 73.6% were within the target range of 22–30 mmol/L.
- The median haemoglobin for PD patients was 110 g/L and 9.6% had a ferritin <100 µg/L.
- The PD peritonitis rate in 2024 (England only) was 0.34/1 PD patient-year.
- The rate of transfer to HD amongst PD patients during 2024 was 0.29 per 1 PD patient-year.
- The leading cause of death was cardiac disease in both younger patients and those ≥65 years at 33.0% and 20.3% respectively. Treatment withdrawal accounted for 8.3% of deaths in those ≥65 years, and infection around 13.8% in younger and 15.0% in older patients.

For information on data quality issues relating to the following centres see Appendix A section 2.2: Antrim, Belfast, Cambridge, Ipswich, Manchester Royal Infirmary, and Ulster.

Analyses

Changes to the prevalent adult PD population

For the 67 adult kidney centres, the number of prevalent patients on PD was calculated as both a proportion of the prevalent patients on KRT and as a proportion of the estimated centre catchment population (calculated as detailed in appendix A).

Table 6.2 Number of adult patients prevalent to PD and proportion of adult KRT patients on PD by year and by centre; number of PD patients as a proportion of the catchment population

Centre	N on PD					% on PD					Estimated catchment population (millions)	2024 crude rate (pmp)
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024		
ENGLAND												
Bham	268	276	280	252	247	8.2	8.4	8.3	7.4	7.1	2.13	116
Bradfd	26	37	40	31	25	3.6	5.0	5.1	3.8	3.0	0.52	48
Brightn	65	68	56	63	66	6.0	6.2	5.1	5.5	5.6	1.10	60
Bristol	68	77	62	65	68	4.6	5.2	4.1	4.3	4.5	1.29	53
Camb	26	29	28	29	27	1.7	1.8	1.7	1.8	1.6	1.00	27
Carlisle	32	30	28	21	29	10.8	9.8	9.3	6.9	8.7	0.26	110
Carsh	121	132	128	125	129	6.5	6.9	6.6	6.3	6.2	1.71	76
Colchr	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.30	0
Covnt	83	80	80	73	71	7.5	7.1	7.1	6.3	6.1	0.82	87
Derby	69	67	60	65	65	10.2	9.7	8.4	8.8	8.4	0.59	111
Donc	19	13	15	21	17	5.6	3.8	3.9	5.4	4.5	0.39	44
Dorset	34	23	19	27	45	4.3	2.9	2.4	3.3	5.4	0.76	59
Dudley	32	40	30	33	36	8.6	9.9	7.8	8.9	10.0	0.36	101
EssexMS	83	92	82	115	115	9.4	10.3	9.2	11.8	11.4	1.03	112
Exeter	76	72	77	69	77	7.0	6.7	7.0	6.1	6.5	1.00	77
Glouc	30	36	30	30	43	5.7	6.6	5.4	5.3	7.5	0.53	80
Hull	57	52	56	54	62	6.2	5.7	6.0	5.6	6.4	0.82	75
Ipswi	33	34	22	15	11	7.7	8.1	5.6	3.8	2.8	0.32	34
Kent	62	72	74	57	53	5.4	6.0	6.1	4.6	4.2	1.10	48
L Barts	264	253	233	219	260	9.9	9.3	8.2	7.4	8.3	1.64	158
L Guys	64	70	47	45	45	2.8	3.0	2.0	2.0	2.0	1.02	44
L Kings	101	98	102	101	106	8.1	7.4	7.3	7.1	7.2	0.96	111
L Rfree	179	172	147	139	134	7.7	7.2	6.1	5.6	5.3	1.29	103
L St.G	49	54	62	58	61	5.7	6.2	7.2	6.6	6.7	0.68	90
L West	200	214	197	188	184	5.7	6.0	5.5	5.1	5.0	2.06	89
Leeds	64	52	54	56	72	3.7	2.9	2.9	2.9	3.6	1.43	50
Leic	121	138	151	160	179	4.6	5.2	5.5	5.7	6.1	2.21	81
Liv UH	57	56	60	55	48	3.9	3.8	4.1	3.7	3.1	1.29	37
M RI	84	96	91	101	97	4.2	4.6	4.3	4.5	4.6	1.39	70
Middlbr	28	20	23	14	13	3.0	2.1	2.4	1.4	1.3	0.83	16
Newc	46	58	43	51	55	3.8	4.7	3.4	4.0	4.3	0.97	57
Norwch	47	48	40	58	61	5.8	6.0	5.0	7.2	7.7	0.72	85
Nottm	95	103	94	88	120	7.9	8.5	7.8	7.4	9.7	0.95	127
Oxford	68	66	75	85	104	3.4	3.3	3.6	4.0	4.8	1.56	66
Plymth	33	34	45	35	38	6.1	6.3	8.3	6.5	7.0	0.42	90
Ports	101	90	106	94	101	5.3	4.6	5.3	4.6	4.9	1.81	56
Prestn	50	55	57	56	61	3.7	4.0	4.1	3.9	4.0	1.29	47
Redng	61	50	55	52	48	7.0	5.7	6.0	5.3	4.6	0.75	64
Salford	106	84	93	96	92	8.4	6.9	7.3	7.0	6.5	1.21	76
Sheff	77	80	82	70	70	5.2	5.3	5.5	4.7	4.7	1.14	61
Shrew	51	50	47	55	64	11.9	11.3	10.5	11.9	14.1	0.43	149
Stevng	25	37	43	36	38	2.6	3.6	4.0	3.2	3.3	1.17	32

Table 6.2 Continued

Centre	N on PD					% on PD					Estimated catchment population (millions)	2024 crude rate (pmp)
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024		
Stoke	95	107	107	89	87	11.6	12.7	11.8	9.7	9.5	0.76	115
Sund	32	37	36	36	44	5.8	6.8	6.4	6.1	7.0	0.55	80
Truro	23	22	16	13	16	5.2	4.8	3.4	2.8	3.5	0.37	43
Wirral	18	20	16	16	13	4.3	4.8	4.0	4.1	3.1	0.49	27
Wolve	59	64	57	62	61	9.0	9.2	7.9	7.8	7.3	0.56	108
York	24	27	40	27	31	4.2	4.6	6.6	4.4	5.1	0.50	62
N IRELAND												
Antrim	12	18	20	15	15	4.2	6.1	6.5	4.8	5.0	0.25	60
Belfast	15	27	22	23	24	1.7	3.0	2.4	2.5	2.6	0.54	44
Newry	9	13	10	8	13	3.4	4.6	3.7	2.9	4.4	0.24	54
Ulster	3	3	5	5	4	1.5	1.5	2.4	2.4	2.1	0.21	19
West NI	7	6	7	1	6	2.0	1.8	2.0	0.3	1.6	0.25	24
SCOTLAND												
Abrdn	21	19	27	21	17	3.7	3.3	4.6	3.4	2.7	0.50	34
Airdrie	29	28	25	24	31	5.6	5.6	4.9	4.4	5.7	0.47	66
D&Gall	9	7	8	8	7	5.7	4.5	5.4	5.4	4.4	0.12	57
Dundee	13	16	20	23	20	3.1	4.0	5.2	6.0	5.5	0.37	54
Edinb	32	32	38	30	24	3.6	3.5	3.9	3.0	2.3	0.86	28
Glasgw	45	38	37	29	33	2.4	2.1	2.0	1.5	1.7	1.40	24
Inverns	7	9	12	10	5	2.6	3.3	4.3	3.4	1.8	0.23	22
Klmarnk	27	33	31	32	26	7.3	9.0	8.3	8.3	6.7	0.29	88
Krkldy	5	6	12	11	11	1.7	2.1	4.2	3.8	3.9	0.28	40
WALES												
Bangor	18	12	10	10	13	8.3	5.5	4.5	4.6	5.7	0.16	81
Cardff	67	58	53	59	58	4.0	3.4	3.0	3.2	3.2	1.18	49
Clwyd	13	11	12	19	18	6.4	5.4	5.9	8.5	8.1	0.18	97
Swanse	59	49	52	43	48	6.9	5.8	6.1	4.8	5.0	0.76	63
Wrexm	24	16	20	21	29	7.5	5.3	6.5	6.4	8.6	0.21	137
TOTALS												
England	3406	3485	3,386	3,300	3489	5.9	5.9	5.6	5.4	5.5	46.50	75
N Ireland	46	67	64	52	62	2.3	3.3	3.1	2.5	3.0	1.49	42
Scotland	188	188	210	188	174	3.5	3.5	3.9	3.4	3.1	4.53	38
Wales	181	146	147	152	166	5.5	4.5	4.4	4.3	4.6	2.50	66
UK	3,821	3,886	3,807	3,692	3,891	5.6	5.6	5.4	5.1	5.2	55.02	71

Country PD populations were calculated by summing the PD patients from centres in each country. Estimated country populations were derived from publicly available sources (see appendix A for details on estimated catchment population by kidney centre)

pmp – per million population

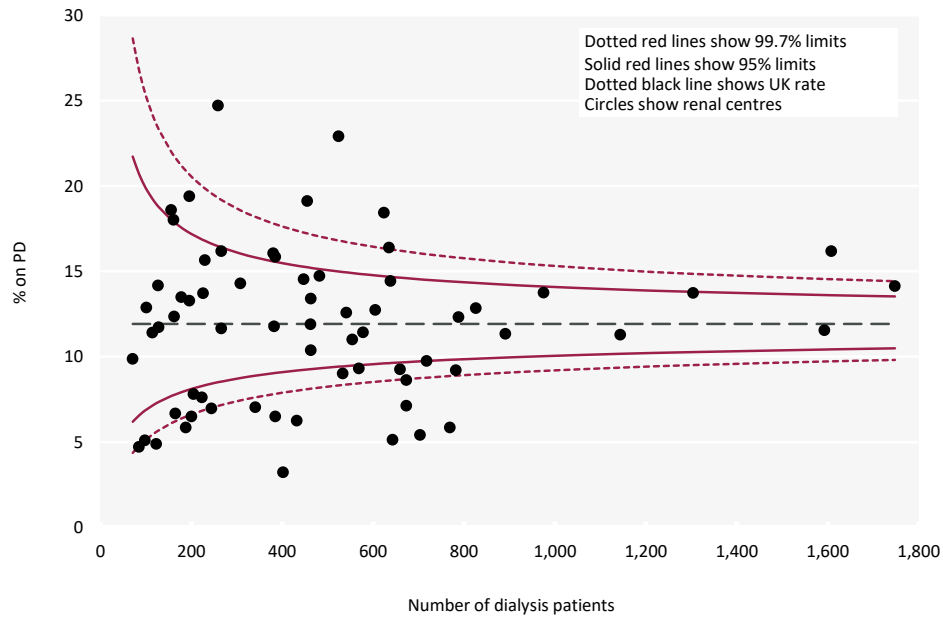


Figure 6.2a Percentage of adult patients prevalent to dialysis on 31/12/2024 who were on PD by centre

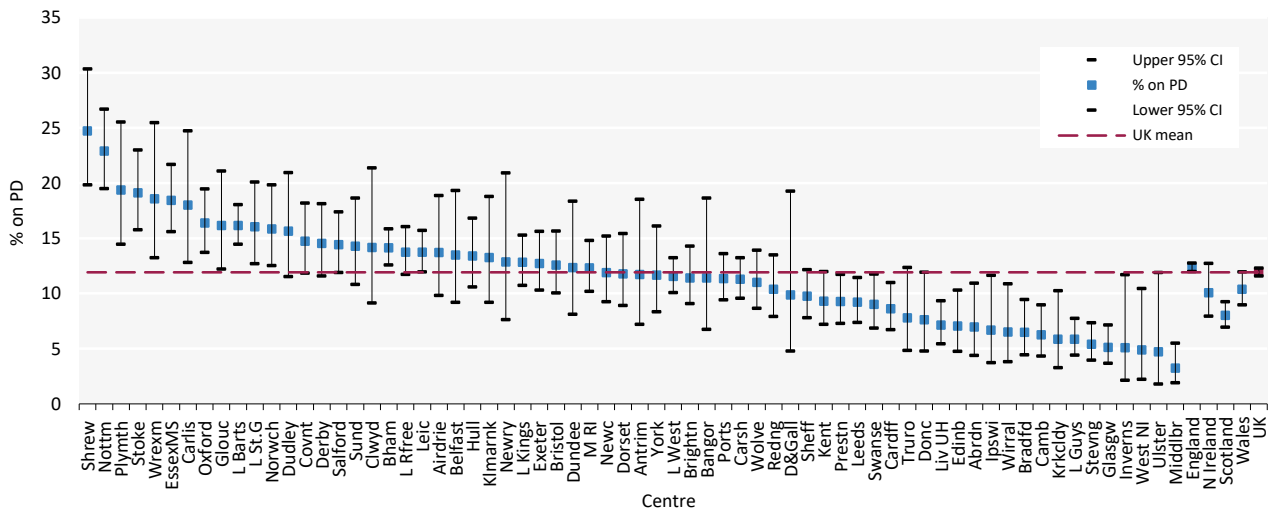


Figure 6.2b Percentage of adult patients prevalent to dialysis on 31/12/2024 who were on PD by centre
CI - confidence interval

Demographics of prevalent adult PD patients

The proportion of PD patients from each ethnic group is shown for patients with ethnicity data – the proportion of patients in each centre with no ethnicity data is shown separately.

Table 6.3 Demographics of adult patients prevalent to PD on 31/12/2024 by centre

Centre	N on KRT	N on PD	% on PD	Median age (yrs)	% male	Ethnicity				% missing
						% White	% Asian	% Black	% Other	
ENGLAND										
Bham	3,469	247	7.1	63.4	54.7	56.4	28.8	12.3	2.5	1.6
Bradfd	841	25	3.0	54.9	40.0	52.0	40.0	0.0	8.0	0.0
Brightn	1,180	66	5.6	67.1	72.7	88.7	3.2	3.2	4.8	6.1
Bristol	1,524	68	4.5	66.9	55.9	89.6	4.5	4.5	1.5	1.5
Camb	1,711	27	1.6	56.0	85.2	74.1	18.5	0.0	7.4	0.0
Carlisle	332	29	8.7	69.0	58.6	96.6	3.4	0.0	0.0	0.0
Carsh	2,088	129	6.2	65.0	62.0	67.5	22.8	8.1	1.6	4.7
Colchr	181	0	0.0							
Covnt	1,160	71	6.1	63.9	53.5	84.5	12.7	1.4	1.4	0.0
Derby	775	65	8.4	63.0	55.4	93.2	3.4	0.0	3.4	9.2
Donc	382	17	4.5	42.6	52.9	100.0	0.0	0.0	0.0	17.6
Dorset	832	45	5.4	61.1	62.2	95.6	0.0	0.0	4.4	0.0
Dudley	359	36	10.0	58.0	63.9	72.2	19.4	8.3	0.0	0.0
EssexMS	1,006	115	11.4	71.6	65.2	81.6	6.8	8.7	2.9	10.4
Exeter	1,183	77	6.5	67.7	68.8	98.7	0.0	1.3	0.0	2.6
Glouc	577	43	7.5	64.6	69.8	93.0	2.3	2.3	2.3	0.0
Hull	971	62	6.4	64.2	58.1	96.7	1.6	0.0	1.6	1.6
Ipswi	400	11	2.8	78.3	63.6	70.0	0.0	10.0	20.0	9.1
Kent	1,277	53	4.2	57.5	64.2	81.1	1.9	11.3	5.7	0.0
L Barts	3,138	260	8.3	59.9	56.9	34.3	37.0	24.4	4.3	2.3
L Guys	2,300	45	2.0	59.5	51.1	40.5	14.3	19.0	26.2	6.7
L Kings	1,472	106	7.2	60.6	69.8	35.5	15.1	43.0	6.5	12.3
L Rfree	2,533	134	5.3	62.8	60.4	30.5	28.1	17.2	24.2	4.5
L St.G	916	61	6.7	64.1	65.6	38.9	31.5	16.7	13.0	11.5
L West	3,688	184	5.0	66.0	56.0	38.0	40.2	15.8	6.0	0.0
Leeds	1,987	72	3.6	56.3	59.7	80.6	12.5	6.9	0.0	0.0
Leic	2,920	179	6.1	65.0	63.1	78.2	15.2	2.4	4.2	7.8
Liv UH	1,531	48	3.1	59.7	70.8	92.5	2.5	5.0	0.0	16.7
M RI	2,128	97	4.6	64.1	53.6	64.8	22.0	7.7	5.5	6.2
Middlbr	1,002	13	1.3	52.1	61.5	91.7	0.0	0.0	8.3	7.7
Newc	1,276	55	4.3	53.7	61.8	87.3	9.1	1.8	1.8	0.0
Norwch	797	61	7.7	65.0	75.4	88.4	9.3	0.0	2.3	29.5
Nottm	1,240	120	9.7	62.3	65.0	71.9	10.5	8.8	8.8	5.0
Oxford	2,170	104	4.8	63.7	67.3	78.6	11.9	6.0	3.6	19.2
Plymth	540	38	7.0	68.6	63.2	94.6	2.7	2.7	0.0	2.6
Ports	2,070	101	4.9	63.3	59.4					33.7
Prestn	1,512	61	4.0	64.1	63.9	82.4	13.7	2.0	2.0	16.4
Redng	1,043	48	4.6	58.0	58.3	71.4	14.3	4.8	9.5	12.5
Salford	1,408	92	6.5	61.4	46.7	82.1	13.1	1.2	3.6	8.7
Sheff	1,503	70	4.7	64.8	61.4	91.3	5.8	1.4	1.4	1.4
Shrew	453	64	14.1	66.6	70.3	93.0	1.8	1.8	3.5	10.9
Stevng	1,144	38	3.3	59.6	52.6	59.5	24.3	5.4	10.8	2.6
Stoke	913	87	9.5	62.0	63.2	92.5	3.8	1.3	2.5	8.0
Sund	627	44	7.0	67.0	56.8	95.5	2.3	0.0	2.3	0.0
Truro	455	16	3.5	67.4	43.8	93.8	0.0	0.0	6.3	0.0
Wirral	421	13	3.1	70.5	69.2	100.0	0.0	0.0	0.0	0.0
Wolve	831	61	7.3	59.9	59.0	68.3	15.0	5.0	11.7	1.6

Table 6.3 Continued

Centre	N on KRT	N on PD	% on PD	Median age (yrs)	% male	Ethnicity				% missing
						% White	% Asian	% Black	% Other	
York	613	31	5.1	63.9	80.6	96.6	0.0	0.0	3.4	6.5
N IRELAND										
Antrim	302	15	5.0	71.0	60.0					53.3
Belfast	922	24	2.6	63.7	58.3					33.3
Newry	297	13	4.4	77.5	46.2					69.2
Ulster	193	4	2.1	79.3	75.0					50.0
West NI	367	6	1.6	63.8	50.0	100.0	0.0	0.0	0.0	16.7
SCOTLAND										
Abrdn	628	17	2.7	62.2	52.9					
Airdrie	547	31	5.7	72.0	61.3					
D&Gall	159	7	4.4	69.7	14.3					
Dundee	362	20	5.5	65.8	65.0					
Edinb	1,042	24	2.3	65.5	62.5					
Glasgw	1,928	33	1.7	61.0	54.5					
Inverns	281	5	1.8	72.0	100.0					
Klmarnk	386	26	6.7	60.8	50.0					
Krkldy	282	11	3.9	58.7	90.9					
WALES										
Bangor	227	13	5.7	73.0	38.5					46.2
Cardff	1,841	58	3.2	65.3	56.9	97.7	2.3	0.0	0.0	24.1
Clwyd	222	18	8.1	67.0	77.8					50.0
Swanse	956	48	5.0	62.2	75.0	93.0	2.3	2.3	2.3	10.4
Wrexm	336	29	8.6	63.8	65.5	92.3	3.8	3.8	0.0	10.3
TOTALS										
England	62,879	3,489	5.5	63.2	60.9	70.0	16.2	8.7	5.0	6.5
N Ireland	2,081	62	3.0	65.6	56.5					45.2
Scotland	5,615	174	3.1	64.2	59.2					
Wales	3,582	166	4.6	64.5	64.5	94.6	2.3	2.3	0.8	22.3
UK	74,157	3,891	5.2	63.5	60.9	71.2	15.6	8.4	4.8	7.8

Blank cells – no data returned by the centre or data completeness <70%

Breakdown by ethnicity is not shown for centres with <70% data completeness, but these centres were included in national averages

UK ethnicity distribution and completeness does not include Scotland

Primary renal diseases (PRDs) were grouped into categories as shown in table 6.4, with the mapping of disease codes into groups explained in more detail in appendix A. The proportion of PD patients with each PRD is shown for patients with PRD data and these total 100% of patients with data. The proportion of patients with no PRD data is shown on a separate line.

Table 6.4 Primary renal diseases (PRDs) of adult patients prevalent to PD on 31/12/2024

PRD	N on PD	% PD population	Age <65 yrs		Age ≥65 yrs		M/F ratio
			N	%	N	%	
Diabetes	861	23.9	458	23.7	403	24.1	1.7
Glomerulonephritis	618	17.2	428	22.2	190	11.4	1.8
Hypertension	260	7.2	113	5.9	147	8.8	2.8
Polycystic kidney disease	292	8.1	192	10.0	100	6.0	1.0
Pyelonephritis	229	6.4	102	5.3	127	7.6	1.4
Renal vascular disease	137	3.8	37	1.9	100	6.0	2.0
Other	575	16.0	331	17.2	244	14.6	1.1
Uncertain aetiology	627	17.4	268	13.9	359	21.5	1.6
Total (with data)	3,599	100.0	1,929	100.0	1,670	100.0	
Missing	292	7.5	146	7.0	146	8.0	2.0

Biochemistry parameters in prevalent adult PD patients

The UK Kidney Association guideline on chronic kidney disease (CKD) mineral bone disease contains only one audit measure, which is the percentage of patients with adjusted calcium above the target range. The UK Kidney Association guideline on PD contains one biochemical audit measure, which is the proportion of patients with bicarbonate in the target range.

Table 6.5 Median adjusted calcium (Ca) and percentage with adjusted Ca within and above the target range (2.2–2.5 mmol/L); and median bicarbonate and percentage with bicarbonate below, within and above the target range (22–30 mmol/L) in adult patients prevalent to PD on 31/12/2024 by centre

Centre	Adjusted calcium				Bicarbonate				
	Median (mmol/L)	% 2.2-2.5 mmol/L	% >2.5 mmol/L	% data completeness	Median (mmol/L)	% <22 (mmol/L)	% 22-30 (mmol/L)	% >30 (mmol/L)	% data completeness
ENGLAND									
Bham	2.4	83.6	11.4	99.6	21	53.5	46.5	0.0	85.0
Bradfd	2.5	60.9	34.8	100.0	26	4.4	87.0	8.7	100.0
Brightn	2.4	80.3	13.1	100.0	22	47.5	52.5	0.0	100.0
Bristol	2.3	91.9	6.5	100.0	25	19.4	77.4	3.2	100.0
Camb	2.5	73.9	21.7	95.8	25	17.4	78.3	4.4	95.8
Carlisle	2.3	73.1	3.9	100.0	24	7.7	88.5	3.9	100.0
Carsh	2.3	77.0	7.1	99.1					0.0
Colchr									
Covnt	2.4	81.4	16.3	71.7	26	3.5	93.0	3.5	95.0
Derby	2.4	72.2	22.2	98.2	23	27.8	72.2	0.0	98.2
Donc	2.4	80.0	20.0	100.0	25	33.3	66.7	0.0	100.0
Dorset	2.4	94.7	5.3	100.0	22	46.0	51.4	2.7	97.4
Dudley	2.4	83.3	13.3	100.0	25	13.3	86.7	0.0	100.0
EssexMS	2.3	88.1	5.9	98.1	26	5.9	84.2	9.9	98.1
Exeter	2.3	71.9	9.4	100.0	24	21.3	78.7	0.0	95.3
Glouc	2.3	90.0	3.3	96.8	23	16.7	83.3	0.0	96.8
Hull	2.4	76.4	21.8	100.0	25	5.5	92.7	1.8	100.0
Ipswi				81.8					81.8
Kent	2.4	78.6	14.3	100.0	26	12.2	80.5	7.3	97.6
L Barts	2.4	82.5	8.1	98.1	25	14.8	81.8	3.4	97.2
L Guys	2.3	84.2	7.9	100.0	24	29.0	71.1	0.0	100.0
L Kings	2.35	68.8	10.0	94.1	23	39.2	58.2	2.5	92.9
L Rfree	2.4	75.7	19.1	100.0	24	15.7	84.4	0.0	100.0
L St.G	2.4	73.1	17.3	100.0	22	34.6	65.4	0.0	100.0

Table 6.5 Continued

Centre	Adjusted calcium				Bicarbonate				
	Median (mmol/L)	% 2.2-2.5 mmol/L	% >2.5 mmol/L	% data completeness	Median (mmol/L)	% <22 (mmol/L)	% 22-30 (mmol/L)	% >30 (mmol/L)	% data completeness
L West				24.4					23.1
Leeds	2.4	84.4	9.4	98.5	26	4.7	84.4	10.9	98.5
Leic	2.3	81.0	8.9	99.4	24	19.0	80.4	0.6	99.4
Liv UH	2.4	77.8	20.0	97.8	25	20.0	77.8	2.2	97.8
M RI	2.4	72.9	17.7	99.0	24	25.3	73.7	1.1	97.9
Middlbr	2.4	90.0	10.0	100.0	28	0.0	90.0	10.0	100.0
Newc	2.4	83.0	12.8	97.9	23	31.9	68.1	0.0	97.9
Norwch	2.4	84.3	13.7	100.0	22	46.8	53.2	0.0	92.2
Nottm	2.35	83.0	8.0	100.0					37.0
Oxford	2.2	75.7	1.4	81.4	22	49.2	49.2	1.5	75.6
Plymth	2.3	75.0	18.8	100.0	22	40.0	60.0	0.0	93.8
Ports	2.3	74.1	13.6	98.8	23	29.3	70.7	0.0	100.0
Prestn	2.4	78.4	11.8	100.0	24	18.0	82.0	0.0	98.0
Redng	2.4	87.2	5.1	100.0	23	20.5	79.5	0.0	100.0
Salford	2.4	89.2	8.4	100.0	25	14.5	84.3	1.2	100.0
Sheff	2.4	84.1	12.7	100.0	23	27.0	73.0	0.0	100.0
Shrew	2.4	76.4	16.4	100.0	23	32.7	65.5	1.8	100.0
Stevng	2.3	57.1	28.6	87.5	25	9.5	90.5	0.0	87.5
Stoke	2.45	70.0	27.5	97.6					0.0
Sund	2.4	83.8	13.5	97.4					2.6
Truro	2.3	84.6	15.4	100.0	27	0.0	100.0	0.0	100.0
Wirral	2.4	90.9	9.1	100.0	27	9.1	81.8	9.1	100.0
Wolve	2.35	92.3	5.8	94.6	22	46.2	51.9	1.9	94.6
York	2.3	91.7	0.0	100.0	27	0.0	95.8	4.2	100.0
N IRELAND									
Antrim	2.4	66.7	33.3	92.3					69.2
Belfast	2.4	61.9	33.3	100.0	25	9.5	81.0	9.5	100.0
Newry				100.0					100.0
Ulster				100.0					100.0
West NI				100.0					100.0
WALES									
Bangor				100.0					100.0
Cardff	2.4	84.4	11.1	100.0	24	15.6	80.0	4.4	100.0
Clwyd	2.4	73.3	26.7	100.0	23	33.3	66.7	0.0	100.0
Swanse	2.3	81.4	4.7	100.0	24	17.1	82.9	0.0	95.4
Wrexm	2.4	92.3	7.7	100.0	25	11.5	88.5	0.0	100.0
TOTALS									
England	2.4	80.2	12.1	93.8	24	24.9	73.2	2.0	82.8
N Ireland	2.4	66.7	25.5	98.1	24	20.8	75.0	4.2	92.3
Wales	2.4	84.6	9.6	100.0	24	17.2	81.3	1.5	98.5
E, W & NI	2.4	80.1	12.2	94.1	24	24.4	73.6	2.0	83.6

Blank cells – no data returned by the centre or <10 patients in the centre or data completeness <70%

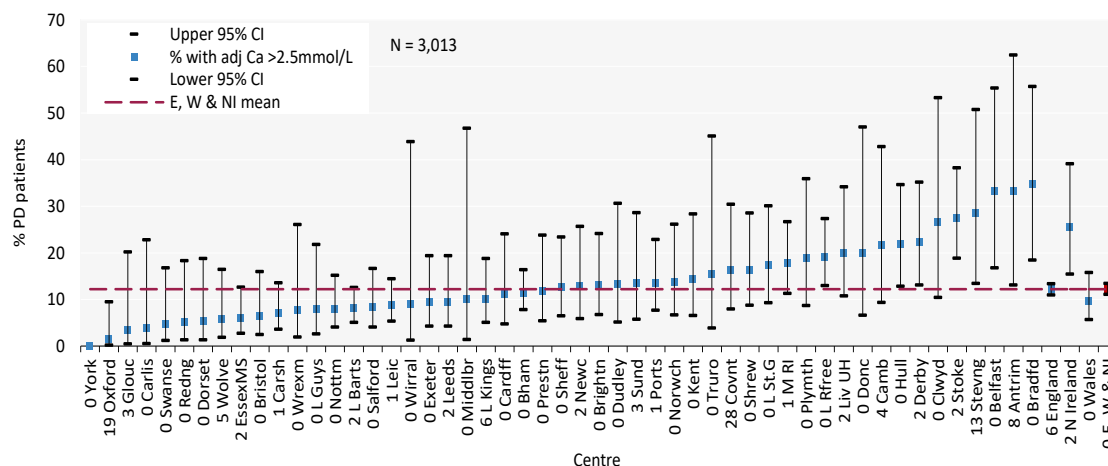


Figure 6.3 Percentage of adult patients prevalent to PD on 31/12/2024 with adjusted calcium (Ca) above the target range (>2.5 mmol/L) by centre
CI – confidence interval

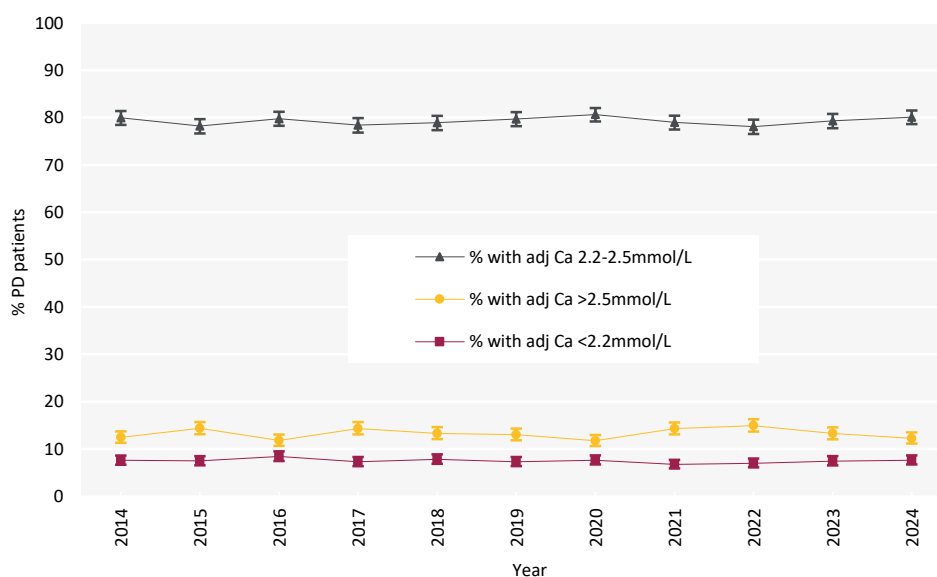


Figure 6.4 Change in percentage of adult patients prevalent to PD within, above and below the target range for adjusted calcium (Ca 2.2–2.5 mmol/L) between 2014 and 2024

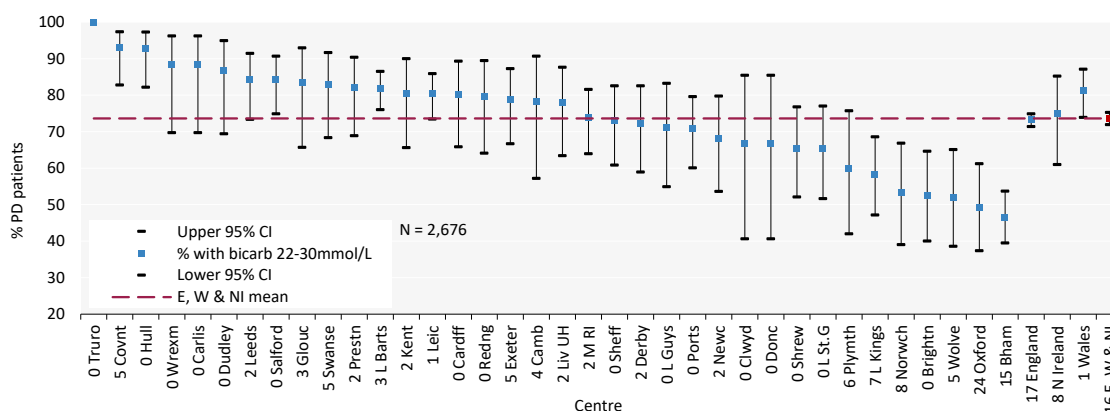


Figure 6.5 Percentage of adult patients prevalent to PD on 31/12/2024 with bicarbonate (bicarb) within the target range (22–30 mmol/L) by centre
CI – confidence interval

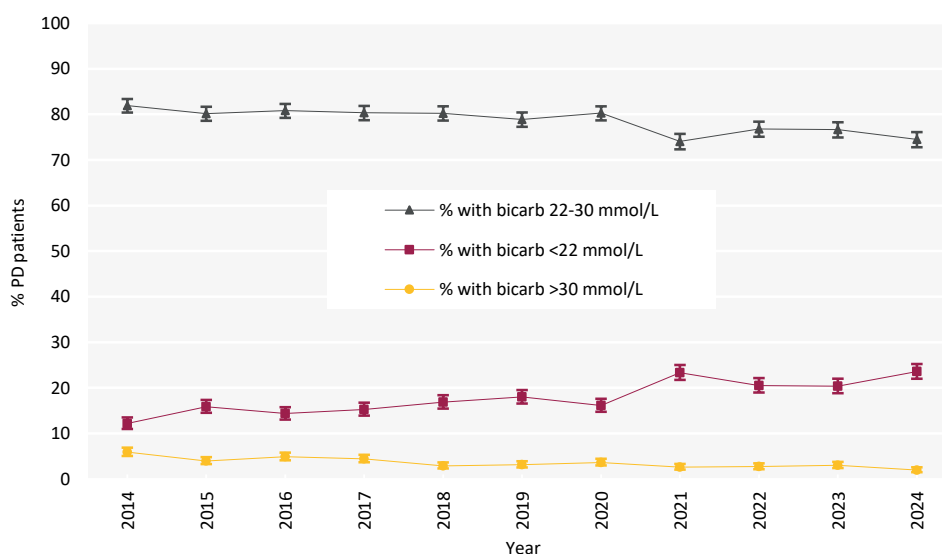


Figure 6.6 Percentage of adult patients prevalent to PD within, above and below the target range for bicarbonate (bicarb 22–30 mmol/L) between 2014 and 2024

Anaemia in prevalent adult PD patients

UK Kidney Association anaemia guidelines recommend a target haemoglobin of 100–120 g/L. Data regarding target and median haemoglobin and ferritin levels attained are presented in table 6.6.

Table 6.6 Median haemoglobin and ferritin and percentage attaining target ranges in adult patients prevalent to PD on 31/12/2024 by centre

Centre	Haemoglobin				Ferritin		
	Median (g/L)	% <100 g/L	% >120 g/L	% data completeness	Median (µg/L)	% <100 µg/L	% data completeness
ENGLAND							
Bham	109	26.9	18.7	99.6	367	6.0	98.2
Bradfd	114	21.7	34.8	100.0	348	4.3	100.0
Brightn	112	11.5	24.6	100.0	410	3.3	100.0
Bristol	113	8.1	22.6	100.0	327	6.5	100.0
Camb	107	17.4	17.4	95.8	369	0.0	95.8
Carlis	120	19.2	42.3	100.0	457	3.8	100.0
Carsh	107	33.6	13.3	99.1	263	5.3	99.1
Colchr							
Covnt	108	24.6	17.5	95.0	195	30.4	93.3
Derby	110	20.4	27.8	98.2	394	7.4	98.2
Donc	109	20.0	13.3	100.0	562	0.0	100.0
Dorset	110	7.9	21.1	100.0	283	16.7	94.7
Dudley	111	23.3	23.3	100.0	172	48.0	83.3
EssexMS	112	10.8	24.5	99.0	294	20.6	99.0
Exeter	114	12.5	29.7	100.0	252	15.9	98.4
Glouc	114	12.9	32.3	100.0	229	14.8	87.1
Hull	109	23.6	21.8	100.0	793	1.8	100.0
Ipswi				81.8			81.8
Kent	109	19.0	11.9	100.0	476	2.4	97.6
L Barts	108	24.2	20.4	98.1	289	18.4	91.2
L Guys	106	31.6	21.1	100.0	341	10.8	97.4
L Kings	106	30.4	20.3	92.9	254	12.2	87.1
L Rfree	111	22.6	25.2	100.0	679	7.0	100.0
L St.G	107	28.8	17.3	100.0	429	5.9	98.1
L West				23.8			13.1
Leeds	109	33.8	20.0	100.0	394	6.2	100.0
Leic	111	21.4	20.1	100.0	335	10.2	98.7
Liv UH	112	15.6	17.8	97.8	443	6.8	95.7
M RI	108	27.4	22.1	97.9	321	6.8	90.7
Middlbr	109	10.0	20.0	100.0	260	20.0	100.0
Newc	109	27.1	20.8	100.0	589	2.1	100.0
Norwch	113	13.7	29.4	100.0	347	12.2	96.1
Nottm	106	33.0	14.0	100.0	492	5.0	100.0
Oxford	105	30.6	9.7	83.7	326	1.4	80.2
Plymth	110	25.0	18.8	100.0	378	9.4	100.0
Ports	112	12.2	24.4	100.0	495	5.2	93.9
Prestn	114	17.6	37.3	100.0	689	6.0	98.0
Redng	112	12.8	28.2	100.0	361	7.7	100.0
Salford	110	14.5	15.7	100.0	412	10.8	100.0
Sheff	110	17.5	25.4	100.0	580	4.8	98.4
Shrew	116	9.1	20.0	100.0	274	14.5	100.0
Stevng	107	23.8	4.8	87.5	323	4.8	87.5
Stoke	109	21.3	18.8	97.6	409	1.3	96.3
Sund	116	13.5	40.5	97.4	347	18.2	86.8
Truro	106	15.4	15.4	100.0	175	30.8	100.0
Wirral	108	9.1	18.2	100.0	601	0.0	100.0
Wolve	110	21.2	30.8	94.6	244	9.8	92.7
York	111	20.8	25.0	100.0	339	8.3	100.0
N IRELAND							
Antrim	111	16.7	25.0	92.3	348	7.7	100.0
Belfast	112	9.5	33.3	100.0	387	19.0	100.0
Newry				100.0			100.0
Ulster				100.0			100.0

Table 6.6 Continued

Centre	Haemoglobin				Ferritin		
	Median (g/L)	% <100 g/L	% >120 g/L	% data completeness	Median (µg/L)	% <100 µg/L	% data completeness
West NI				100.0			100.0
SCOTLAND							
Abrdn	114	7.7	23.1	100.0			
Airdrie	109	11.5	11.5	100.0			
D&Gall				83.3			
Dundee	115	10.5	36.8	100.0			
Edinb				0.0			
Glasgw	113	15.4	23.1	100.0			
Inverns				100.0			
Klmarnk	107	13.6	27.3	95.7			
Krkldy				0.0			
WALES							
Bangor				100.0			100.0
Cardff	113	20.0	22.2	100.0	204	20.5	97.8
Clwyd	118	6.7	40.0	100.0	540	6.7	100.0
Swanse	111	14.3	19.0	97.7	377	9.5	97.7
Wrexm	113	15.4	23.1	100.0	462	0.0	100.0
TOTALS							
England	110	21.7	21.5	94.4	363	9.4	91.6
N Ireland	110	15.7	23.5	98.1	391	13.5	100.0
Scotland	113	13.8	25.0	78.9			
Wales	113	16.3	22.2	99.3	377	11.2	98.5
UK	110	21.1	21.7	94.0	365	9.6	92.1

Blank cells – no data returned by the centre or <10 patients in the centre or data completeness <70%
Ferritin total for UK represents E, W and NI only

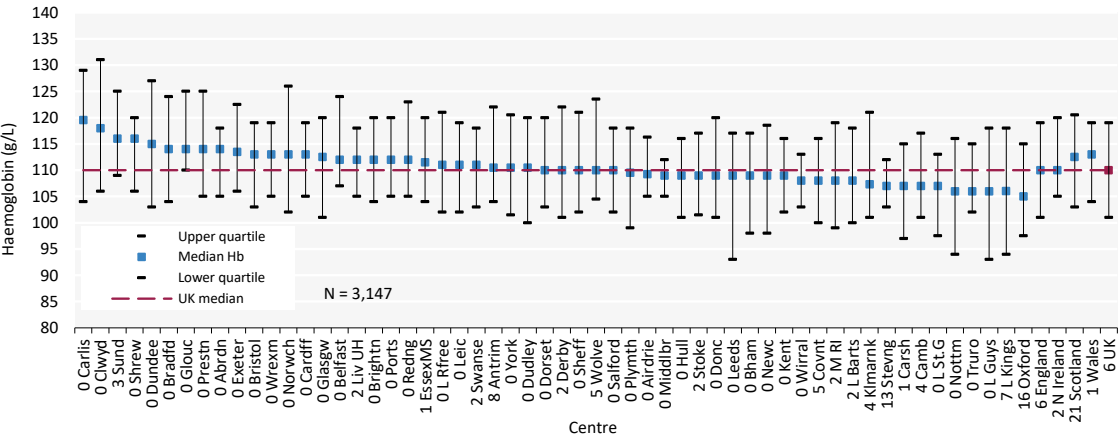


Figure 6.7 Median haemoglobin (Hb) in adult patients prevalent to PD on 31/12/2024 by centre

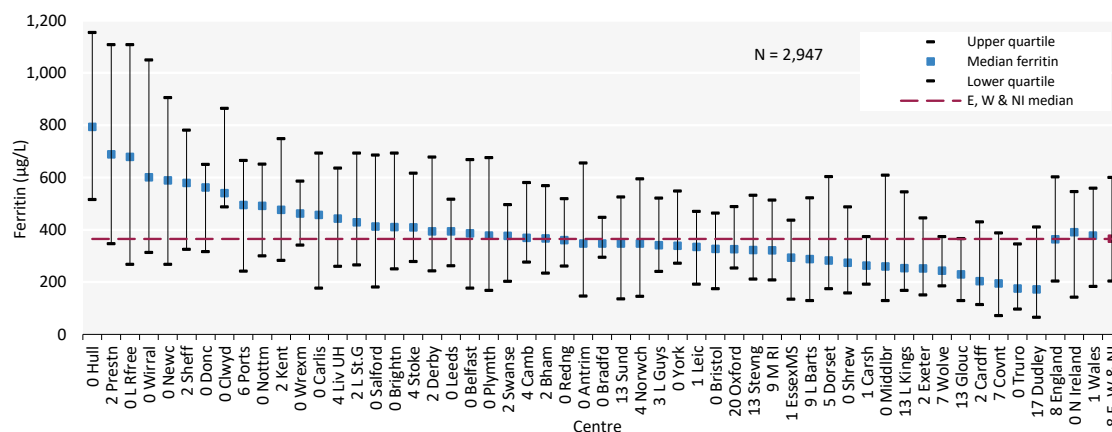


Figure 6.8 Median ferritin in adult patients prevalent to PD on 31/12/2024 by centre

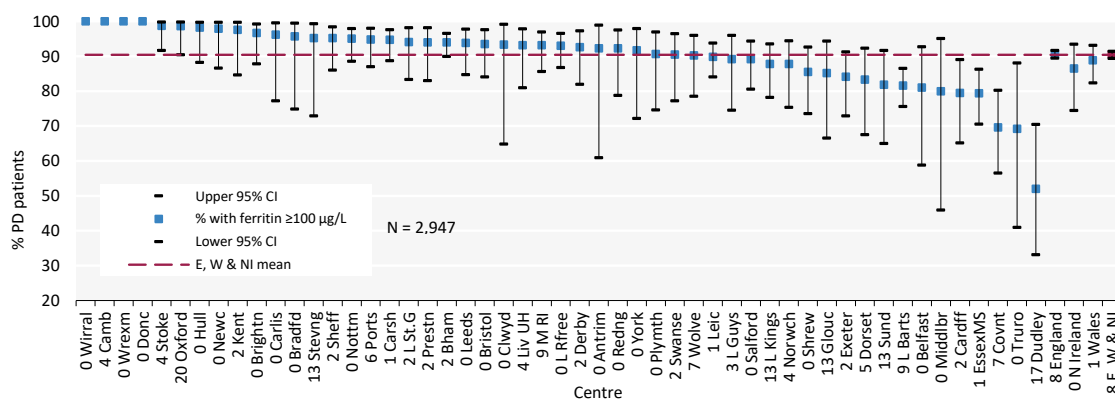


Figure 6.9 Percentage of adult patients prevalent to PD on 31/12/2024 with ferritin ≥ 100 $\mu\text{g/L}$ by centre

CI – confidence interval

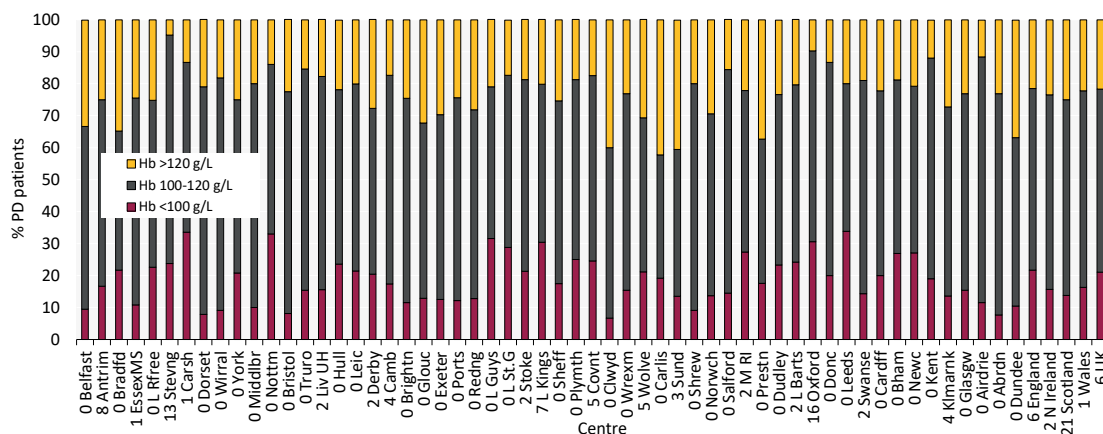


Figure 6.10 Distribution of haemoglobin (Hb) in adult patients prevalent to PD on 31/12/2024 by centre

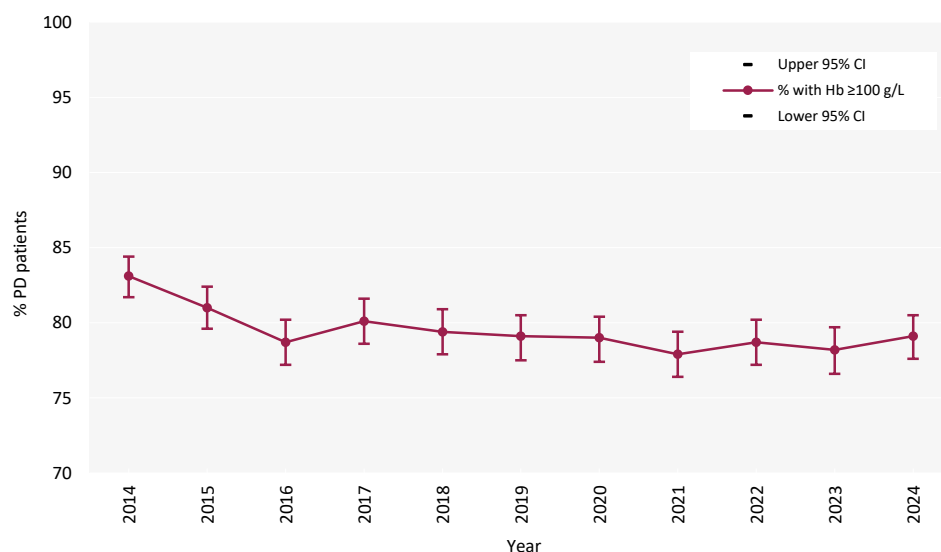


Figure 6.11 Percentage of adult patients prevalent to PD with haemoglobin (Hb) ≥ 100 g/L between 2014 and 2024
CI – confidence interval

Peritonitis in adult PD patients

PD peritonitis infection rates are collected for English kidney centres by the UKRR in collaboration with NHS England for the Renal Dialysis Quality Dashboard (ukkidney.org/audit-research/data-permissions/data/ukrr-nhs-england-quality-dashboard-dataset) and are listed in the table below. The funnel plot (figure 6.12) shows each centre's 2024 peritonitis rate per one PD patient-year against the number of patient-years at risk to take into account the greater variation expected as centre size decreases.

Table 6.7 Number of patient-years and peritonitis rate in adult patients receiving PD in 2024 by centre in England

Centre	PD patient years	Peritonitis rate per 1 PD patient year
Bham	277	0.43
Bradfd	28	0.36
Brightn	68	0.18
Bristol	75	0.35
Camb	40	0.33
Carlis	18	0.11
Carsh	133	0.16
Covnt	69	0.29
Derby	70	0.52
Donc	20	0.31
Dorset	38	0.34
Dudley	32	0.38
EssexMS		
Exeter	72	0.26
Glouc	58	0.40
Hull	60	0.40
Ipswi	33	0.12
Kent	54	0.33
L Barts	229	0.46
L Guys	43	0.35
L Kings		
L Rfree	138	0.29

Table 6.7 Continued

Centre	PD patient years	Peritonitis rate per 1 PD patient year
L St.G	60	0.35
L West	186	0.26
Leeds	68	0.32
Leic	122	0.70
Liv UH	52	0.31
M RI	99	0.36
Middlbr	12	0.25
Newc	54	0.37
Norwch		
Nottm	110	0.52
Oxford	95	0.36
Plymth	41	0.07
Ports	100	0.27
Prestn	53	0.55
Redng	51	0.59
Salford	93	0.15
Sheff	68	0.06
Shrew	68	0.40
Stevng	47	0.40
Stoke	88	0.26
Sund	46	0.15
Truro	16	0.19
Wirral	19	0.11
Wolve	60	0.35
York	28	0.18
TOTAL		
England	3,189	0.34

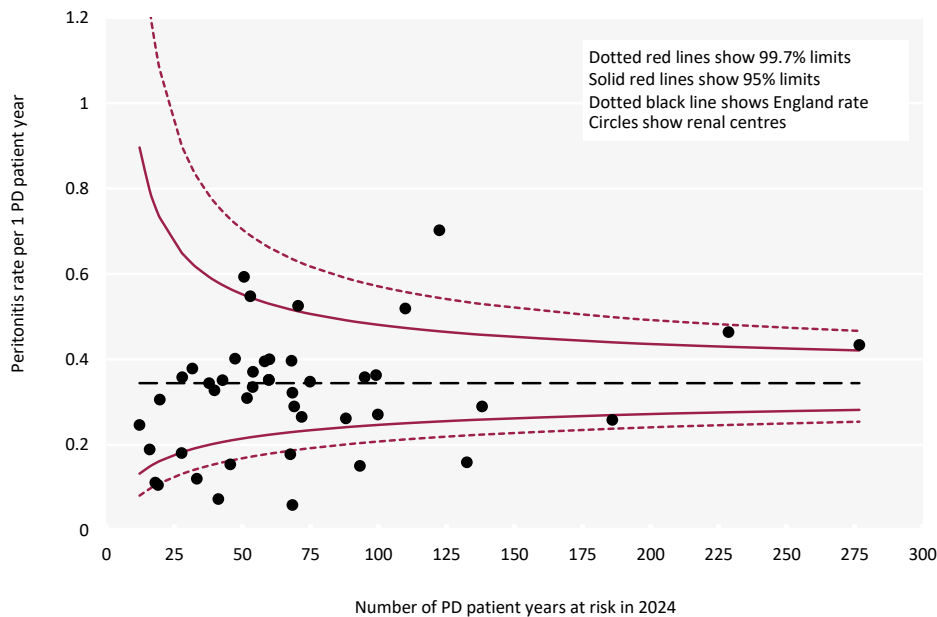


Figure 6.12 PD peritonitis rates in adult patients receiving PD in 2024 per 1 PD patient-year by centre in England
Please visit the UKRR data portal (ukkidney.org/audit-research/data-portals) to identify individual kidney centres

Rate of transfer to HD amongst adult PD patients

The rate of transfer from PD to HD was calculated as number of HD starts of any duration in patients that were receiving PD during 2024, see Appendix-A section 7.6 for details on method. Note that the PD patient years shown in Table 6.8, calculated using the UKRR patient-level data, can be different from what is shown in Table 6.7, which is obtained from the aggregate data of the Renal Dialysis Quality Dashboard. The funnel plot (figure 6.13) shows each centre's 2024 rate of HD per one PD patient-year against the number of patient-years at risk to take into account the greater variation expected as centre size decreases.

Table 6.8 Number of PD patient-years and rate of transfer to HD in adult patients receiving PD in 2024 by centre

Centre	PD patient years	N PD patients transferring to HD	HD rate per 1 PD patient year
ENGLAND			
Bham	236.6	60	0.25
Bradfd	28.3	9	0.32
Brightn	67.9	27	0.40
Bristol	65.4	28	0.43
Camb	27.5	6	0.22
Carlis	27.2	5	0.18
Carsh	127.5	24	0.19
Colchr			
Covnt	66.5	21	0.32
Derby	58.3	13	0.22
Donc	18.1	12	0.66
Dorset	36.0	9	0.25
Dudley	31.4	9	0.29
EssexMS	112.3	22	0.20
Exeter	70.8	15	0.21
Glouc	32.9	11	0.33
Hull	57.5	19	0.33
Ipswi	13.1	2	0.15
Kent	56.3	24	0.43
L Barts	227.1	75	0.33
L Guys	41.1	12	0.29
L Kings	101.5	27	0.27
L Rfree	138.1	24	0.17
L St.G	57.3	18	0.31
L West	187.3	35	0.19
Leeds	65.9	17	0.26
Leic	163.0	51	0.31
Liv UH	51.7	18	0.35
M RI			
Middlbr	13.0	3	0.23
Newc	51.0	11	0.22
Norwch	56.5	19	0.34
Nottm	106.0	25	0.24
Oxford	92.1	26	0.28
Plymth	33.3	5	0.15
Ports	98.3	39	0.40
Prestn	51.0	24	0.47
Redng	47.3	21	0.44
Salford	90.2	13	0.14
Sheff	63.8	20	0.31
Shrew	57.1	18	0.32
Stevng	36.7	23	0.63
Stoke	87.7	14	0.16
Sund	43.0	12	0.28
Truro	15.3	4	0.26

Centre	PD patient years	N PD patients transferring to HD	HD rate per 1 PD patient year
Wirral	14.3	4	0.28
Wolve	62.9	21	0.33
York	28.3	10	0.35
N IRELAND			
Antrim	14.2	2	0.14
Belfast	21.6	4	0.19
Newry	11.4	3	0.26
Ulster	4.0		
West NI	4.8		
SCOTLAND			
Abrdn	18.7	8	0.43
Airdrie	28.0	3	0.11
D&Gall	8.1		
Dundee	21.7	3	0.14
Edinb	25.3	17	0.67
Glasgw	28.1	20	0.71
Inverns	6.7		
Klmarnk	30.1	10	0.33
Krkldy	12.9	7	0.54
WALES			
Bangor	9.1		
Cardff	55.6	24	0.43
Clwyd	18.8	9	0.48
Swanse	42.5	20	0.47
Wrexm	24.9	3	0.12
TOTAL			
England	3,214	905	0.28
N Ireland	56	10	0.18
Scotland	180	78	0.43
Wales	151	59	0.39
UK	3,601	1,052	0.29

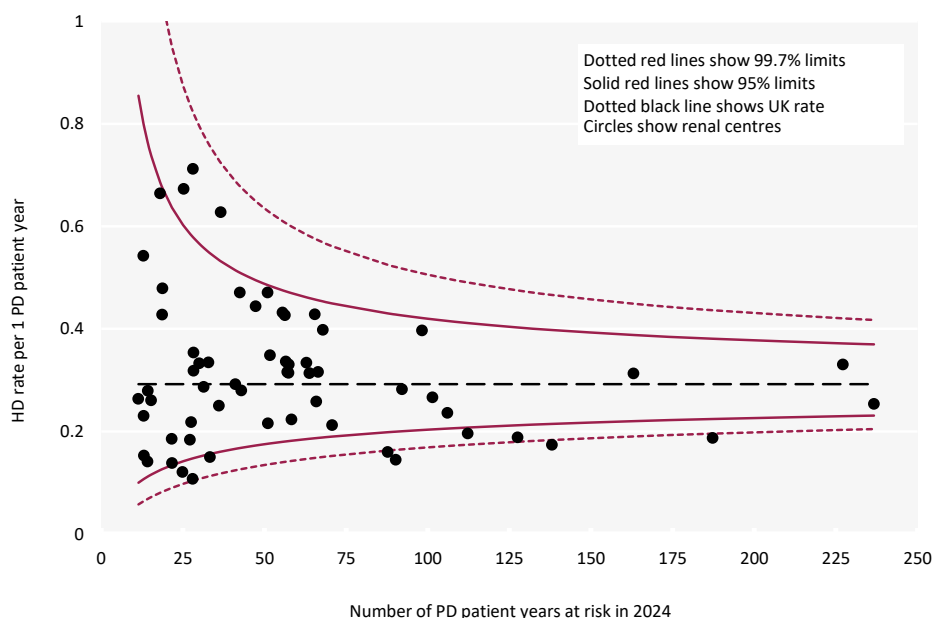


Figure 6.13 Rate of transfer to HD in adult patients receiving PD in 2024 per 1 PD patient-year by centre

Cause of death in adult PD patients

Cause of death was analysed in prevalent patients receiving PD on 31/12/2023 and followed-up for one year in 2024. The proportion of PD patients with each cause of death is shown for patients with cause of death data and these total 100% of patients with data. The proportion of patients with no cause of death data is shown on a separate line. Where cause of death was missing in UKRR data, cause of death from Civil Registration records was used. Further detail on the survival of prevalent KRT patients is in chapter 3.

Table 6.9 Cause of death in adult patients prevalent to PD on 31/12/2023 followed-up in 2024 by age group

Cause of death	PD all ages		PD < 65 years		PD ≥ 65 years	
	N	%	N	%	N	%
Cardiac disease	97	23.7	36	33.0	61	20.3
Cerebrovascular disease	18	4.4	3	2.8	15	5.0
Infection	60	14.6	15	13.8	45	15.0
Malignancy	27	6.6	6	5.5	21	7.0
Treatment withdrawal	30	7.3	5	4.6	25	8.3
Other	149	36.3	41	37.6	108	35.9
Uncertain aetiology	29	7.1	3	2.8	26	8.6
Total (with data)	410	100.0	109	100.0	301	100.0
Missing	38	8.5	11	9.2	27	8.2

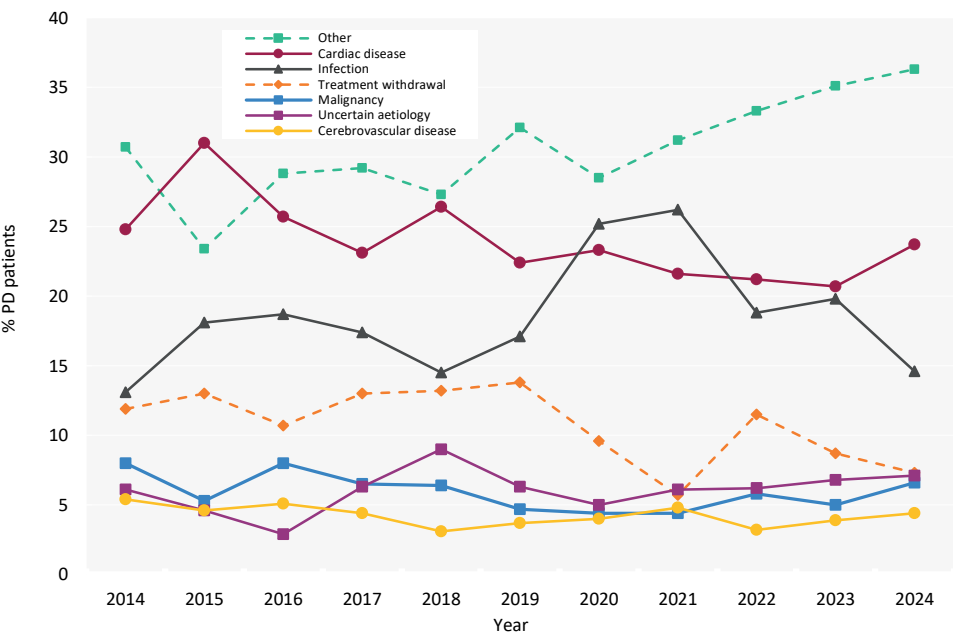


Figure 6.14 Cause of death between 2014 and 2024 for adult patients prevalent to PD at the beginning of the year