

TE1

Association of social deprivation and clinical outcomes in patients receiving peritoneal dialysis: A propensity score matched study over 10 years

Dr Varun Mamidi¹, Joanne Collier¹, Helen Hurst¹, Dimitrios Poulidakos¹, David Lewis¹, Rajkumar Chinnadurai¹

¹Department of Renal Medicine, Salford Royal Hospital, Northern Care Alliance NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

Social deprivation (SD) is a key determinant of adverse health outcomes across a range of health conditions, including dialysis-dependent end-stage kidney disease. There remains a paucity of UK-based data examining the relationship between SD and clinical outcomes in peritoneal dialysis (PD) patients. This study investigates the impact of SD on clinical outcomes in the PD patient cohort in our centre over a 10-year period.

Methods:

Retrospective observational study on 648 adult patients commencing PD between January 2015 and December 2024. Data collected includes patient demographics, comorbidity status, PD catheter and prescription, biochemistry results and medications. For the analysis, patients were grouped based on the Index of Multiple Deprivation (IMD) quintiles, generated using postcodes from the English Indices of Deprivation 2019 online tool. A comparative analysis was made between patients across the IMD quintiles. Clinical outcomes included infectious complications (peritonitis & exit-site infections), cardiovascular events, death, transfer to haemodialysis (HD) and kidney transplantation. The analysis was also extended to a 1:1 propensity score-matched cohort (Lower: Q1+Q2: 151 vs Higher: Q4+Q5: 151) obtained by binary logistic regression analysis, matching for age, gender, and ethnicity. Cox-regression analysis and KM charts were used to study the association between risk factors and outcomes.

Results:

The cohort was 63% male. Patients in the lower IMD quintiles (1&2) were significantly younger compared to the higher IMD quintiles (4&5) (54.5 vs 65 years; $p < 0.001$) and had a higher proportion of ethnic minority backgrounds (27 vs 10%, $p < 0.001$). The distribution of comorbidities, PD catheter characteristics, and biochemistry were similar across the IMD quintiles. There were no significant differences in clinical outcomes across the IMD quintiles, including cardiovascular events, all-cause mortality, transition to HD, transplantation and PD peritonitis episodes. The PD exit-site infection rate was noted to be higher in the lower quintiles (18% vs 13%; $p = 0.003$). Neither univariate Cox regression (Figure 1) nor Kaplan-Meier chart analyses (Figure 2) revealed an association between social deprivation and poor outcomes. In the matched analysis, patients in the lower quintile had a higher all-cause mortality (39 vs 25%; $p = 0.01$), but no difference was noted in the rest of the outcomes.

Conclusions:

Social deprivation was associated with higher all-cause mortality, but the other outcomes were similar in patients receiving PD. It is possible that SD effects are mitigated by effective patient training and support from our community nursing team.

TE2

Healthcare provided assisted peritoneal dialysis practice patterns in the UK: Results from a national survey

Dr Udaya Prabhakar Udayaraj¹, Dr Mark Lambie², Mrs Shalini Santhakumaran⁴, Mrs Georgina Hamill⁵, Mrs Katherine Elson⁵, Professor Edwina Brown³

¹Churchill Hospital, ²Keele University, ³Imperial College, ⁴UK renal Registry, ⁵KQIP

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction

Peritoneal dialysis (PD) offers flexibility and better quality of life and assisted PD (asPD) increases patient choice and equitable access to patients unable to do self-care PD. Data on asPD is not reported by the UK Renal Registry.

Methods

A national survey on asPD provided by health care assistants only was sent to 68 adult renal centres in the UK (July-August 2025). Funnel plots were used to assess the centre variation in proportion of prevalent PD patients using asPD. Scatter plots were used to examine any association with PD prevalence in each centre. Responses on barriers to asPD were reviewed to identify key themes.

Results

Responses were received from 47/68 (69%) adult kidney centres in the UK (38/49 England, 5/9 Scotland, 3/5 Wales, 1/5 Northern Ireland). 78% of the surveys were completed by PD nurses. Only 3 centres reported that they did not have an asPD programme. The overall proportion of PD patients receiving asPD was 12.5% (range 0 -46%) with 11 centres below the 95% centile. Centre variation in the asPD proportion is illustrated using a funnel plot (Figure 1). The relationship between the proportion of patients on asPD, duration of asPD programme in a centre, type of asPD provider and geographical location is shown on a map (Figure2). AsPD was provided through an independent industry provider in 24 (54%) centres and by locally employed assistants in 14 (32%) centres; 6(14%) centres offered both options. Proportion of PD patients on asPD (median, IQR) was higher in centres employing assistants (14.2%, 12.0-18.9%) compared to Industry provided only (8.3% ,5.3-13.8%), and combination of both options (12.5% (5.7-18%, p=0.01). Scatter plots (Figure 3) did not show any association between the asPD proportion and the overall PD prevalence in a centre.

AsPD visits offered per day varied: 46% offered one Automated PD (APD) visit, 20%- APD 1-2 visits, 34% -combination of Continuous ambulatory PD and APD visits.

62% agreed that asPD should be the predominant dialysis modality for older and frail people. 17 (36%) respondents reported no barriers to asPD within their centre. Others reported availability of healthcare assistants, geographical challenges and travel distance from centre, staff familiarity with asPD and financial constraints as common barriers (Figure 4). Despite these challenges, almost three-quarters of responders (31/42) had no patients who either could not start PD or transferred out of PD due to a lack of healthcare asPD. Proportion of total PD patients using asPD was similar in centres with perceived barriers (mean + SD, 11.5 + 5.2%) compared to centres with no barriers (mean +SD 13.7 +10.3%).

Discussion

This study is the first to describe asPD practice patterns in the UK and shows a significant unwanted variation in the proportion of patients on asPD. AsPD was not associated with total PD prevalence in a centre suggesting several other patients specific and centre related

factors influenced the PD usage. A national strategy including staff training, renal service specifications and appropriate financial incentives is required to overcome these challenges and reduce the inequitable access.

TE3

Investigating the association between vitamin D levels and outcomes in patients receiving peritoneal dialysis

Rishi Ravishankar², Dr Varun Mamidi¹, Emma Hayes¹, Andzelika Kot¹, David Lewis¹, Rajkumar Chinnadurai¹

¹Salford Care Organisation, Northern Care Alliance NHS Foundation Trust, ²Manchester University NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

Vitamin D, beyond its classical role in bone mineral metabolism, has been shown to exert immunomodulatory and anti-inflammatory effects. These properties are particularly relevant in peritoneal dialysis (PD) patients who are at risk of infections and adverse cardiovascular outcomes. Vitamin D deficiency is highly prevalent in this population, often driven by reduced sun exposure, renal metabolic impairment, and losses via peritoneal effluent. While emerging evidence suggests a protective role of vitamin D supplementation in reducing PD-related peritonitis and cardiovascular mortality, clinical data remain limited. The aim of this study is to evaluate the association between time-averaged serum vitamin D levels and clinical outcomes in patients receiving peritoneal dialysis at our centre over a 10-year period.

Methods:

A total of 470 patients with complete datasets who initiated PD between January 2015 and December 2024 at our centre were included in this analysis. Data included patient demographics, comorbidities prior to PD, and issues identified during home visits before and after PD initiation. Information on PD catheter-related variables, including insertion method (medical or surgical), procedural setting (elective outpatient vs inpatient), and PD modality (APD vs CAPD), were collected. Groups were stratified based on time-averaged Vitamin D levels (25-hydroxy cholecalciferol) into Group 1 (<30 nmol/L), Group 2 (30-50 nmol/L), and Group 3 (>50 nmol/L). Binary logistic regression (BLR) analysis was used to identify the risk factors associated with peritonitis and all-cause mortality.

Results:

The median age of the cohort was 57 years, with a predominance of male (62%) and white ethnicity (80%). A higher proportion of patients in Group 1 had a history of myocardial infarction (15.7 vs 7.2%, $p=0.022$); the rest of the comorbidities were similar across the groups. Patients in group 1 had a lower median haemoglobin (97 vs 105 g/L, $p<0.001$) and lower serum albumin (36 vs 39 g/L, $p<0.001$). Over a median follow-up of 21 months, the PD peritonitis rate (38.6 vs 25.4, $p = 0.067$) and all-cause mortality (41% vs 24%, $p = 0.002$) were higher in patients in group 1 (Table 1). Multivariate BLR analysis revealed a lower time-averaged Vitamin D level as a risk factor for all-cause mortality (OR: 0.97; CI: 0.96-0.99; $p = 0.001$) and as demonstrated in the KM chart (Figure 1). Also, patients in group 1 had a higher odds for PD peritonitis (OR: 1.36; CI: 1.03-1.8; $p = 0.027$) (Table 2).

Discussion:

A lower native Vitamin D level is observed to be an independent predictor of all-cause mortality and PD peritonitis, suggesting its immunomodulatory and anti-inflammatory roles and supporting the importance of Vitamin D repletion.

TE4

Evaluating home dialysis training in Nephrology across the UK

Shannon Marren¹, Alastair Brown¹, Asif Mahmud², Jyoti Baharani²

¹North Bristol NHS Foundation Trust, ²University Hospitals Birmingham NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction

The 2021 Getting it Right First Time (GIRFT) renal report recommended that a minimum of 20% of renal replacement therapy (RRT) be delivered at home within 12 months.¹ However, the 2023 UK Renal Registry report identified that only 16% of patients were on home RRT (5137/31,750), comprising 1451 on home haemodialysis (HHD) and 3686 on peritoneal dialysis (PD).² This shortfall highlights challenges in achieving national targets, yet limited research has evaluated contributing factors. Lack of trainee exposure to home dialysis may be one such barrier. A survey by the American Society of Nephrology identified major gaps in home dialysis training for US nephrology fellows,³ but comparable UK data are lacking. This study aimed to evaluate home dialysis training among UK nephrology trainees, identify gaps, and inform strategies for standardised training.

Methods

We conducted a questionnaire-based, cross-sectional study of nephrology trainees across the UK. Questionnaires were distributed via email using Google Forms and addressed domains including: current training structure, perceived barriers to training, preferred improvements, and self-rated confidence in HHD and PD (5-point Likert scales).

Results

Thirty-three trainees across seven UK training regions responded. Most respondents (56.7%) reported <5 hours of structured home dialysis training in the preceding year, with only two trainees receiving >10 hours. Limited exposure to HHD was prominent: 19.4% had not managed a single patient on HHD, and only 14 of 31 respondents rated their HHD confidence $\geq 3/5$, compared with 22 of 31 for PD. Nevertheless, three respondents reported managing >10 HHD patients, suggesting regional variation in exposure. PD exposure was greater: 71.0% managed <25 patients, while 25.8% managed 25–50 patients. Overall, 90.3% of respondents felt their training did not provide sufficient experience in home dialysis. Fewer than half (41.9%) reported that home dialysis training was actively encouraged. The most commonly cited barriers were limited patient exposure, lack of structured training, and insufficient opportunities for hands-on experience. Suggested improvements included enhanced exposure through clinics and MDT settings, alongside dedicated teaching sessions.

Discussion

With demand for RRT projected to rise, expanding home dialysis provision will be essential to alleviate pressure on in-centre haemodialysis. This requires clinicians confident in managing HHD and PD. Our findings indicate that UK renal trainees receive limited structured training in home dialysis, reflected in lower confidence, particularly with HHD.

While overall exposure was low, variability between regions suggests that some centres provide more comprehensive training opportunities. Identifying the factors underpinning these differences may inform scalable strategies.

Targeted interventions to increase structured teaching and clinical exposure should be prioritised within nephrology training. Standardisation across regions would help ensure all trainees develop the skills required to support future expansion of home dialysis.

TE5

A single-centre observational study comparing the outcomes between straight versus coiled peritoneal dialysis catheters

Benedita Cowling², Dr Varun Mamidi¹, Joanne Martin¹, Adele Green¹, Rajkumar Chinnadurai¹, David Lewis¹

¹Salford Care Organisation, Northern Care Alliance NHS Foundation Trust, ²Manchester University NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

A well-functioning peritoneal dialysis (PD) catheter is a key factor for long-term sustainability on PD. In this study, we aim to evaluate the characteristics and compare the outcomes in patients on straight versus coiled PD catheters.

Methods:

We conducted a retrospective observational study of 650 adult patients with a complete dataset in the organisation's PD study database between January 2015 and December 2024. A straight PD catheter with a single cuff was introduced for practice in medical PD catheter insertions since June 2023. Data collected included patient demographics, comorbidities, and information on PD catheter-related variables, such as the insertion method (medical or surgical), procedural setting (elective outpatient vs. inpatient), and reasons for PD dropout (e.g., death, transplant, infection, catheter dysfunction, and patient choice). Comparisons were made between coiled and straight PD catheters on immediate post-operative catheter position in abdominal X-ray (AXR) and undesired catheter removal (due to infection and catheter dysfunction).

Results:

The median age of the cohort was 59 years, with a predominance of males (63%) and white ethnic background (82%). Salient baseline comorbidities included diabetes mellitus (44%), hypertension (81%), myocardial infarction (11%), and cerebrovascular accident (12.5%). 544 (84%) had a percutaneous (medical) PD catheter insertion under local anaesthetic and sedation. Of these 35 (6.4%) were straight PD catheters with a single cuff, which was noted to be relatively technically easier during insertion. Catheter malposition on immediate postoperative abdominal X-ray was reported to be less with straight PD catheters (8.6% vs 30.9%, $p = 0.005$). Over a median follow-up of 19 months, no significant difference was noted in PD dropouts due to catheter dysfunction resulting from malposition (14.3% vs 14.1%, $p = 0.75$) or PD peritonitis (2.9% vs 9.4%, $p = 0.192$).

Discussion:

Straight PD catheters with a single cuff are technically and functionally non-inferior to coiled PD catheters. Ongoing audit with an increased sample size is warranted.

TE6

Analysis of Peritoneal Dialysis research activity and distribution within UK renal units

Gavin Esson¹, Dr Caroline Wroe

¹Freeman Hospital

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

Clinical research is a cornerstone of medical care in the United Kingdom. Participation in research offers patients early access to novel diagnostics and treatments, and generates evidence to help improve clinical guidelines and decision making. Existing UK data demonstrates that healthcare sites with higher research activity are linked to better patient outcomes, even for those not directly participating in studies. This is shown in both primary and secondary healthcare settings. Peritoneal dialysis (PD) is an established treatment for end stage kidney disease in the UK. It is important to understand the distribution and trajectory of PD research activity across the UK. Mapping patterns of access and monitoring changes over time help provide the foundation for strategic planning and delivery of future research initiatives to improve outcomes in PD and health inequalities.

Aim

This project aimed to map out the number of research participants enrolled into peritoneal dialysis research in the UK from 2018/19-2022/2023, and compare trends over time. A secondary aim was to assess if there were any regional outcome differences between centres with high and low research recruitment.

Methods

The number of peritoneal dialysis clinical trials open across the UK and the number of patients recruited into these trials over the last 5 years was extracted from the NIHR open data platform using specialty (renal), and subspecialty (peritoneal dialysis) search criteria. Data were compared by NIHR research delivery network regional geography and devolved nations. This was compared to Peritoneal Dialysis activity and performance data from the UK Renal Registry for the same regions.

Results/Discussion

Over the five-year period, the annual size of the PD population remained stable but national research activity fluctuated, the number of recruiting studies was small, peaking at five in both 2019 and 2023. Participant enrollment reached its highest level in 2019 (n = 652) but has not subsequently returned to this peak. Analysis of incident peritoneal dialysis patients compared to participation in PD studies showed more than a 3 fold variation in access to PD research across the UK PD population. Preliminary analyses indicate a possible regional association between research participation and quality metric outcomes (serum bicarbonate and peritonitis); however, these findings should be interpreted cautiously given the small number of studies and potential confounding factors.

TE7

Anti-hypertensive prescribing patterns in patients receiving peritoneal dialysis: A single-centre observational study

Adrian Ng Ping Vey², Dr Varun Mamidi¹, Laurie Crosby¹, Laura Hayes¹, David Lewis¹, Rajkumar Chinnadurai¹

¹Northern Care Alliance NHS Foundation Trust, ²Manchester University NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

Hypertension is highly prevalent among patients undergoing peritoneal dialysis, affecting up to 88% of this population and contributing significantly to cardiovascular morbidity and mortality. The continuous nature of PD offers a more stable fluid and blood pressure profile compared to haemodialysis. Yet, hypertension control remains suboptimal in many patients. Volume management strategies are the first-line interventions. However, antihypertensive medications are frequently required when these measures are insufficient. Despite widespread use, there is limited longitudinal data on the patterns of antihypertensive prescribing in PD patients, particularly in relation to comorbidities and treatment response over time. In this study, we aim to analyse the antihypertensive prescribing trends and outcomes in PD patients over 10 years.

Methods:

This retrospective observational study was conducted on 651 patients who were initiated on PD at our centre between January 2015 and December 2024. Data collated included patient demographics, comorbidities, and data on the antihypertensive medication class prescribed at baseline, 12 months, and 24 months. Additionally, residual urine output, clinical outcomes (e.g., cardiovascular events, death, and transplant), and follow-up duration were also collected. Antihypertensive drug prescribing patterns over a two-year period from PD initiation were analysed. Blood pressure control, residual urine output, cardiovascular outcomes, and other adverse events were assessed during the follow-up period in patients with and without the use of renin-aldosterone system inhibitors (RASi).

Results:

The patients in the cohort had a median age of 59 years, with males (63%) and white ethnicity (82%). The salient baseline comorbidities included hypertension (80%), diabetes mellitus (44%), myocardial infarction (11%) and cerebrovascular accident (13%). The median blood pressure of the cohort was 131/78 mmHg. The proportion of patients on RASi agents increased during follow-up: baseline (37%), 12 months (60%), and 24 months (71%; $p < 0.001$). Also, the proportion of patients on diuretics increased, and a reduction in the use of alpha blockers was noted (Figure 1). Over a median follow-up of 19 months, although there were no significant difference in cardiovascular events (17% vs 14%, $p = 0.261$) or all-cause mortality (34% vs 28%, $p = 0.112$) was observed between cohorts based on RASi treatment, a higher proportion on a RASi received a transplant (28.6 vs 14.2%, $p < 0.001$)

Discussions:

Appropriate introduction of RASi and diuretics and reduction of other anti-hypertensive agents was observed. The impact of RASi agents on residual urine output needs further exploration.

TE8

Investigating outcomes between surgical and medical peritoneal dialysis catheter insertions: A single-centre observational study over 10 years

Muhammed-Ibrahim Khan², Dr Varun Mamidi¹, Joanne Collier¹, Rajkumar Chinnadurai¹, David Lewis¹

¹Northern Care Alliance NHS Foundation Trust, ²Manchester University NHS Foundation Trust

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

Introduction:

Peritoneal dialysis (PD) catheter insertion approaches include both surgical (open or laparoscopic) and medical (percutaneous) methods. Each method presents distinct advantages, with surgical techniques allowing direct visualisation, while percutaneous insertions offer reduced invasiveness and quicker recovery. In this study, we aim to evaluate and compare the outcomes of surgical versus medical PD catheter insertions at our centre over 10 years (January 2015 and December 2024).

Methods:

This retrospective observational study was conducted on 650 adult patients who underwent PD catheter insertions (medical: 544 vs. surgical: 106). Data included patient demographics, comorbidities before PD catheter insertion, and information on PD catheter-related variables, including insertion method (medical or surgical), procedural setting (elective outpatient vs inpatient), occurrence of acute complications (e.g., catheter malposition), and reasons for PD dropout (e.g., death, transplant, infection, catheter dysfunction, and patient choice) was collected. A comparative analysis was made between medical and surgical PD catheter insertion for catheter longevity, PD drop-out reasons, and undesired catheter removal (due to infections and catheter dysfunction).

Results:

The cohort had a predominance of white ethnicity (82%), with a median age of 59 years, and more male patients having undergone a medical PD insertion (66 vs. 47, $p < 0.001$). A higher proportion of patients had a previous abdominal surgery in the surgical PD group (51 vs 23%, $p < 0.001$). Over a 19-month follow-up, there was no significant difference regarding PD dropout due to malposition-related catheter dysfunction (medical 12% vs. surgical 11.3%, $p = 0.902$). However, dropouts due to tunnel infections were noted to be higher in the surgical group (4.7% vs. 1.23%, $p = 0.015$).

Discussion:

Outcomes between surgical and medical PD catheter insertions were comparable. A careful pre-procedure assessment in advanced kidney care services and dialysis preparation clinics is warranted to prevent undesirable PD dropouts and sustain a healthy PD programme.

TE9

Evaluating the uptake of home haemodialysis among individuals on peritoneal dialysis: Experience from Imperial College Renal and Transplant Centre

Ronel Carlo Cruz¹, Dr Oshini Shivakumar², Sally Punzalan¹, Dr Neill Duncan¹, Dr Steven Law¹, Dr Richard Corbett¹, Dr Gaetano Lucisano¹, Prof Edwina Brown¹, Ma Blesselle Bayaban¹, Normandy Coloma¹, Renal Home Therapies¹

¹Imperial College Healthcare NHS Trust, ²Imperial College London

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

TITLE

Evaluating the uptake of home haemodialysis among individuals on peritoneal dialysis: Experience from Imperial College Renal and Transplant Centre

OBJECTIVES

Transitioning from Peritoneal Dialysis (PD) to Home Haemodialysis (HHD) supports continued home-based care, promoting quality of life, self-management, and autonomy. This study reviews referrals from PD to HHD training, to examine barriers to initiation and completion.

METHODS

A retrospective service evaluation was conducted of all individuals on PD referred for HHD training between March 2023 to February 2025 at Imperial College Renal and Transplant Centre.

RESULTS

A total of 14 patients were referred from PD to HHD. Median age at referral was 53 years (range 30–74); 57% were male; 71% identified as Asian. Median PD duration prior to referral was 31 months. Common referral reasons included loss of residual kidney function (43%) and fluid overload (29%). Of those referred, 7 (50%) commenced HHD training. Four completed training and remain on HHD, two still in training, and one died during training following a stroke. Among the seven who did not start training, five opted for in-centre haemodialysis (ICHD), citing prior negative home therapy experiences, lack of caregiver support, or personal preference. The remaining two were preparing for live donor kidney transplantation. Median time from referral to training start was 7 months (range 3–44). Only one began HHD with an arteriovenous fistula (AVF); delayed maturation postponed training. Six started with a tunneled dialysis catheter (TDC).

CONCLUSIONS

This real-world evaluation demonstrates that transitioning from PD to HHD is feasible and successful for a significant proportion of patients. Half of those referred began HHD training, with most either completing or continuing it—demonstrating strong engagement and a successful referral process. The findings underscore the value of early identification of motivated candidates, comprehensive pre-training education, timely vascular access planning, and ongoing support to sustain interest in home therapies. Despite challenges,

these findings reinforce HHD as a viable and effective home-based option for selected patients transitioning from PD.

TE10

Rates of Peritonitis and hypokalaemia in a single centre peritoneal dialysis cohort

Mrs Joanne Driscoll, Leanne Tory

¹Queen Elizabeth Hospital, Birmingham

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

In peritoneal dialysis (PD) populations, hypokalaemia is associated with increased rates of peritonitis after adjustment for other cofactors (Davies et al, 2021, Chaung et al, 2009). New recommendations regarding the management of modifiable risk factors like hypokalaemia are highlighted in the updated International Society for Peritoneal Dialysis (ISPD) (Li et al, 2022).

Based on previous studies of hypokalaemia in PD, it is thought that the main contributory factor of hypokalaemia is low dietary potassium intake, rather than increased potassium excretion or extracellular shift (Virojanawat et al, 2021; Szeto et al, 2005).

We aimed to identify the rates of peritonitis at a single centre dialysis unit and see if there was a correlation between hypokalaemia and rates of peritonitis. Furthermore, we wanted to assess whether those patients with hypokalaemia had been seen by a dietitian for oral nutrition support/dietary advice and/or given potassium supplementation.

Method

We collected data on 172 PD patients between January 2024 and December 2024. We identified all PD patients who had had peritonitis during this period. The average potassium over 3 months was collected. Low potassium (LK) was identified as <3.5 , moderately low potassium (MLK) was 3.51-3.99 and normal potassium 4mmol and $>$. We identified those patients that had been seen by the dietitian and/or had taken potassium supplements by looking back at patient records. We also compared the centres peritonitis rates to the target rate of <0.4 episodes per patient-year (Lie et al, 2022).

Results

During the period of January 2024 and December 2024 a total of 33 PD patients had peritonitis, this is the equivalent of <0.2 episodes per patient-year, which is well within the target range of <0.4 episodes. The total rate of peritonitis including repeat episodes was 44. Of those who had peritonitis during this period there were no patients that had a low potassium (LK) (<3.5 mmol), 11 patients had a moderately low potassium level (MLK) (3.51-3.99). The number of patients with repeat episodes of peritonitis with LK (<3.5) was 0 and MLK (3.51-3.99) 4. The remaining patients with peritonitis had normal serum potassium levels.

Out of the total number of PD patients (with and without peritonitis) reviewed during this 12-month period, 46 (27%) PD patients had LK or MLK potassium. Of those PD patients with low potassium (MLK/LK), 18 patients were seen by a dietitian for oral nutrition support. A total of 9 PD patients were prescribed Sando-K, of these, 4 were also seen by the dietitian for oral nutrition support.

Discussion

Peritonitis episodes are well within the recommended target range at QEH, <0.4 episodes per patient-year. However, a significant proportion of patients with peritonitis had MLK

(33%), a risk factor identified by ISPD, for peritonitis (Li et al, 2022). This was greater than the overall number of PD patients identified with hypokalaemia at this centre (27%). Less than half of PD patients with hypokalaemia had been seen by the dietitian for hypokalaemia/oral nutrition support advice and only a small proportion of patients with hypokalaemia were prescribed potassium supplements.

TE11

Increasing Home Haemodialysis Uptake and Sustaining Patient Engagement through Collaborative Quality Improvement

Karen Turner¹, Robyn Hodgson¹

¹Royal Free Hospital

TUESDAY - Moderated Poster Session, HALL Q, March 10, 2026, 16:00 - 17:00

GIRFT suggests 20% dialysis patients should be having dialysis at home. At RFH, we had a reasonable PD population with roughly 15% of patient on home dialysis but just 5 people on home haemodialysis (HD). In January 2024, RFL secured funding from NHSE to restructure the home HD programme, along with a dedicated full time CNS. There had been barriers to driving Home HD, including the lease contract for 4 home machines coming to an end. Furthermore, some available machines were not patient-friendly, being too big for the home and requiring technician team input to set up and maintain. As such, the QI work was initiated to overcome these barriers and increase the number of patients receiving Home HD.

AK98 machine was chosen with pay-per-treatment model to deliver a flexible and responsive service. The Home therapies CNS worked with the dialysis and pre-dialysis team to increase awareness and knowledge of home dialysis as a treatment option. Strategies to overcome barriers to home dialysis included mitigating with council or private landlords and increasing patient confidence via peer supporters. The process and patient experience of home HD training and set-up have also been improved through the revision of patient pathway and monthly Home HD MDT.

13 patients successfully established on home HD since Jan 2024. As of September 2025, 16 patients are on home HD with 11 patients on the waiting list.

The aim is to sustain the number of patients receiving Home HD, continuing the changes implemented to grow patient interest and provide them with the choice to receive dialysis at home.