Home Dialysis QI Project Report

Reducing preventable PD loss using QI approach

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Trust:	Wirral University Teaching Hospital NHS Foundation Trust
Units:	Arrowe Park Hospital and Countess of Chester Hospital
Project start date:	March 2023
Project end date:	Ongoing

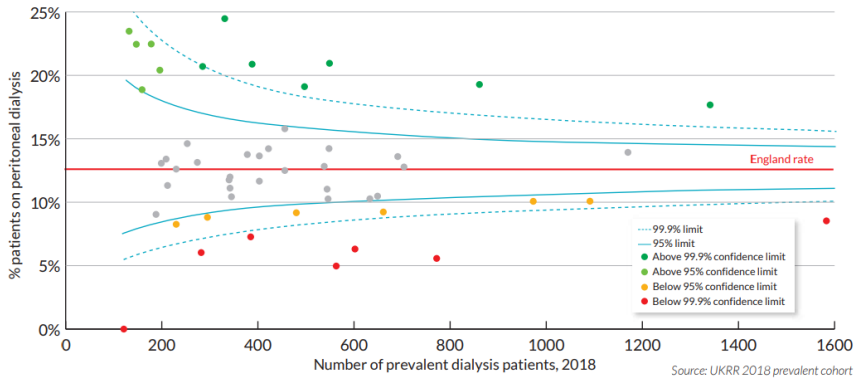
Problem and background

Renal Clinical Networks support the delivery of the following priorities: Promoting equity of access and reducing health inequalities; quality of care, autonomy and wellbeing for those living with kidney disease; quality improvement (QI) across the whole care pathway; and value in healthcare.

The Renal Services Transformation Programme (RSTP) has been established to support transformation of renal services across England to deliver better healthcare outcomes for kidney patients including early intervention, home dialysis, shared decision making, integrated CKD clinics, vertical integration of care and patient monitoring and risk reduction.

One of the recommendations from the Getting It Right First-Time report (2021) is improving access to dialysis at home, either as peritoneal dialysis (PD) or home HD (HHD). These treatment types have many advantages for patients in terms of quality of life, autonomy and flexibility. Overall, it is good value for the NHS. There is wide centre variation in the proportion of new and established dialysis patients that are treated at home. The overall proportion on home dialysis is unchanged over the past ten years, with the rise in HHD being balanced by a fall in PD. Multiprofessional renal QI is to be embedded within networks and supported by project management, with leads in each renal centre, driven by timely access to data and focused on addressing regionally set priorities. To ensure home therapy is promoted and offered for all suitable dialysis patients and that a minimum prevalent rate of 20% is achieved in every renal centre.

*Figure 22: Variation in proportion of prevalent dialysis patients on peritoneal dialysis**



*The centre with a zero value does refer patients to a neighbouring centre for home therapy and since this data was gathered the two trusts have merged.

Prevalence: 13% (range 5-24%)
WUTH data prevalence: approx. 10%
GIRFT technique failure: Peritonitis
WUTH technique failure: PD patency (2020-2022)
Outliers from national picture

NHS England funded the creation of English kidney networks in 2021. In 2022, the North-West Kidney Network (NWKN) prioritised improving dialysis care by creating a dialysis workstream. There was an agreement within the network that the Kidney Quality Improvement Partnership (KQIP) would provide quality improvement training and support to local priority areas relating to dialysis and improving access to home dialysis.

SMART aim

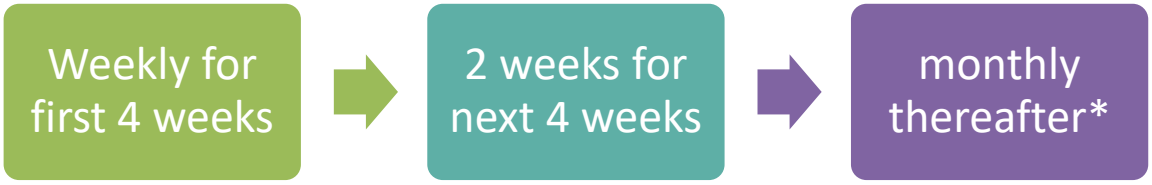
To reduce preventable PD loss from 11 patients to 0 patients by Sept 2024

QI methodology

Looking at our time on therapy baseline data gave us a starting point to understand what was actually happening.

- 2021 = 308 days (0.8yr)
- 2022 = 281 days (0.7yr)
- 74% loss to ICHD within first 6 months (3yr data)

Some of the home dialysis team attended QI training delivered by the KQIP team. This training gave us insight into using a structured approach for making sustainable change - The KQIP methodology (10 steps in QI)
NWKN and KQIP supported the project by attending the project team in person, where we used QI tools and concepts to unlock challenges (process map) and help shape our project (Driver diagram)
The biggest change idea the home dialysis team introduced was the introduction of new PD patients receiving enhanced PD support home visits. Although these visits are flexible, and the plan is individualised, this is the timeline for our enhanced PD support home visits:



**we can continue with 2 weekly visits until patient is ready to move to monthly visits*

Each visit consists of:

- Share source discussion (new initiative) bowel habit/ laxative compliance

- Exit site care. Visualization, competency check, mupirocin compliance (new initiative)
- PET status/ adequacy
- Wellbeing/ understanding needs/ illness perception

Results

Table 1: Reduction in preventable PD loss (2022-2024):

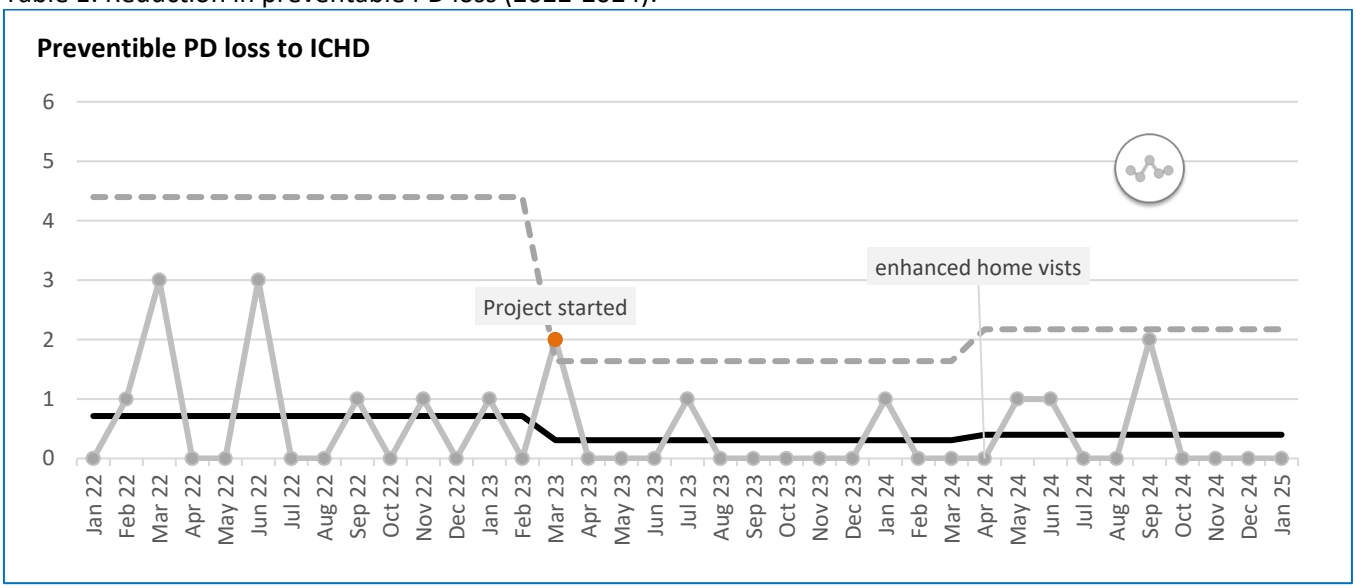
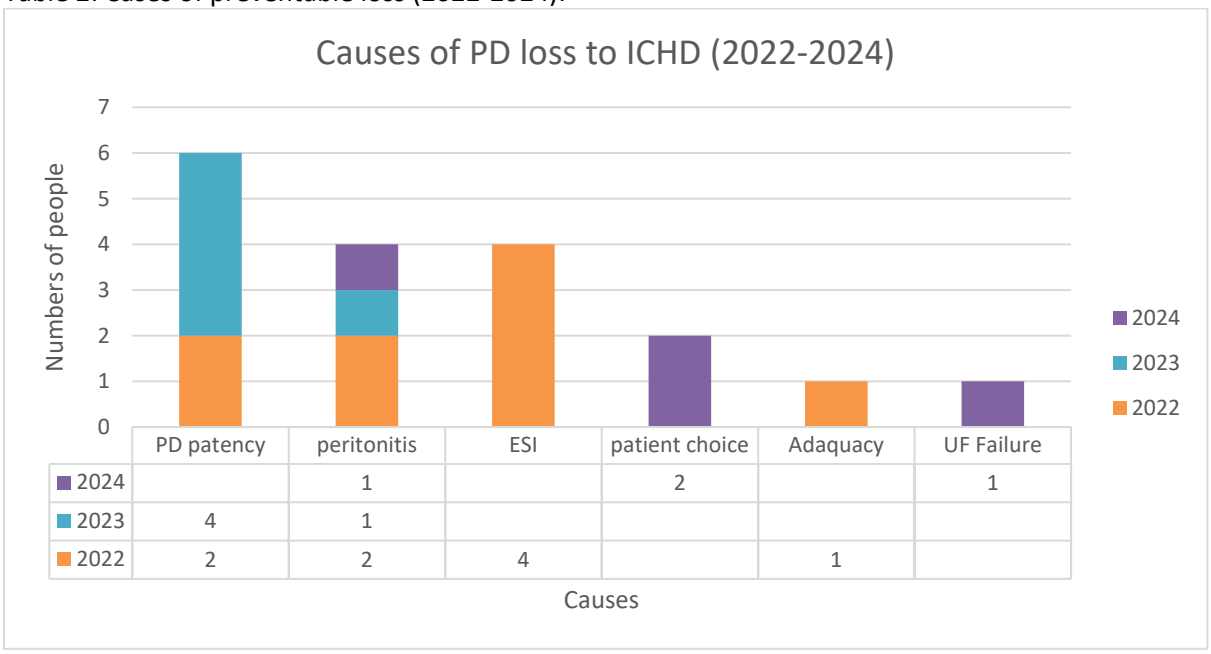


Table 2: Cases of preventable loss (2022-2024):



Lessons learned

The KQIP methodology	
Agree area for improvement	Be SMART! Reduce *preventable* loss to ICHD…
Involve and assemble your team:	Muti-disciplinary approach/ stakeholder analysis … but, when necessary, remember it is always easier to ask for forgiveness than permission
Understand the problem/ system	Be data driven
Define project aim and scope	Focus on what you can do within your remit
Choose "just enough" project measures	be prepared to adapt to service needs
Develop change ideas	Enhanced PD support/ exit site care/ Infection prevention and care
Test change ideas	be agile, engage and enable patients / team
Measure impact of change	share with everyone!!!
Do further PDSA cycles	ownership of PDSA cycles within home therapies team/ embed in practice
Implement successful changes	and celebrate