Ditch the Diaries: Peritoneal Dialysis Service Improvements

Angela Jayne-Hardy, PD Team, Kirsty Blakemore-Ash, KPO and Thomas Deighton, KPO

The Leeds Teaching Hospitals NHS Trust

Problem definition and Aim:

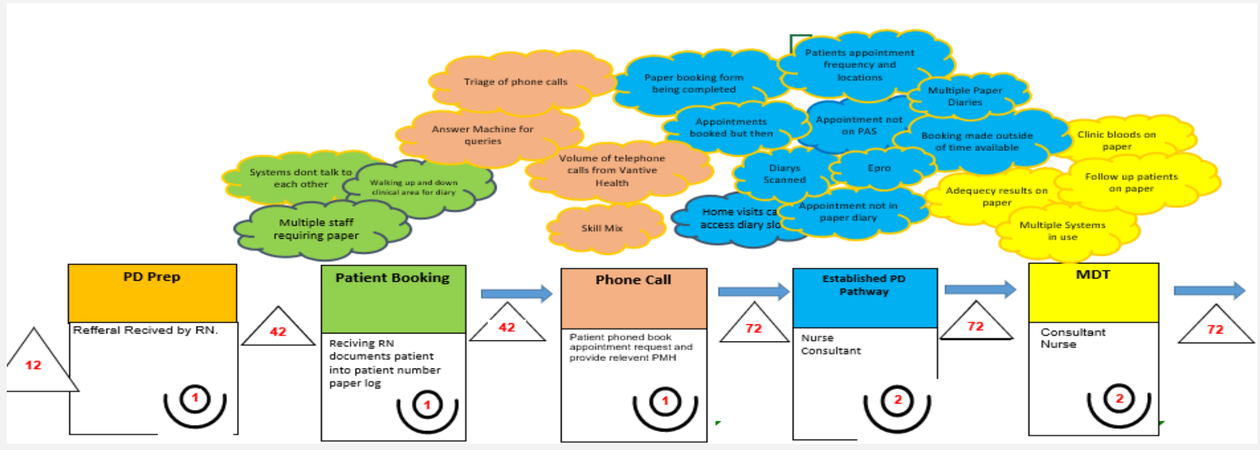
The Peritoneal Dialysis (PD) service at St James's University Hospital is a single specialist unit that has historically operated with limited senior oversight and a heavy reliance on one Band 7 leader. This has contributed to:

- Variation in processes and decision-making
- Inconsistent referral and assessment pathways
- Limited visibility of patient flow and service capacity
- Fragility during leadership or staffing changes

National GIRFT guidance recommends that at least 20% of dialysis patients should commence on a home-based therapy. The current PD infrastructure does not reliably identify, prepare, or transition suitable patients into home PD. Integration of PD into the wider Home Therapies portfolio has further highlighted gaps in continuity, standardisation, and proactive patient management.

To deliver a safe, equitable, and sustainable home-based therapy model, the service requires redesigned pathways, improved transparency of the patient pipeline, and a shift from informal or paper-based systems toward consistent, data-driven processes.

By September 2025, the Peritoneal Dialysis service will increase its capacity and capability so that it is in a good position to achieve the long-term service goals of at least 20% of patients commencing dialysis start on a home-based pathway, in line with GIRFT recommendations.



Background and Stakeholder Engagement

National Guidance

GIRFT recommends that at least 20% of dialysis patients should commence on a home-based therapy, emphasising early identification, structured assessment, and consistent pathways to support patient choice.

Local Baseline

Prior to this project, the PD service had:

- Variable referral and assessment processes
- Limited visibility of the patient pipeline
- Heavy reliance on informal tracking systems (paper diaries, individual memory, ad-hoc communication)
- A single Band 7 acting as the operational linchpin, creating fragility in service continuity

Known Challenges

- Inconsistent documentation and handover practices
- Limited capacity for proactive patient preparation
- Difficulty monitoring pathway adherence or forecasting demand due to lack of standardised data

Drivers for Change

- Leadership transitions
- Integration of PD into the broader Home Therapies portfolio
- Increasing demand for home-based options
- Recognition that the existing model could not reliably support GIRFT-aligned growth

Stakeholder Involvement

Stakeholders co-developed a shared understanding of the current state, contributed to pathway redesign, and participated in iterative testing to ensure the model is sustainable, transparent, and patient-centred.

Stakeholders:

PD Nursing Team, Renal Consultants, Administrative Teams, Patients, KPO Improvement Team.

Methodology and Measurement

A focused Kaizen Event, facilitated by Improvement Specialists, brought together a multidisciplinary team, including a patient partner volunteer, to redesign the PD service pathway. Using principles from the Leeds Improvement Method, the team mapped the current state, identified sources of variation, and co-designed a more reliable and transparent process for managing patients through the home-therapy pathway.

A suite of outcome, process, and balancing measures was developed to track the impact of the redesigned pathway. These measures were monitored through iterative PDSA cycles, with results informing ongoing refinement and ensuring improvements were both effective and sustainable

PDSA 1 - Ditching the diaries. Transitioning to an electronic platform

	Baseline	Target	30 Days	60 Days	Difference
Lead Time: Time taken to find the diary to book a patient or answer a query a day – A day	70 Mins	0 Mins	70 Mins	0 Mins	70 Mins per day
Morale: Staff who are frustrated looking for the diaries – Out of 5	2.7	5	3.2	4	26% increase
Defects: Number of stickers added to the diary (Flags in new process)	60	0	43	22	38 less defects

PDSA 2 – Medication Changes. Moving from a wet signature to an electronic signature from MDT

Lead Time: Time taken to complete the Medication signing process – A day - Average per day 10	100 Mins	20 Mins	15 Mins	15 Mins	85 Minutes reduction
Sustainability: Printing of paper – A day	20pp	0	0	0	100% reduction
Defects: How many Medication changes to GP not completed that day	10	0	0	0	100% reduction
* PDSA rolled out further to other medication changes due to success. 10 Mins per change - Average 2 per day	20 Mins	0	3 Mins	3 Mins	17 Minutes reduction

PDSA 3 – Huddle. Introducing a morning safety huddle

Morale: Staff feeling supported during clinic set-up- Out of 5	2.7	5	3.9	4	26% increase
Huddle Time	0	5 Mins	5 Mins	5 Mins	

PDSA 4 – Home Visits. Reviewing appointments and patient interventions to see what could be undertaken in the patient home and then changing the templates.

Number of patients reviewed at home rather than in a hospital clinic	18%	20%		34%	16% increase
Reducing Attendances in hospital clinic to homecare	10	3		3	7 less visits

PDSA 5 – Set-Up Reduction Peritonitis packs. Having Peritonitis packs already created.

Set-Up reduction: Peritonitis set-up per patient	15 Mins	3 Mins	3 Mins	3 Mins	12 Minute reduction
Defects: Items not being available		0	0	0	

Results and Impact

Across five targeted PDSA cycles, the Peritoneal Dialysis service delivered rapid, measurable improvements in efficiency, reliability, and staff experience. Collectively, these changes strengthened the foundations required for a sustainable, GIRFT-aligned home therapies model.

Overall demand for the service increased by 9% (from 468 to 511 patients) compared with the previous year, yet home-based treatment more than doubled (from 84 to 173 patients). The proportion of patients treated at home rose from 18% to 34% — a shift from roughly 1 in 5 to 1 in 3 patients receiving a home visit.

Hospital pathway activity fell by 12% (from 384 to 338 patients). If patients had been managed using the 2024 model, the service would have expected around 419 hospital cases in 2025. Instead, only 338 occurred — meaning 80 hospital attendances were avoided in the three-month monitoring period.

Together, these improvements demonstrate a clear shift toward a more efficient, standardised, and resilient PD service. The cumulative time released across processes, combined with reductions in defects and increases in staff morale, has strengthened the service's capacity to proactively identify, prepare, and transition patients into home-based dialysis.

The work has also catalysed a cultural shift:

- from paper-based to digital
- from reactive to proactive
- from individual reliance to team-based reliability

These results show that small, targeted improvements can drive a transformational shift in care by embedding a sustainable, data-driven approach to service delivery.

Sustainability and Next Steps

The improvements delivered through the PDSA cycles have laid strong foundations for long-term sustainability within the Peritoneal Dialysis service. The team has embedded new ways of working that reduce variation, strengthen reliability, and ensure the service is better connected to the wider renal pathway.

A formalised referral process has replaced the previous email-based approach, ensuring consistent information capture and clearer visibility of the patient pipeline.

The PD team now feel fully integrated into the broader renal service, regularly contributing to discussions and supporting colleagues through teaching and shared learning about PD. This increased visibility and collaboration have reinforced a culture of collective ownership rather than reliance on individuals.

The team has also demonstrated a commitment to continuous improvement. The medication changes PDSA, initially was just for medication changes following MDT. PD has now adopted this change across all medications in the department - a clear sign that improvement capability is spreading beyond the original project boundaries.

Not every test has led to a permanent change: a trial of an electronic route for bloods was unsuccessful and has reverted to paper. However, this has strengthened the team's confidence in iterative testing, and they are now generating ideas for the next PDSA cycle to explore alternative solutions.

Together, these developments show that the service is not only improving processes but also building the behaviours, skills, and structures needed to sustain and extend the gains.

The next phase will focus on refining digital solutions, strengthening data visibility, and continuing to embed home-therapy pathways as a core, reliable part of renal care.

Leeds Improvement Method

CONTINUOUS LEARNING