DAYLiFe: Home Dialysis improvement programme Richard Fluck

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Why are we doing this?

Variation in provision



International variation

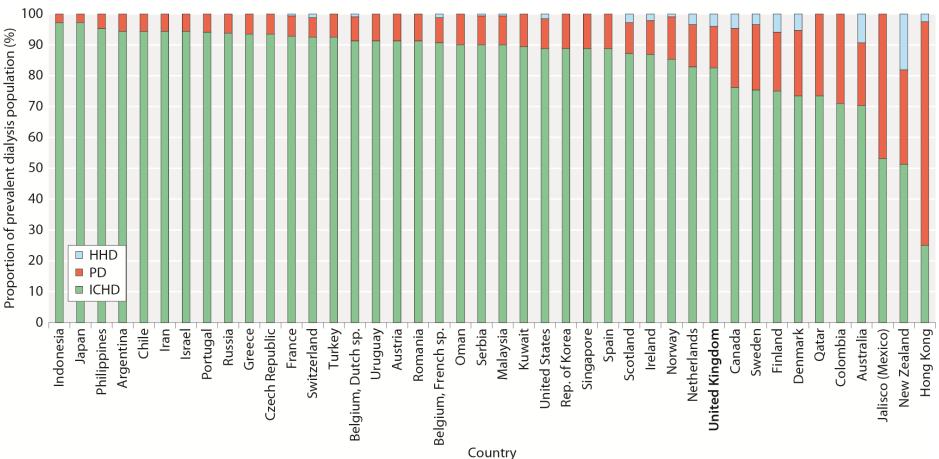
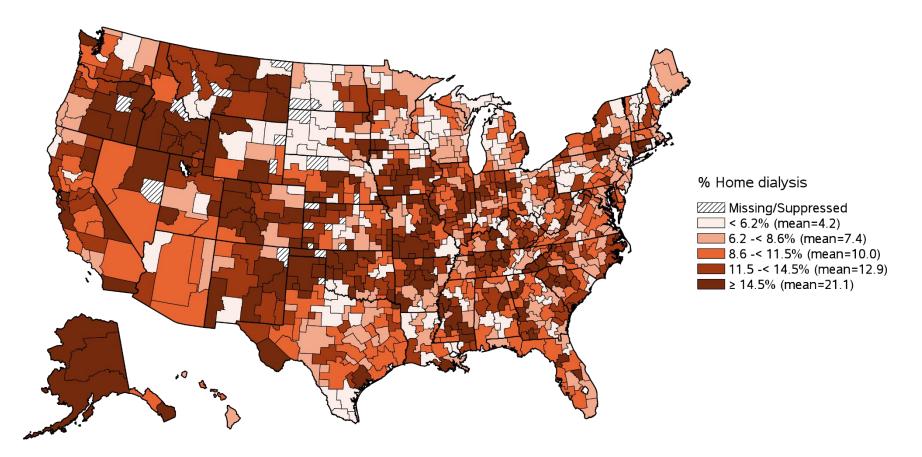


Figure 13.16. Dialysis modality use by nation, 2014

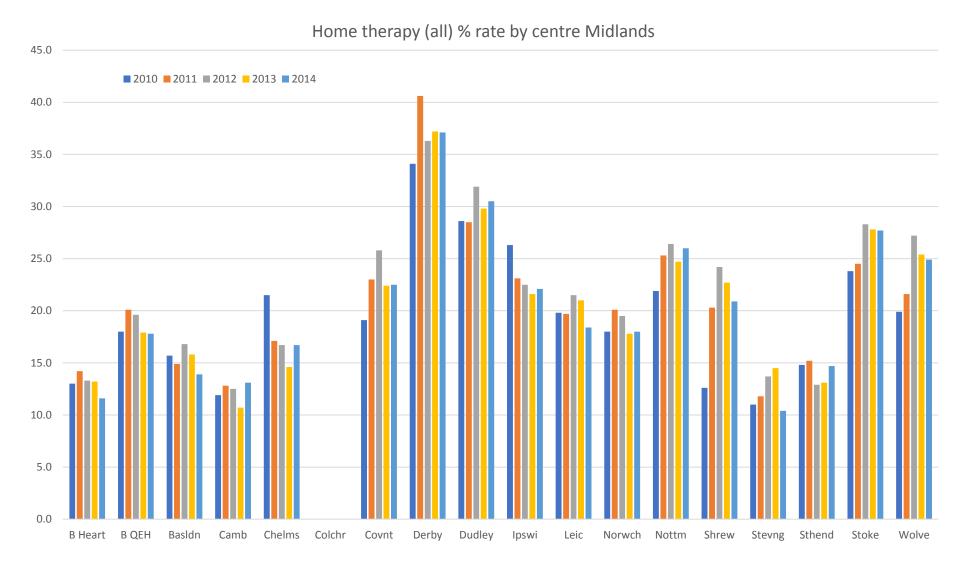
UK Renal Registry 19th Annual Report

Variation by region (USA) vol 2 Figure 1.14 Map of the percentage of incident dialysis cases using home dialysis (peritoneal dialysis or home hemodialysis), by Health Service Area, 2011-2015



Data Source: Special analyses, USRDS ESRD Database. Values for cells with 10 or fewer patients are suppressed.

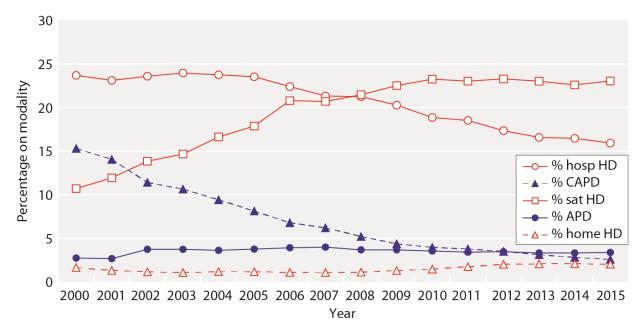
Variation by provider





Temporal changes: UK

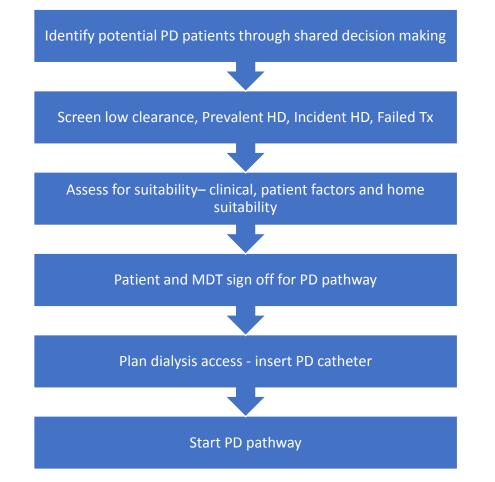
Figure 2.10. Detailed dialysis modality changes in prevalent RRT patients from 2000–2015 *Scottish centres excluded as information on satellite HD was not available



What can be improved?

Fluid not solute, infection

Think about patient flow: process measures



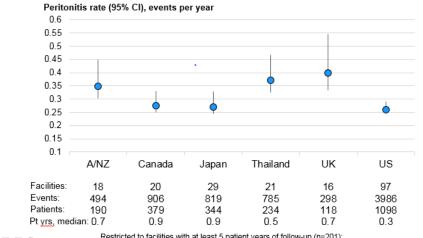
• Selection

- Initiation
- Maintenance
- Drop out

Figure 4 PD pathway adapted from Perit Dial Int. 2013 May-Jun;33(3):233-41. doi: 10.3747/pdi.2012.00119.Peritoneal dialysis and the process of modality selection. Blake PG, Quinn RR, Oliver MJ.

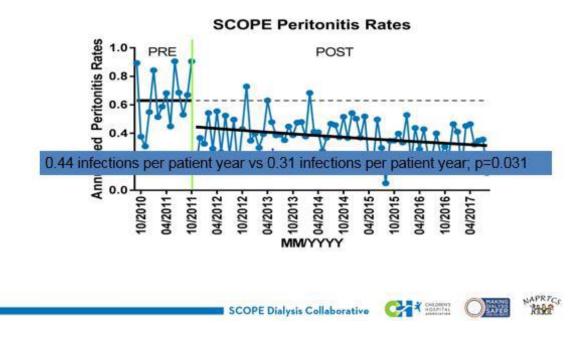
Peritonitis

Peritonitis rate, by country

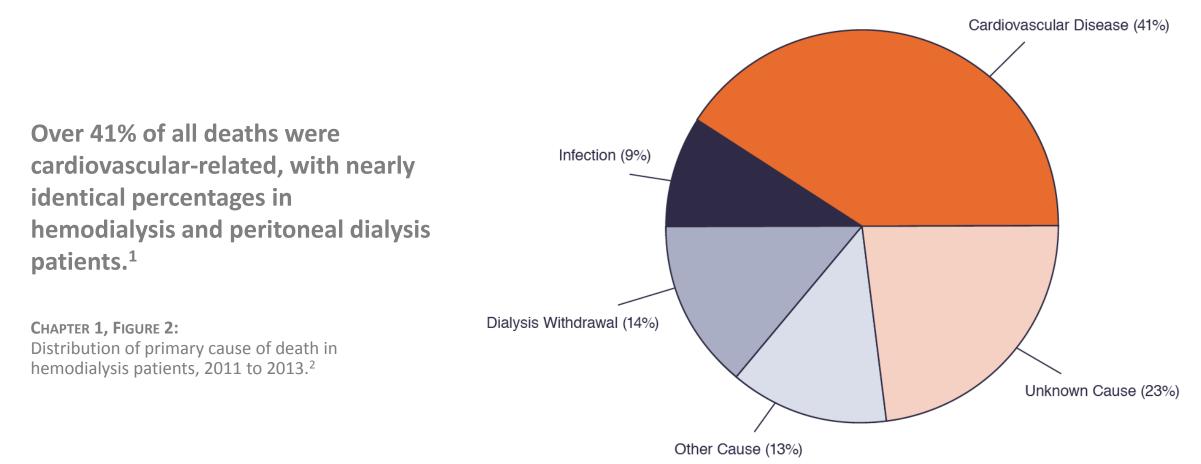




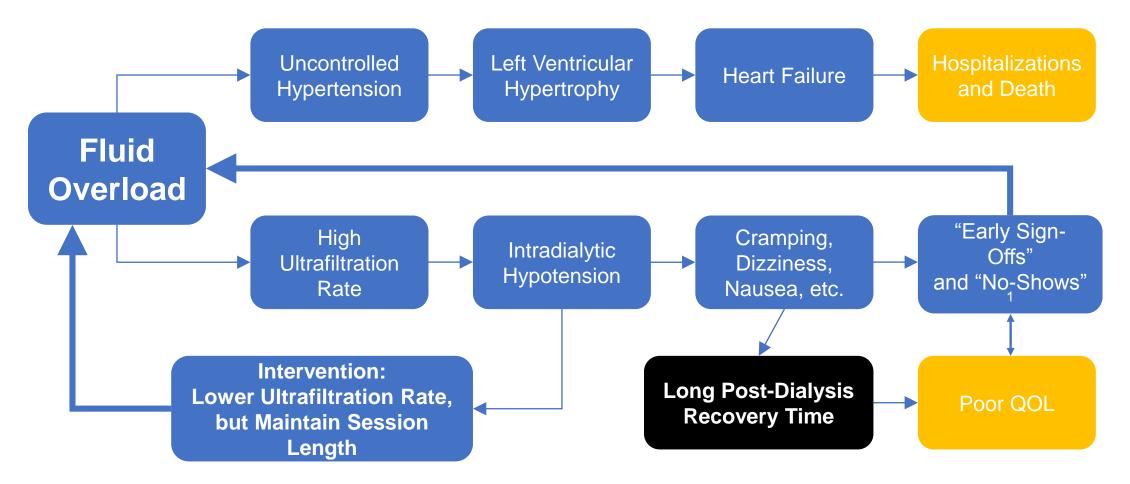
Restricted to facilities with at least 5 patient years of follow-up (n=201); US large dialysis organization facilities included Adapted from Perl et al. ASN abstract (2016)



Cardiovascular-related Deaths in Prevalent Dialysis Patients are Common

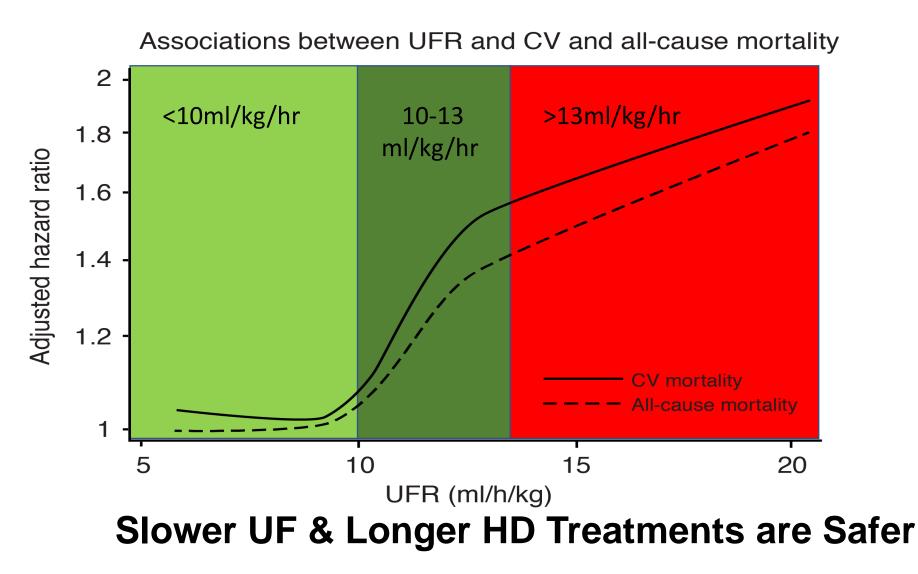


Pathophysiology and Outcomes Challenges with Thrice-Weekly Hemodialysis



1.Rocco MV, Burkart JM. Prevalence of missed treatments and early sign-offs in hemodialysis patients. J Am Soc Nephrol. 1993 Nov;4(5):1178-83.

UF rate and Mortality

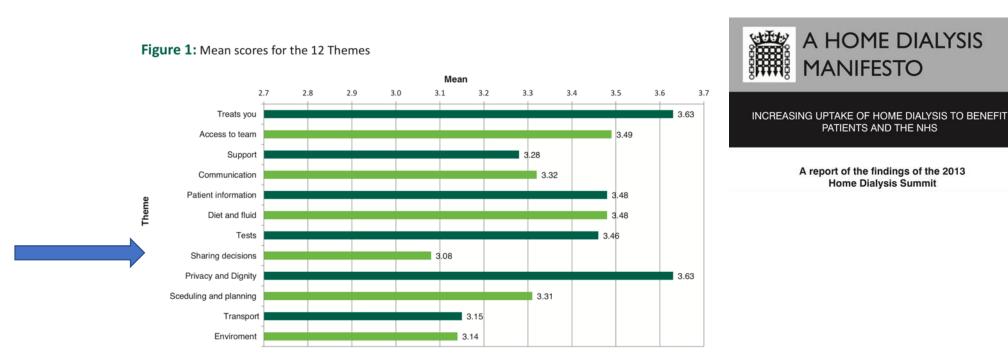


Flythe JE et al. Kidney Int. 2011 Jan; 79(2):250-7

What should we measure and change?

Mortality probably not sensitive enough

Patient perspective: drivers for change



Measures

- Number and proportion on home therapies prevalent and incident
- PCOMS My Health Survey, PREM, holidays
- Patient activation measures (PAM tool)
- Clinician support to activation (CSPAM tool)
- Drop off data number, cause
- Balancing measures hospitalisation, adverse events infection, cannulation
- Process measures training time, resource utilisation, aborted home therapy attempts, surgical support (e.g PD tube insertion)

Central mechanism to change

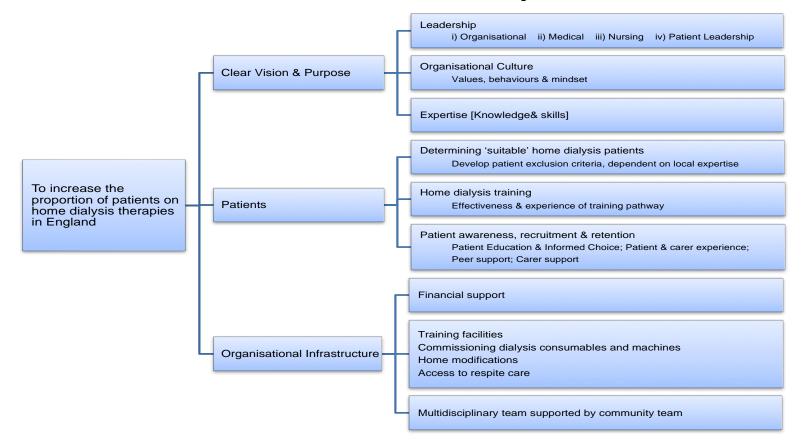
- Monthly MDT: patient flow management
 - Review all incident patients
 - Assess drop offs
 - Training status
 - Review critical data hospitalisation, infections, technique issues
 - Consider review of low clearance lists

Project details

How will it work

KQuIP UK National Home Dialysis QI Project DAYLiFe: Dialysis at yours: Life fulfilled

DRIVER DIAGRAM: Home Dialysis



Project structure

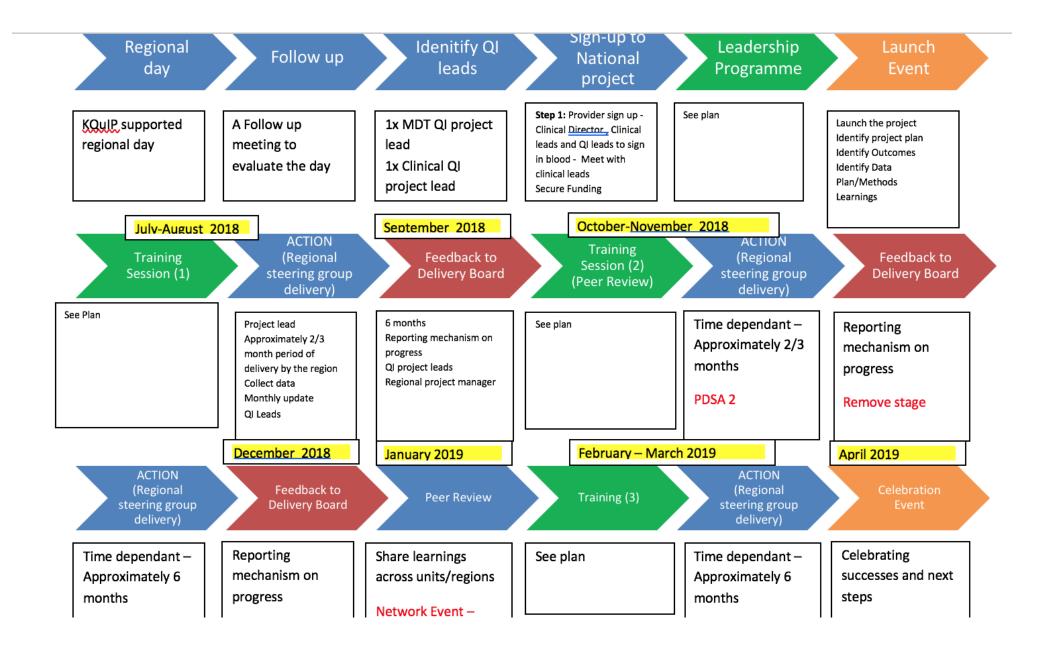
- 'Co production' patients involved at the start and at every level
- A regional team to coordinate the work, representative of the region
- Each centre to form a project team
- Support from KQuIP
 - Project management, expertise, measurement

The project cycle

- Research and discovery
 - Consider barriers and evidence
- Consider solutions and ideas
 - Long list
 - Short list
- Test ideas
 - Test, evaluate, share
- Review and report then repeat process

Based around regional networks

- Consider modelling on the Cancer Alliance
- Network
 - Leadership development
 - Build capability in QI
 - Use KQuIP to offer support
- First (supra) regional team engaged East and West Midlands
- Second in year team TBA
- Funding secured for year 1



Challenge: how do we improve?

