

# Tackling kidney inequalities: The development of the London Kidney Network (LKN) Health Inequalities in Kidney Care online learning module.

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**Introduction:** The aim of the LKN health equity (HE) education group is to highlight the existing inequalities for people with kidney disease to everyone, clinical and non-clinical, involved in providing care across the whole patient pathway. Our group also supports the kidney workforce to address and reduce the impact of these inequalities in daily practice. Access to good quality training and education has been reported as pivotal towards highlighting and reducing the impact of health inequalities among high-risk groups. However, there are no specific resources for training staff working in kidney units to help understand and identify inequalities in kidney care. Accordingly, we developed an online education module to address the knowledge gap in both clinical and non-clinical staff.

**Methods:** To understand people's health inequalities training and education needs, the HE education group created a short online survey that was electronically distributed to all staff in the seven kidney units within the LKN. The survey was aimed at all clinical and non-clinical staff. We used the results of this to design a bespoke online education module focussing on the nature, causes and mitigation strategies for inequalities in kidney care.

**Results:** Of the 196 responses received, 62.7% (n= 123) were fully completed. Majority of respondents were nurses 42%, (n=52) 18% (n=22) Consultant grade medical staff, 11% (n=13) Dietitians, and 9% (n=11) in an administrator role, the remaining 20% (n=25) respondents were made up of other MDT members. 77% (n=94) of staff had not received any health equity training as part of their current role and 88% (n=106) expressed interest in health equity training. The preferred training format was self-paced e-Learning. The LKN HEG education group worked with a learning technologist at Kings Health Partners Learning Hub to create an interactive e-learning module. The module content was developed with patient involvement and piloted by a wide range of stakeholders. This introductory course is aimed at all staff groups with consideration of literacy levels. The module includes a pre and post course knowledge check to assess learning, and participants are requested to complete a short module feedback survey at the end of the course. The module went live in late Autumn 2023 and the group are working with the LKN to advertise and encourage all staff in each of the seven kidney units to complete.

**Discussion:** Our module is ideally placed to help all staff identify and reduce inequalities in kidney care along the whole patient pathway. We will refine and update the content based on user and patient



feedback. Preliminary feedback shows an increase in knowledge and skills following course completion. Promotion of the module and access to its content across all staff groups is a vital component of LKN efforts to reduce kidney health inequalities



# Peritoneal dialysis nursing workforce: how does variation within a regional network effect quality of care?

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#### Introduction

The importance of supporting sustainable growth in home dialysis, including peritoneal dialysis (PD) has recently come to the fore. A skilled and adequately resourced workforce is central to high quality care; nurses, in particular play a key role in the delivery of PD with wide ranging and varied roles depending on the service model. However, there is limited guidance as to what good staffing ratios look like; in an effort to identify good practices, we investigated the variation in PD nursing numbers across a regional network.

#### **Methods**

The PD teams across all the renal units in our region were contacted. We identified the skill mix and whole time equivalent (WTE) of nursing staff along with nursing roles including patient training. Where home haemodialysis and peritoneal dialysis nursing teams were combined, the lead nurse was asked to estimate the time spent on each modality. Nursing workforce size was compared by unit with the prevalent PD population as well as peritonitis rates, as a marker of quality of care.

#### **Results**

Across the seven renal units, two units provided an in-house assisted PD service, the nursing team delivering these services were excluded from the analysis. There was a wide variation in nursing workforce skill mix, three units were led by a Band 8a nurse, while registered nurses (Band 5 and greater) formed between 60-100% of the workforce.

The key workforce descriptors are included in Table 1. Prevalent PD nursing staff to patient ratios ranged from 15 to 22. In general, units with larger PD programs had higher staff ratios. Peritonitis rates were weakly positively correlated with nursing workforce ratios (r=0.33, p=0.48). The unit with the highest patient to staff ratio, along with the lowest proportion of registered nurses had the highest peritonitis rate.

Unit	PD numbers Dec 2022	Registere d Nurses (WTE)	Non- registere d nurses (WTE)	Total nursing workforc e (WTE)	% of registere d nurses	Number of patients per nursing staff	Peritonitis rate (per 1 PD patient year) Dec 2022
A	237	6.47	4.4	10.87	60	22	0.455



В	199	10.5	0.8	11.3	93	18	0.249
С	150	8.8	1.4	10.2	86	15	0.336
D	129	6	2	8	75	16	0.365
E	106	7	0	7	100	15	0.272
F	71	4	0	4	100	18	0.320
G	46	4	0.5	4.5	89	10	0.348

#### Discussion

There are great variations at regional level between units in both workforce numbers but also skill mix along with the tasks undertaken by PD nursing teams. The use of nursing workforce ratios is further confounded by the effect of small changes in patient or staff numbers. The use of prevalent PD population alone is also limited as an indicator of workforce demands given that the greatest care needs arise at the start, and to a lesser extent at the end, of dialysis, particularly around patient training. It is unsurprising that there was an, albeit non-significant, correlation between workforce size and peritonitis rates.

The delivery of high-quality and safe PD services require an appropriately resourced and skilled nursing workforce, to ensure sustainable growth in home dialysis, the use of staffing ratios alone are unlikely to define what good care looks like.

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### Kidney Supportive Care – Staff education.

#### Development of a bespoke kidney supportive care education package

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#### **Introduction**

London has 2929 patients with an eGFR <15ml/min under a kidney clinicians care <sup>1</sup>, and 6909 patients receiving dialysis, with 23% aged 75 or older and 4.7% aged 85 or older <sup>2</sup>. Many also face increased frailty and vulnerability, making the provision of high quality, holistic care challenging, relying on effective communication, empathy and a clear understanding of the patient's needs.

As part of the kidney supportive care workstream within the London Kidney Network (LKN), a bespoke education training package has been developed. It addresses a knowledge gap identified in a survey of 253 kidney care professionals, 61% of whom were nurses, 21% doctors, 10% unspecified and 8% allied healthcare professionals. Notably, 63% lacked prior training. 85% of those surveyed also expressed interest in receiving support and training. The study package consists of two eLearning modules, covering kidney supportive care and advanced care planning (ACP) and is accessed through King's Health Partner's (KHP).

Existing staff education tools for kidney disease predominantly focus on palliative and end-oflife care, with limited emphasis on the needs of patients in the later stages of kidney disease. Our work aims to educate kidney professionals in the tools required to enhance patient quality of life, as the primary goal of care. This may include those who forgo dialysis, or those who are on renal replacement therapy, such as dialysis or transplantation, who require additional support to meet their frailty needs. Older patients, especially, require excellent frailty care, symptom management, and tailored support for dialysis, ensuring a genuine opportunity for future planning.

#### **Methodology**



The staff education package is composed of three key elements: eLearning content (figure 1), an ACP 'at a glance' tool (figure 2), and two concise infographic videos (figure 3). The content has been peer and patient endorsed and has undergone successful piloting. The two modules require a total of 90 minutes for completion and are designed for all kidney clinicians, encompassing a staff total of over 2250 across the 7 London kidney units, who stand to benefit from this initiative.

In order to facilitate effective learning and engagement, and to assist staff in translating knowledge into practice, the modules feature a diverse range of interactive elements.

In-person meetings were conducted with 120 members of staff, from the seven London kidney units to actively promote and disseminate information about the supportive care education module.

#### **Results**

The education package uses a combination of text resources and concise infographic videos developed in collaboration with an animation company. Additionally, the package is supplemented by case studies, exercises, videos and quizzes, with links to further resources.

Finally, as part of region-wide quality improvement, data monitoring on module performance and completion will guide ongoing development and ultimately sustainably improve patient care.

# **Conclusions**

A follow-up staff survey 12 months post module launch, revisiting confidence and knowledge together with a review of completed ACP's and Clinical Frailty Scales (CFS), will aid in evaluating and demonstrating success. National interest has also prompted plans for broader implementation, aiming to improve workforce knowledge and consequently the patient experience.

Figure 1:



# Example of eLearning page



# Link to eLearning module, via KHP

https://learninghub.kingshealthpartners.org/product?catalog=khp1235c



# Figure 2: LKN ACP 'at a glance' tool

Figure 3:Example of infographic videos.





https://londonkidneynetwork.nhs.uk/supportive-care-workstream/

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New clinical pathways to transform identification and management of early stage chronic kidney disease in people with and without Type 2 diabetes across London

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# Introduction

Chronic kidney disease (CKD) affects 1 in 10 people in the UK, costs the NHS at least £1.95 billion each year and is predicted to become the fifth leading cause of premature death by 2040.1 To improve outcomes in people with or at risk of CKD, urgent action is needed to identify CKD early, prevent its progression and optimise management. Several landmark trials2,3 have transformed the evidence base for Sodium-glucose co-transporter-2 inhibitors (SGLT2i) in CKD.

Our aim was to use this new evidence to develop pathways to support primary care to identify and optimise CKD management early in people with or at risk of CKD using crude SGLT2i use as an indicator of progress.

# Methods

The London Kidney Network (LKN) brought together clinicians (including nephrologists, diabetologists, GPs, AHPs) to produce three pathways, i.e.:

- 1. CKD Early Identification Pathway
- 2. CKD Optimisation Pathway for adults with Type 2 diabetes (T2DM) and CKD
- 3. CKD Optimisation Pathway for adults with albuminuria, but without T2DM

Our pathways align with relevant NICE,4-6UKKA7,8 and ABCD8 recommendations on CKD assessment, management and treatment. We also examined data sources to explore SGLT2i use in London over time.

# **Results:**

# Pathway 1: CKD Early Identification Pathway

This pathway is a kidney health check for adults at risk of CKD including those with T2DM or hypertension. It includes both the uACR and eGFR test, and emphasises the importance of



regular uACR testing along with coding, patient education and lifestyle advice for those diagnosed with CKD.

Pathways 2 & 3: CKD Optimisation Pathways for adults with T2DM and CKD and for those with albuminuria but without T2DM

These pathways focus on '3 key actions within 3 months' to save lives in those with and without T2DM. They are based on optimising ACEi/ARB dose in month 1, starting SGLT2i according to licence/indication in month 2 and BP optimisation in month 3.



#### Discussion:

These pathways were launched in September 2022 and are now integrated into official CKD guidelines across London Integrated Care Systems. Our pathways may have helped to account for the rise in crude SGLT2i use across London. However, it is likely that other initiatives (e.g. as part of extending licences for SGLT2i in heart failure, along with increasing familiarity with this class in T2DM) will have contributed to this rise. In addition, this data does not describe the prevalence of SGLT2i use compared to the population who could benefit. Despite this overall increase, significant variation exists within London ICBs in crude SGLT2i usage. Tackling this inequality will be a future focus of work. Supporting implementation of our pathways has provided valuable insight into the barriers and enablers to better CKD care across London. We



will be updating our pathways as new medical therapies become available/are approved by NICE, e.g. Finerenone and the expansion of SGLT2i use in CKD with Empagliflozin.

# References

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