

WI1

## The Making Every Contact Count (MECC) approach: Piloting healthy lifestyle conversations in the Community Chronic Kidney Disease (CKD) Service

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction:

The Making Every Contact Count (MECC) approach encourages staff to use the opportunities arising during their routine interactions with patients to have conversations about how they might make positive improvements to their health or wellbeing (1).

A key priority for the Faculty of Population Health (FoPH) is driving culture change across the Trust by targeting four health behaviours: smoking, alcohol intake, physical activity, and diet. The goal is to empower staff and patients to prioritise prevention through meaningful health conversations.

Recognising the link between lifestyle and CKD progression, the Kidney Nurse Consultant and CKD service lead volunteered the renal department to pilot this approach.

The community CKD service is a multidisciplinary team—nurses, pharmacist, dietitian, and occupational therapist—supporting patients with early-stage CKD through education, lifestyle advice, and medication. Staff saw clear value in the initiative and showed strong enthusiasm to lead the project.

### METHODS:

Initial training was delivered by the FoPH team, supported by upskilling days, and bespoke sessions over 12 months.

A task and finish group, including CKD and FoPH staff, meets biweekly to review progress. Resources developed include healthy conversation cards, a renal toolkit, and clinic posters on key health behaviours. A Kidney Kitchen poster with QR codes was co-created with Kidney Care UK to track engagement. To streamline resources, a single MECC London link was embedded in the updated CKD booklet, alongside a one-page staff resource with QR codes.

Staff and patient surveys were designed to evaluate the programme, focusing on health behaviours and the impact of MECC conversations, these will be repeated every 6 and 3 months respectively.

### RESULTS:

The pilot launched in July 2025. Due to limited clinic support, the FoPH team handled patient survey distribution. Electronic surveys couldn't be used, affecting those patients in telephonic clinics.

Baseline data was collected from 20 patients across multiple sites. While many weren't engaged in healthy conversations, among those who were, 1 in 2 found it very useful and 1 in 2 made or maintained a health behaviour change.

6 of 7 seven CKD team members provided baseline data. Unlike other Trust sites, most had formal training in healthy behaviours and rated their knowledge as "somewhat knowledgeable," reflecting strong engagement. Time constraints and limited awareness of referral services were key barriers.

Since July, the Kidney Kitchen website received 46 QR code visits: 26 from posters, 13 from handouts, and 7 from letters. Data will continue to be reported quarterly.

#### DISCUSSION:

This pilot embeds the MECC approach to support lifestyle changes that may improve clinical outcomes. Although there are limitations to the data, regular surveys will give us more insight into the adoption of these health changing behaviours.

Since the initial surveys were completed, staff report increased confidence and skills in giving brief, empowering patient conversations and referring more patients to local services such as smoking cessation.

Next steps involve deeper data analysis, embedding best practices, and expanding to the living donation team and wider renal service. To support this cultural shift, advanced training, train-the-trainer models, and external provider programmes for senior managers are being explored to enable successful scale-up of promoting healthy conversations across the Trust.

WI2

## Kidney injury associated with recreational and performance-enhancing drugs – a potentially devastating tsunami of kidney disease on the horizon

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### Introduction

Illicit and recreational drug use can lead to acute and chronic kidney injury through many mechanisms. Recent reports have highlighted the growing use of such drugs, particularly in our deprived communities. The impact on emergency departments and intensive care are well recognised. We wanted to better understand the frequency and nature of such presentations to a renal centre, the associated patient and service impact and provide evidence to support strategies to prevent harm.

### Methods

A review of admissions to a tertiary renal centre was undertaken over a 3-month period. Cases where there was evidence of association or causal relationship between recreational or performance enhancing drug use and renal impairment were analysed further. Patient, clinical and drug use characteristics were taken from the clinical record. Outcome measures were length of stay, need for any dialysis or kidney biopsy, renal recovery and patient survival.

### Results

20 patients were identified in the 3-month period who were admitted to the renal ward – median age 39 (24-55) and all but one were male and were consistently from areas of higher relative deprivation. Patients were consistently forthcoming with detailed drug use history with use generally being frequent and long term. 4 patients used only anabolic steroids, 6 patients used only cocaine, and the remainder used a mixture including cocaine, heroin, amphetamines and ketamine. 8 patients required a kidney biopsy, and 8 patients required dialysis at some stage of their admission. All patients were left with at least residual stage 3b chronic kidney disease often with significant proteinuria. The renal pathology was complicated including FSGS, AA Amyloid, TMA, rhabdomyolysis and obstruction due to ketamine – all requiring complex nephrology input. The investigation and management utilized specialist tertiary centre beds for extended periods with knock on impact on other patients being delayed access due to capacity issues.

### Conclusion

This case series supports evidence of alarming trends in the nature and frequency of patients presenting with kidney dysfunction in association with drug use. Patients are left with advanced kidney damage or kidney failure which has lifelong implications for their health and quality of life. Given the mechanisms involved and the widespread use of these drugs it is likely that there is subclinical and subacute kidney injury occurring in the

population that is yet to be clinically apparent. The economic and service burden on acute and chronic renal services is significant. In an age of social media and associated societal pressures particularly in our deprived communities, better public health awareness is needed to prevent a wave of related kidney disease and its sequelae due to this issue.

WI3

## Meeting the urgent need to identify early disease in high-risk communities – a qualitative study exploring Peer Educator attitudes, experiences, and impacts

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction

NICE recommend early CKD diagnosis to prevent progression. However, in some communities, this is far from a reality. CKD is more likely to be detected in advanced stages in minority ethnic groups. Screening for urinary albumin has been reported to be cost effective in African-Americans but targeted testing for CKD in high-risk communities has rarely been explored in the UK. Our novel approach used Peer Educators to explore the feasibility of screening. Here we report on their experiences of engaging underserved groups in screening behaviour.

### Methods

Peer educators were recruited from African and Caribbean communities to work with community members of the same ancestry. Following accredited training, they undertook point-of-care albuminuria testing in community and faith spaces and provided education about the importance and benefits of testing, early detection, and intervention. Ten PEs were recruited to take part in virtual semi-structured interviews. Questions covered their experiences, attitudes, feedback and their recommendations about their role and the kidney health screening project. Data was analysed using thematic analysis (Braun & Clarke 2019).

### Results

Six themes were generated which illustrate the experiences and attitudes of PEs. PEs reported they felt impactful because they were familiar and perceived to have equal power to those they worked with which made it easier to build trust. Their positive impact on communities was due to relational and physical proximity, and the ability to pivot information to provide culturally relevant advice. Importantly, PEs saw their role as advantageous to the NHS as this service was believed to be bridging the gap between NHS and the communities, preventing “crash landers” and reducing costs, time, and burden. This sense of contributing value was essential to motivation for being a PE i.e. passion to help/“save” communities in a direct, efficient way through education and testing for prevention/early detection of a life changing condition(s). PEs did however see operational ways in which their impact in communities could be further deepened and were keen to do so for scale and sustainability. Structured training, support, and mentorship with accreditation were extremely valued not only as an aid to the role but also giving the PEs a

sense of agency for future. The clinical supervisory staff were acknowledged as inspirational. Implications for the model of PE recognition and reward were also surfaced. Payment was appreciated, helping motivation, but overall, the volunteers would still do the work without pay. The primary motivation was helping the community though some said they would do less if there was no payment as it covered time and cost of living.

#### Discussion

This study has demonstrated the impressive impact of empowering and motivating culturally congruent community connectors to provide education and support to their peers, for health screening and testing for CKD. This model enabled >1000 people from under-served communities to engage in early screening behaviour and could be optimised for wider roll out.

WI4

## Improving CKD outcomes through research collaboratives in primary care: A quality improvement project

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction:

Chronic kidney disease (CKD) is climbing the ranks of global mortality, now affecting nearly a billion people and projected to be the fifth leading cause of death by 2040 (1). Research activity is fundamental to innovation, and primary care involvement pivotal. Much activity was suspended due to the global outbreak of coronavirus disease in 2019 with delayed resumption due to workforce shortages. A randomised controlled trial assessing Vicadrostat (an aldosterone synthase inhibitor) in addition to SGLT2i is enrolling CKD patients regarded as high risk (2). These patients typically don't breach national institute for health and care excellence (NICE) CKD referral domains and are thus largely unknown to nephrology (2). Community screening of potential participants, supported by Nephrology and National Institute for Health and Care Research (NIHR) teams has attendant benefits in code cleansing, to improve public health.

### Methods

In May 2025 County Durham and Darlington Foundation Trust (CDDFT), employed a renal physician with an interest in cardiokidney metabolic medicine (CKM). We built a bespoke Clinical Digital Resource Collaborative (CDRC) search to run in within EMIS and SystmOne clinical systems (EPRs used by most GP practices in England) to identify eligible patients for EASi-KIDNEY with (a)  $eGFR \geq 20 < 45 \text{ mL/min/1.73m}^2$ ; or (b)  $eGFR \geq 45 < 90 \text{ mL/min/1.73m}^2$  with  $uACR \geq 200 \text{ mg/g}$  and its exclusion criteria. We also ran these strata searches separately to validate this new CDRC search.

### Results

We identified 228/32000 registered patients registered (0.75%) as eligible for trial enrolment. Through screening, we CKD code cleansed with specific detail for those with diabetes and microalbuminuria. These patients are eligible for the GKPTN Cohort Study which could feed The Chronic Kidney Disease Adaptive Platform Trial Investigating Various Agents for Therapeutic Effect (CAPTIVATE) Study. This study, evaluating finerenone vs placebo, layered on top of standard-of-care (RAS inhibition + Flozin) may open to UK recruitment. Regardless, patients, declining experimental medicine, benefit from accessing other CKD related interventions, namely flozin initiation if naïve, to enable add on therapies such as mineralocorticoid receptor antagonists (MRAs). Additionally, we validated our own (CDRC) prioritisation search results, by cross referencing these trial cohort populations to explore epidemiology.

## Conclusion

This project shows that research expertise and collaboration is welcome to support UK primary care. Identifying and screening patients for trials has secondary benefits in targeting those with highest risk of CKD and cardiovascular disease CVD. Current CKD NICE referral domains are unlikely to have resulted in targeted education or referral of this trials cohort. For example, an 'ACR of > 70 mg/mmol' , and a '5-year risk of needing renal replacement therapy of >5%', which replaced 'all patients with new or previously undiagnosed CKD 4'(3). Additionally, through this work, we refined the CDRC CKD prioritisation tool using coded CKD as denominator so that users can now adjust for their CKD population to estimate unmet needs and focus resource.

(1)Forecasting life expectancy, years of life lost, and all-cause and cause-specific mortality for 250 causes of death: reference and alternative scenarios for 2016-40 for 195 countries and territories. 2018.

WI5

## Impact of Missing ACR Records on ESRD Risk Stratification Using the KFRE

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Background

The 4-variable Kidney Failure Risk Equation (4-KFRE) is used for risk stratification of end-stage renal disease (ESRD) in patients with chronic kidney disease (CKD). This equation incorporates age, sex, eGFR, and urinary ACR. However, urine ACR testing rates remain suboptimal, especially in primary care among patients with CKD stage 3-5 or in patients with risk factors for CKD. The absence of ACR records among patients with eGFR<60 mL/min/1.73 m<sup>2</sup> prevents ESRD risk estimation using the 4-KFRE. We investigated pattern of missing ACR using routinely collected electronic health records (EHR).

### Methods

EHR from 42 general practices in Lambeth, South London (2005–2023) were considered and patients with CKD Stage 3-5 were extracted based on the record of eGFR. Multivariable logistic regression was used to examine associations between ACR measurement status and patient characteristics.

### Findings

Among 23004 patients identified with CKD Stage 3-5 (median time since KFRE or first eGFR<60: 5.13 years), only 59.2% had at least one ACR record. ESRD occurred in 5.27% of them and 2.64% in patients without ACR records. Recorded ACR was associated with age (OR: 1.12, p<0.001), male gender (OR: 1.07, p=0.03), Black and Asian ethnicity (OR: 1.15 and 1.69, resp., p<0.001) history of cardiovascular disease (OR: 1.33, p<0.001), hypertension (OR: 3.75, p<0.001), diabetes mellitus (OR: 15.00, p<0.001), asthma (OR: 1.22, p<0.001), COPD (OR: 1.38, p=0.004) and depression (OR: 1.76, p<0.001) (figure 1).

### Conclusions

Approximately 40% of patients with eGFR<60 lacked ACR measurement, thereby limiting KFRE-based ESRD risk estimation in this vulnerable population. ACR clear pattern of missingness however supports the development of alternative strategies, such as ACR imputation or the evaluation of alternative KFRE to enable risk stratification when ACR is unavailable. Meanwhile, we recommend encouraging ACR measurement and exploring innovative ways to increase its recording in primary care.

WI6

## Adherence with NICE (CKS) CKD Guidelines on Blood Pressure and Albuminuria: A Cross-sectional Analysis of an Elderly General Practice Population

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction:

Chronic Kidney Disease (CKD) is prevalent in older adults and significantly increases cardiovascular risk. NICE guidelines recommend stratified blood pressure (BP) targets based on albumin-creatinine ratio (ACR): <140/90 mmHg for ACR <70 mg/mmol and <130/80 mmHg for ACR ≥70 mg/mmol. An analysis of adherence to these targets in a primary care population was conducted with specific attention to the correlation with age and gender.

### Methods:

We conducted a cross-sectional analysis of 390 patients on the CKD register at a single general practice, using data extracted from the EMIS system. Patients were categorised into three groups: no ACR recorded, ACR <70 mg/mmol, and ACR ≥70 mg/mmol. The most recent BP reading was assessed against the appropriate guideline target for each group. Demographic characteristics, including age and gender, were analysed in relation to BP control.

### Results:

The cohort consisted of 170 males and 220 females, with a mean age of 82 years (range 39–103). Of these, 89 patients had no recorded ACR. Within this subgroup, 62 (69.7%) achieved a BP <140/90 mmHg, with females more likely to meet the target (39 females vs. 23 males). 30 patients (33.7%) achieved a stricter BP <130/80 mmHg, with a slightly older average age of 83 years compared to the group average of 82.

288 patients had ACR <70 mg/mmol, among which 204 (70.8%) met the <140/90 mmHg target. The gender difference persisted, with 108 females and 96 males achieving control.

The average age of this group and of those who met the target was 82 years.

Only 13 patients had ACR ≥70 mg/mmol. Of these, Six (46.2%) met the more stringent <130/80 mmHg target. Notably, this group had a lower average age of 75 years, with those meeting the target averaging slightly higher at 76. Five of the six patients who achieved control were male, contrasting with the gender pattern in other groups.

### Discussion:

This study demonstrates moderate adherence to CKD blood pressure targets in a predominantly elderly primary care population. BP control was lowest among patients with ACR ≥70, and this group was on average seven years younger than the broader cohort, warranting further investigation into potential contributing factors such as earlier detection or comorbidity patterns.

Across the dataset, males were consistently less likely than females to meet BP targets, underscoring a persistent gender disparity. This highlights the need to explore sex-specific factors such as differences in healthcare-seeking behaviour, medication adherence, and pharmacological response. Improving ACR testing coverage, particularly in those without recent measurements, may further enhance risk stratification and support more targeted interventions in primary care.

WI7

## Evaluating the prevalence and association of sudden cardiac death among dialysis patients: a matched study over a decade in a single United Kingdom renal centre

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

**Background:** Sudden cardiac death (SCD) is reported to be the leading cause of death among dialysis patients. The latest United States Renal Data System report indicates that SCD accounts for 47% and 42% of deaths among patients with a known cause of death in the haemodialysis (HD) and peritoneal dialysis (PD) cohorts, respectively. Clinical trials with careful death adjudication consistently report that approximately 1 in 4 deaths are attributable to SCD. Despite this, many renal registries including the United Kingdom (UK) do not routinely collect data on SCD, resulting in the lack of global prevalence data for SCD.

**Methods:** This retrospective analysis included all patients who initiated HD and PD in our renal centre from 2014 to 2024 (n=1189; 83% HD, 17% PD). Deaths occurring up to the end of 2024 were identified for systemic adjudication by three independent clinicians based on the current widely accepted definition of SCD. Patients who were dialysed due to acute kidney injury, received a kidney transplant or moved out of area were excluded. Baseline characteristics were analysed through Mann-Whitney U and Chi-square tests. A multivariate logistic regression model was used to identify independent predictors of SCD. A propensity-matched cohort of patients with SCD (n=101) and patients with other causes of death (n=101) was also used to compare risk factors between the two groups.

**Results:** A total of 459 deaths (38.6% of patients) were reported and included in the systematic death adjudication, in which 377 deaths were attributable to a known cause. 103 deaths (27.3% with a known cause) in dialysis patients were classified as SCD (23.4% of total HD deaths, 17.9% of total PD deaths). This results in an annual total mortality rate of 12.2% and annual SCD rate of 2.3% in our overall dialysis population. Compared to patients who died from other known causes, those who experienced SCD were younger at the start of dialysis (median 65 vs. 71 years, p=0.015), less likely to be Caucasian (74.8% vs. 84.6%, p=0.022) and more likely to have diabetes (49.5% vs. 39%, p=0.05). Lower age of starting dialysis was also found to be a significant independent predictor of SCD (Odds Ratio [OR] for every one-year increase in patient's age at the start of dialysis: 0.97, 95% Confidence Interval [CI] 0.95 – 0.99, p=0.004). In the propensity-matched cohort, a composite history of cardiovascular events including ischaemic heart disease, stroke, heart failure and peripheral vascular disease prior to starting dialysis was a significant predictor for SCD (OR 1.75, 95% CI 1-3.06, p=0.049).

**Conclusions:** The prevalence of SCD in the dialysis population in our centre - aligns with current global SCD data, therefore validating the high burden of SCD. Prior cardiovascular

event history was noted to be significant predictor for SCD. These findings could potentially bring value in reporting SCD nationally in the UK and underscore the need for focused cardiovascular risk assessment in this at-risk population.

WI8

## Does platelet microparticle derived bioactive cargo induce chronic kidney disease responses?

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

Platelet microparticles (PMPs) are small vesicles shed from activated or apoptotic platelets, which account for around 80% of all circulating microparticles. In Chronic Kidney Disease (CKD), elevated production of PMPs is associated with increased risk of cardiovascular complications and directly drives renal inflammation and fibrosis. The underpinning mechanisms are yet to be elucidated however. The aim of this project is to systematically evaluate the impacts of PMPs on human renal proximal tubular epithelial cells (hRPTECs), hRPTECs are particularly vulnerable to insult and are a primary site where CKD can progress from. Their maladaptive repair drives inflammation and renal tissue loss. Investigating how PMPs shape the health and phenotype of hRPTECs will give us critical insight into the development of CKD.

PMPs were isolated from thrombin stimulated platelets and their provenance verified using nanoparticle tracking analysis and flow cytometric analysis. Fluorescent microscopy was used to confirm uptake of PMPs by hRPTECs. RNA isolated from hRPTECs co-incubated with PMPs for 24hr was used for RNA-sequencing where a bioinformatic approach enabled us to identify changes in RNA expression and use gene ontology to identify specific cellular pathway changes and inform future functional assays. To assess cellular proliferation differences of hRPTECs co-incubated with PMPs, a CyQUANT™ cell proliferation assay (ThermoFisher) was used. To assess cell monolayer migration we used a simple scratch assay. Following this, to evaluate the effects of PMPs on hRPTEC glucose uptake, we used a fluorescent analogue of glucose, 2-NBDG (2-(N-(7-Nitrobenz-2-oxa-1,3-diazol-4-yl)Amino)-2-Deoxyglucose), to be able to measure glucose uptake. Examination of pro-inflammatory chemical messenger release by hRPTEC following PMP incubation was conducted using a Human Cytokine Array (R&Dsystems).

Using immuno-fluorescence microscopy we have shown that PMPs are internalised by primary human renal proximal tubular epithelial cells (hRPTECs). hRPTECs treated with PMPs for 24 hours exhibited significant global changes in gene expression. Genes implicated with cell proliferation and DNA synthesis were down regulated, whilst genes relating to fibrosis, extracellular matrix production and inflammation were significantly elevated. Following incubation with PMPs, hRPTECs proliferation was significantly reduced at 48hr by 23.24% (P=0.0433) and 72 hr by 35.34% (P=0004) post PMP treatment. Cellular migration within the nephrons along with systemic inflammation are hallmarks of CKD. Concordantly, we have shown PMPs directly induce the release of pro-inflammatory cytokines, such as CCL2/MCP-1 and significantly induce migration. At 22hr post wound initiation, hRPTECs +PMPs showed a 30.66% (P=0.0103) increase in wound closure, compared to the control. Finally our data shows that subsequent to PMP incubation, hRPTEC 2-NBDG uptake was increased by 116% (P=0.0074), evidencing increased glucose uptake. Metabolic

reprogramming in tubular epithelial cells following CKD induced injury helps drive kidney damage.

Our data provides systematic evidence that PMPs induce CKD responses. Through promoting global changes in renal proximal tubular epithelial cells gene expression, PMPs decrease the cells proliferation, whilst promoting the migration, metabolic reprogramming and inducing a pro-inflammatory phenotype. We are now seeking to examine the drivers of these changes and wish to know if these effects can be therapeutically targeted.

WI9

## Prevent from Home: Young person and buddies' cardiovascular health Improvement feasibility Study (PHYLLIS)

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction:

Hypertensive disorders of pregnancy (HdP) and gestational diabetes mellitus (GDM) affect over 10% of pregnancies in the United Kingdom annually. There is increasing evidence that pregnancy represents a physiological stress test. These maternal complications may reveal an individual's predisposition towards future cardiometabolic disease including Type II diabetes mellitus, cardiovascular disease (CVD), and chronic kidney disease and the risk of progression appears to be greatest for those from backgrounds of socioeconomic deprivation and ethnic minority. Pregnancy is the first time many individuals interact with healthcare which creates an ideal opportunity to address healthcare inequality. However postpartum studies report significant attrition rates as it can be difficult for individuals with a newborn to participate and the length of time and funding required to deliver a CVD prevention study for relatively young individuals, using traditional endpoints, would be enormous. Surrogate endpoints are urgently needed. Endothelial dysfunction, a ubiquitous and early marker of CVD, has been identified following HdP and GDM. Novel approaches for assessing endothelium are needed as traditional methods such as flow mediated dilation are costly and labour-intensive. Optical coherence tomography-angiography (OCT-A) is a non-invasive retinal imaging technique which identifies early changes prior to the development of diabetic retinopathy and shows promise as a surrogate endpoint but postpartum feasibility has not been fully explored. Unequivocal evidence supports the use of sodium glucose co-transporter-2 (SGLT2) inhibitors and GLP-1/GIP agonists in CVD risk reduction but further studies are needed to assess efficacy in younger patients and to determine duration of treatment.

### Methods:

PHYLLIS is a multicentre NIHR-funded phase II randomised feasibility study which began recruiting in August 2025 and incorporates adaptations advised by relevant Patient and Public Involvement (PPI) groups to enhance recruitment and participation from underserved communities including the use of peer-recruitment, "healthcare champions" (providing culturally congruent support), and remote-testing using capillary blood and urine albumin-creatinine ratio (uACR) testing. PHYLLIS will be delivered in two phases: Part A where 108 individuals, with pregnancies complicated by HdP, following informed consent will be randomised (1:1) immediately postpartum to receive enalapril or nifedipine for 16 weeks with transthoracic echocardiogram (TTE) and retinal imaging performed at baseline and final

visit and Part B for 162 individuals, who have completed breastfeeding, provided informed consent and had pregnancies complicated by HdP and/or GDM who will be randomised (1:1:1) to tirzepatide, dapagliflozin or standard care for 26 weeks with a further 26 weeks of follow-up, with TTE and retinal exam performed at baseline, 26 weeks and final visit. The primary outcome is feasibility (recruitment rate of individuals per site per month) with secondary outcomes including changes in blood pressure, weight, serum potassium, serum creatinine, uACR, TTE and OCT-A parameters, and adherence, acceptability and pregnancy rate. Ethical approval has been provided by the South East London Research Ethics Committee. (Ref:24/LO/0902).

Discussion:

Preliminary results will be presented, including feasibility of a randomised study of SGLT2i and GLP-1/GIP agonists in postpartum individuals with risk factors for CVD.

WI10

## Renal advice and guidance for heart failure service: a micro-costing analysis of integrated care

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Background:

Patients with heart failure (HF) who also have chronic kidney disease (CKD) face delays in accessing specialist input, often leading to underuse or discontinuation of guideline-directed medical therapies. This is associated with avoidable hospital admissions and increased mortality. We established an advice and guidance (A&G) service to provide specialist nephrology input for heart failure teams across Greater Manchester faced with kidney-related therapeutic challenges for their patients.

This evaluation aimed to describe the service impact of cardiorenal A&G and establish the cost of A&G compared to standard referral and follow-up processes in nephrology.

### Methods:

We retrospectively evaluated all referrals to a tertiary cardiorenal A&G service for patients with HF and CKD between 1st January and 31st December 2024. Each referral was mapped to predefined scenarios representing standard clinical practice versus A&G. A micro-costing approach (perspective: healthcare system) was applied using NHS Payment Scheme 2024/2025 tariffs and national staff cost data. Resource categories included outpatient visits, admissions, laboratory tests, administrative tasks, and consultant time. Descriptive analyses explored referral patterns, treatment effects, and cost savings.

### Results:

A total of 310 referrals were made during the 12-month period. 96% received same-day responses; 73% (n=71/98) of new patient referrals to nephrology were resolved without outpatient appointments. In 160 patients, prognostically significant therapies were either initiated earlier or continued when they would otherwise have been discontinued. Initiation of SGLT2 inhibitors and other key therapies was brought forward by an average of 24 weeks compared with standard referral processes.

Compared with standard pathways, the A&G service reduced mean per-patient costs by £182.75, yielding aggregate savings of £56,651 (41.4% reduction). Absolute costs were £136,887 in the standard pathway versus £80,236 with A&G (median £315 versus £14 per patient respectively). Consultant time costs were slightly higher under A&G (£2,870 vs £2,616), while administrative costs were reduced (£890 vs £1,512). The largest cost saving came from the need for fewer outpatient appointments (£28,158) and fewer hospital admissions (£25,935), together accounting for more than 95% of the overall reduction.

With respect to referral reasons, savings were greatest in referrals for medication initiation/optimisation (£18,738) and adverse event management (£13,988), with smaller but consistent reductions across other categories. Referring clinicians reported uniformly positive feedback, citing improved communication, appointment planning, and overall patient care.

**Conclusion:**

A structured renal A&G service is both cost-saving and clinically impactful for complex HF-CKD patients. By reducing hospital-based resource utilisation, accelerating therapy optimisation, and improving cross-specialty communication, this model supports NHS capacity and integrated care priorities. The micro-costing approach provides reproducible evidence of economic benefit and highlights scalability.

WI11

## Baseline high sensitivity CRP and subsequent rise in urine albumin/creatinine ratio / fall in estimated glomerular filtration rate over 24 years in people with type 2 diabetes

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction

Systemic inflammation, which can be measured by high-sensitivity C-reactive protein (hsCRP), may play a crucial role in the progression of CKD in people with type 2 diabetes (T2D).

Elevated hsCRP levels have been associated with insulin resistance, endothelial dysfunction and microvascular damage, all of which contribute to renal impairment. Studies suggest that inflammation may serve as an early predictor of CKD development in T2D.

However, the long-term relation between hsCRP and the progression of CKD markers (uACR/eGFR) remains unclear.

### Methods

In this study, we report longitudinal outcomes from 718 individuals with T2D, followed up for up to 24 years, to assess how hsCRP influences the development and progression of CKD, as measured by uACR/eGFR.

Individuals with complete baseline data were stratified into three clinical groups: Group 1 (no CKD), Group 2 (CKD with preserved eGFR but elevated uACR), and Group 3 (CKD with reduced eGFR and elevated uACR).

Baseline and follow-up data were obtained from integrated NHS records.

### Results

The study had a mean follow-up period of 14.9 years (SD 5.5 years). At baseline, 255 patients (61.4%) were male. Mean age was 63.5(10.7) years. Patients in Group 3 at baseline were more likely to have hsCRP levels above the 50th percentile (63.3%) compared to those in Group 1 (47.5%) and Group 2 (46.8%).

Longitudinal renal function analysis showed numerical trends towards a greater mean eGFR decline (-20.6 ml/min in Q1 vs. -26.4 ml/min in Q4) and a greater fold increase in uACR (1.93 in Q1 vs. 2.91 in Q4) across higher hsCRP quartiles (Figure).

In multivariate linear regression analyses, baseline hsCRP was not an independent predictor of either eGFR decline( $p=0.267$ ) or change in uACR( $p=0.884$ ).

#### Conclusion

In this long-term prospective cohort of individuals with T2D, baseline hsCRP was associated in univariate analysis with future progression of CKD markers. However, this association was no longer significant after adjusting for age/sex/baseline eGFR/uACR.

The potential of inflammatory markers such as hsCRP to predict long-term renal outcomes remains an important area of investigation

We suggest that hsCRP may serve as a single surrogate quantifiable analyte encompassing multiple risk factors and denotes individuals with greater risk of rapid progression of diabetic nephropathy.

WI12

## Unmet Potential of SGLT2 Inhibitors and Finerenone in CKD and Type 2 Diabetes: a cross-sectional analysis of contemporary UK primary care data

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WEDNESDAY - Moderated Poster Session, HALL Q, March 11, 2026, 13:45 - 14:45

### Introduction

The National Institute for Health and Care Excellence (NICE) now recommends treatment with sodium-glucose cotransporter-2 inhibitor (SGLT2i) and Finerenone to slow progression of chronic kidney disease (CKD) in people with type 2 diabetes (T2D). However, there is limited data on the extent to which these recommendations have been implemented. We therefore assessed the uptake of SGLT2i and Finerenone treatment among adults with CKD and T2D eligible according to NICE recommendations, using a contemporary cross-sectional UK primary care cohort.

### Methods

We conducted a cross-sectional study using data from the UK representative Clinical Practice Research Datalink (CPRD). We included adults with CKD (eGFR <60 mL/min/1.73m<sup>2</sup> or urinary albumin-creatinine ratio [uACR] ≥3 mg/mmol) and T2D registered on 1 March 2024. We determined eligibility for kidney protection treatment with SGLT2i or Finerenone using NICE guideline NG28 and technology appraisal TA877. Among those eligible, we assessed the proportion being prescribed treatment and used multivariable logistic regression to identify factors associated with being prescribed treatment, reporting adjusted odds ratios (OR) with 95% confidence intervals (CI).

### Results

We identified 206,209 adults with CKD and T2D on 1 March 2024. The mean age was 72 ±13 years, 116,182 (56%) were male, 154,853 (75%) were of white and 13,323 (6%) of black ethnicity, and 82,334 (40%) had a history of heart failure or atherosclerotic cardiovascular disease. Overall, SGLT2i treatment was prescribed to 84,077 individuals (41%). Among 82,334 individuals with heart failure, 35,238 (42.8%) were prescribed an SGLT2i. Among those without heart failure, in those with uACR ≥3mg/mmol, for whom NICE recommends “considering” SGLT2i, 50588 (41.6%) individuals were prescribed treatment. Among those without heart failure with uACR ≥30 mg/mmol (n=17, 427), whom NICE guidelines recommend “offering” SGLT2i treatment, 8126 (46.6%) were prescribed treatment. In multivariable analysis, SGLT2i prescription was less likely for older individuals (OR per year increase in age 0.95, 95% CI 0.95–0.96), women (0.69, 95% CI 0.63–0.75), people of black ethnicity (0.83, 95% CI 0.71–0.97), those in the highest two deprivation deciles (OR 0.81, 95% CI 0.71–0.92), those on treatment with insulin (OR 0.14, 95% CI 0.12–0.16) or GLP1 receptor agonists (OR 0.54, 95% CI 0.48–0.61). Notably, CKD stage or history of fungal genital infection were not associated with being prescribed SGLT2i treatment.

Of the 38,457 individuals (19% of the study population) eligible for Finerenone treatment (eGFR 25-60 mL/min/1.73m<sup>2</sup>, uACR ≥3 mg/mmol, and serum potassium ≤5 mmol/L), only 81 (0.2%) were prescribed treatment. Further analysis was not feasible due to insufficient numbers.

#### Conclusion

More than a year after NICE recommendations for SGLT2i and Finerenone, fewer than half of patients with T2D and uACR ≥30 mg/mmol are prescribed SGLT2i treatment, and Finerenone uptake is negligible. Targeted interventions are urgently needed to embed these evidence-based therapies into routine primary care.