

THI1

## Evaluation of the investigation and optimisation of patients with cardio-renal syndrome in a UK District General Hospital

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Background:

Cardio-renal syndrome (CRS) is characterised by the bidirectional dysfunction of the heart and kidneys, leading to poor outcomes and high mortality (Ronco et al., 2008). Guidelines have shown that use of the four pillars of heart failure treatment improve morbidity and mortality in heart failure with reduced ejection fraction. These include angiotensin converting enzyme inhibitor (ACEi)/angiotensin receptor blocker (ARB)/angiotensin receptor-neprilysin inhibitor (ARNI), beta blocker, mineralocorticoid receptor antagonist, and sodium–glucose co-transporter 2 (SGLT2) inhibitor (McDonagh et al., 2021). Concurrently, patients with chronic kidney disease (CKD) benefit from structured investigation and early referral to nephrology, in line with kidney disease Improving Global Outcomes (KDIGO, 2024) recommendations. Despite these advances, it is unclear how well these standards are implemented in routine practice within chronic heart failure clinic in UK district general hospitals (DGHs).

### Methods:

We conducted a retrospective quantitative review of 100 patients with heart failure and CKD attending a specialist heart failure clinic. Data collected included demographics, diabetes status, CKD staging, uptake of renal investigations (iron studies, protein:creatinine ratio [PCR] or albumin:creatinine ratio [ACR], myeloma screen, parathyroid hormone [PTH], lipid profile, renal ultrasound scan, and prescription of heart failure therapies including the four pillars of guidelines directed medical treatment and statins. Outcomes were summarised using descriptive statistics (counts and proportions).

### Results:

The cohort was predominantly elderly (85% aged 70–89 years) and male (71%). Diabetes was present in 23%. CKD staging showed 70% in Stage 3 (36 in 3a, 34 in 3b), 25% in Stage 2, and 5% in Stage 4. Uptake of investigations varied: lipid profile (97%), iron studies (79%), imaging (79%), myeloma screen (63%), PCR/ACR (54%), and PTH (54%). Four-pillar heart failure therapy was prescribed in 55% of patients, while statin use was observed in 77%. By the initial visit, 59% of the 55 patients had commenced all four pillars of therapy, rising cumulatively to 81% by the second visit, 89% by the third, and 100% by the fourth. We took this opportunity and arranged renal outpatients appointment of all the patients with CKD stages 3 to 5 for further management.

### Conclusion:

This study demonstrates variable uptake of renal investigations and sub optimal prescription of four-pillar among patients with CRS in a UK DGH setting. Despite widespread use of basic investigations (lipids, iron, imaging), key CKD assessments such as proteinuria measurement

and PTH testing were performed in just over half of patients. Similarly, only 55% of patients received full heart failure treatment, despite strong evidence of prognostic benefit. These findings highlight the need for structured care pathways and closer multidisciplinary collaboration between heart failure team and nephrology to optimise outcomes in CRS.

THI2

## The cardiovascular-kidney-metabolic clinic: Evaluation of a novel multidisciplinary service for complex kidney care.

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Introduction:

Cardio-renal-diabetes on a background of metabolic diseases is a crossover of chronic kidney disease (CKD), heart failure (HF) and type 2 diabetes mellitus (T2DM). Care models for CKD, HF and diabetes are traditionally asynchronous, with siloed specialty reviews from nephrology, cardiology and endocrinology. This causes delays in optimising therapy, inertia and knowledge blind spots that may adversely affect patient outcomes.

However, there is rising recognition of cardiovascular-kidney-metabolic (CKM) syndrome. We explore a novel approach, piloting a multidisciplinary team (MDT) CKM clinic attended by a nephrologist, cardiologist and endocrinologist for synchronous optimisation of medical therapy.

### Methods:

An observational retrospective study at a single tertiary centre providing specialist renal, cardiology and endocrinology care. Electronic records were audited for patients reviewed in the CKM clinic between May 2024-August 2025. First reviews in clinic were included.

Demographic data and main reason for referral were collected. Relevant investigations results were collected (ejection fraction, eGFR, HbA1c, urine albumin:creatinine ratio, BMI). Clinic notes were reviewed to ascertain past medical history and documented management plans, subsequently categorised according to specialty and theme. Statistical analysis was performed using R in Visual Studio.

### Results:

During the 15-month pilot period, 111 patients were seen. Males comprised 57.7%. Median age was 69.5 years (Table 1). There was high prevalence of CKD (100%; mean eGFR 35.3 ml/min, SD 16.3), T2DM (72.1%, 46% on insulin), HF (72.1%), IHD (42.3%), and obesity (84.6%; mean BMI 35.9 kg/m<sup>2</sup>, SD 6.5).

The clinic generated plans across all three specialties: metabolic (81.1%), cardiac (74.8%) and renal (58.6%) (Figure 1). Documented management plans involved input of at least two specialties in 67.6% of cases, and all three specialties in 55.9%.

Common interventions included optimisation of HF or CKD medications (68.5% and 56.8% respectively), glycaemic optimisation (62.2%), and obesity management (62.2%).

#### Discussion:

Preliminary results from this pilot clinic suggest that the resulting management plans are truly multidisciplinary. Greater than half of plans involved all three specialties, and two thirds involved at least two specialties. This demonstrates the value of a collaborative clinic in expediting multi-specialty plans. The authors propose this model as an efficient way to manage complex CKD-HF patients, reducing delays and clarifying management. This model has been adopted in other healthcare systems. The clinic is also being introduced into primary care settings, convening professionals into a neighbourhood health service as per the NHS 10-Year Health Plan.

The clinic had a large focus on obesity reduction in the cohort – discussed in 62.2% of appointments, and 39.6% including GLP-1 analogue discussion or intervention. The multisystem effects of this increasingly popular drug class underscore the value of MDT discussion around its use.

THI3

## Optimising diabetes management for people on dialysis: Pathways to better outcomes

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Background:

People with coexisting diabetes and end-stage kidney disease (ESKD) on dialysis present a substantial clinical and public health burden. They require complex, multi-disciplinary care to address the intersecting risks of cardiovascular disease and diabetes-related complications. However, diabetes care for many individuals on dialysis remains suboptimal relative to established national guidelines.

### Aim:

The aim of this project is to improve diabetes care among individuals on dialysis in NWL, facilitating equitable access and optimising health outcomes, including transplantation.

### Methods:

Two renal diabetes specialist practitioners (DSPs) systematically identified individuals with diabetes across 11 dialysis units, including peritoneal dialysis. Individuals were reviewed at the dialysis unit and were assessed to optimise diabetes management, as well as ensure care processes were met in line with national guidelines on the care of people with diabetes on dialysis (Joint British Diabetes Society JBDS, 2023.) People at highest risk of complications were discussed within a multidisciplinary team (MDT) setting, comprised of a consultant diabetologist, two nephrologists, an experienced diabetes renal specialist nurse, and two renal DSPs. Targeted support was then provided to enable individuals to access appropriate care pathways and services. Data were also collected for baseline demographics and clinical parameters.

### Results:

A total of 1,612 individuals with end-stage kidney disease (ESKD) receiving dialysis were assessed. Of these, 44.8% (n=723) were identified as having diabetes. Diabetes, primarily type 2 emerged as the leading aetiology of ESKD, accounting for approximately 75% (n=533) of cases within this subgroup.

The cohort was predominantly male (65%) and was ethnically diverse, comprising 17% White (n=124), 20% Black (n=146), and 51% Asian (n=365) participants. Socioeconomic status demonstrates a high burden of deprivation with more than 52% (n=376) from the most and second-most deprived quintiles.

The median body mass index (BMI) was 26.1 kg/m<sup>2</sup> (IQR 22.3–29.1), and the median clinical frailty score was 4 (IQR 3–5). Glycaemic control, as measured by HbA1c, had a median value of 50.5 mmol/mol (IQR 23–63).

In terms of care delivery, 56.3% (n=407) were managed in primary care, while 40.1% (n=290) received tertiary care, underscoring the substantial reliance on primary care services for managing diabetes in this high-risk population. Access to supportive services

was variable: 84% (n=607) had been reviewed by a renal dietitian, while retinal screening attendance was 81% (n=590) and foot screening was 67.2% (n=486).

Conclusion:

This pilot project demonstrates the feasibility of implementing a structured review process for individuals with diabetes receiving dialysis who are at high risk of complications across multiple clinical sites. The role of the DSP was central in facilitating care coordination, bridging nephrology and diabetes services and ensuring timely identification and management of complex cases.

Social determinants of health present additional challenges in delivering consistent, equitable care, yet the pilot shows that structured, site-based interventions can improve care processes and delivery.

THI4

## Effectiveness and patient satisfaction of a pharmacist-led secondary care hypertension clinic in East Kent Hospitals (EKH)

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Introduction

Secondary-care hypertension clinics in the UK are largely provided by doctors. Existing literature has demonstrated benefits of community pharmacist-led hypertension interventions, but little is known regarding the pharmacist's role in secondary-care settings.

EKH hypertension clinic referral criteria align to NICE hypertension guidelines and BIHS position statements. This service evaluation compares cost- and clinical-effectiveness and patient satisfaction provided by an advanced prescribing pharmacist (P) vs. a consultant nephrologist (N).

### Methods

Retrospective extraction of demographic, administrative and clinical data for new referrals seen during 2023 (n=134). Patients who did not attend follow-up appointments, died or switched clinicians were excluded from clinical effectiveness analysis. Blood pressure (BP) control was defined as clinic BP  $\leq 140/90$ mmHg or home BP  $\leq 135/85$ mmHg. Treatment Intensity Score (TIS) was calculated as the sum of the percentage of the usual maximum dose for each anti-hypertensive, as listed in SmPC or British National Formulary. Separately we distributed patient feedback surveys from Oct 2024 through June 2025.

Data were collated and analysed using Microsoft Excel, and results are presented as descriptive statistics.

### Results

Investigations analysis: Referral for investigation (aged  $<40$  or other reason, n=82): P more likely to organise endocrine tests (93.3% vs. 75.7% for N), and imaging (42.2% vs. 35.1% for N). Secondary cause identification was 2.2% vs. 5.4% for P and N respectively.

Clinical effectiveness analysis: Referral for uncontrolled, resistant or drug-intolerant hypertension and followed up to discharge (n=35): change in average home BP from referral to discharge was  $-17/-5$  mmHg (P) vs.  $-20/-7$  mmHg (N). BP control at discharge was 80% (P) and 88% (N). The average number of antihypertensive medications prescribed remained unchanged from referral to discharge (3.2 for P, 2.8 for N) with TIS changes of  $-0.2$  for P and  $+0.05$  for N.

Cost effectiveness analysis: Median number of appointments and time under follow-up (days) were 3 and 168 for P (n=52) vs. 2 and 102 for N (n=52) respectively. Median costs, comprising staff time and investigation costs, per completed episode were £385 for P vs. £498 for N.

Mean overall patient satisfaction score (0-10 scale) was 9.8 for P (n=30) and 9.5 for N (n=52).

#### Conclusion

A senior prescribing pharmacist working in EKH's hypertension clinic was able to deliver clinical effectiveness and patient satisfaction comparable to a consultant-delivered service whilst offering greater cost effectiveness, with costs being lower by £113.41 per completed episode.

These findings support integration of prescribing pharmacists into secondary care hypertension services.

THI5

## The role of integrated multi-specialist pharmacists in the delivery of a multi-LTC cardiovascular-renal (kidney)-metabolic model of care in London, UK

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Introduction

Significant health inequalities exist in South East London (SEL) with a high burden of cardiorenal metabolic (CRM) diseases, associated with premature mortality. Pharmacists deliver holistic, person-centred care by optimising medications, addressing polypharmacy and improving adherence, traditionally working within a single specialty.

Our aim was to embed two multi-specialist pharmacists (MSPs) into an integrated CRM model of care in SEL that aligns with the NHS Long Term Plan to support transition from sickness to prevention through integrated neighbourhood team working; deliver targeted CRM education and training (E&T); improve patient outcomes through evidence-based treatment optimisation and promote medicines safety.

### Methods

From November 2024, two MSPs were appointed in a SEL integrated CRM model of care across primary and secondary care. The MSP role involves optimising CRM risk factors in secondary and intermediate care patient facing clinics; providing specialist E&T to healthcare professionals (HCP) and supporting complex case management through integrated multidisciplinary team meetings (MDTs) across the care interface.

MSPs implemented service improvement projects in secondary care using electronic searches to identify suitable patients. Firstly, a novel pathway was developed to discharge patients with stable CKD stage 3 (CKD3) and/or type 2 diabetes (T2D) to primary care using MDT support. Secondly, patients with low renal clearance at high risk of hypoglycaemia (eGFR 10-20 ml/min, HbA1c less than 58 mmol/mol, taking insulin and/or sulfonylureas) were identified and interventions to reduce the risk of hypoglycaemia recorded.

### Results

MSPs completed 161 holistic patient reviews across 30 clinics from January to July 2025, making 156 medication interventions to optimise CRM risk factors and 146 dietary and lifestyle interventions.

From November 2024 to August 2025, MSPs delivered 8 clinical education sessions to primary care teams reaching 628 attendees; discussed over 150 complex patient cases at 50 MDTs, and from June 2025, established a monthly cross-site, multispecialty E&T programme for secondary care pharmacists across SEL.

In trust A and B, a total of 70 and 45 patients with stable CKD3 were identified respectively, of which 36% (25/70) and 20% (9/45) are in the process of being discharged to primary care with MDT support. Trust C identified 29% (10/35) patients with CKD3 and T2D with a HbA1c less than 69 mmol/mol as being suitable for discharge to primary care with MDT support.

Trust A and B identified 59 patients with low renal clearance at high risk of hypoglycaemia, with 59% (35/59) of patients contacted, 24% (14/59) failed contact (these patients had letters sent to their GP) and 17% (10/59) not contacted as no intervention required. For those contacted, treatment was de-escalated in 11% (4/35) of patients, 49% (17/35) of patients were educated on how to adjust insulin doses as needed, 91% (32/35) of patients were provided with education on hypoglycaemia and 31% (11/35) had other interventions provided.

## Discussion

MSPs have a key transformative role in providing integrated and comprehensive care to patients with multiple long-term conditions, to optimise patient outcomes and shift from a reactive to preventative care approach, aligning with the NHS Long Term Plan.

THI6

## Uraemic cardiomyopathy in chronic kidney disease: a nephrology-centric review of mechanisms, diagnostics, and management strategies.

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Introduction

Uraemic cardiomyopathy (UCM) is the silent cardiac epidemic of chronic kidney disease (CKD): common, lethal, yet modifiable if detected early. Affecting up to 80% of patients by kidney failure and driving cardiovascular mortality up to 20-fold higher than the general population, it remains under-recognised in nephrology. Unlike conventional heart failure, UCM arises from CKD-specific pathways—FGF-23 excess, Klotho deficiency, uraemic toxins, oxidative stress—that evade traditional cardiology models. We present the first nephrology-centric, stage-stratified framework integrating mechanisms, biomarker trajectories, imaging, and therapeutic timing, reframing UCM as preventable and measurable within kidney-led care.

### Methods

A librarian-assisted evidence search (Ovid MEDLINE, Embase, PubMed, Google Scholar; Jan 2015–Mar 2025) identified 58 eligible studies. Two reviewers screened and verified full texts. Randomised trials, large cohorts, and systematic reviews were prioritised, with mechanistic and biomarker studies included when directly informative for CKD-related remodelling. Paediatric series, non-CKD cardiomyopathies, and abstracts without full texts were excluded. Findings were synthesised into a CKD stage-stratified diagnostic–therapeutic cascade designed for reproducible clinical use.

### Results

By CKD stage 3, approximately 30% of patients already show left ventricular hypertrophy (LVH), rising to 70–90% by kidney failure, establishing UCM as a progressive and detectable phenotype. Drivers include haemodynamic overload, metabolic derangements, and toxin-mediated injury, alongside emerging mechanisms such as ferroptosis, NLRP3 inflammasome activation, and glycocalyx loss. Diagnostic advances include strain echocardiography for subclinical dysfunction, native T1/T2 mapping for diffuse fibrosis and oedema, and biomarkers (NT-proBNP trajectory, soluble ST2, GDF-15) for risk stratification. In advanced CKD, echo-first and mapping approaches minimise contrast use; where essential, macrocyclic group II gadolinium is preferred.

Therapeutic strategies validated in CKD cohorts include RAAS inhibition, SGLT2 inhibitors (EMPA-KIDNEY 2023: n=6,609; HR 0.72 [95% CI 0.63–0.82] for heart failure events), and finerenone (FIDELIO-DKD: HR 0.82 [0.73–0.93] for cardiovascular composite). Sequencing embeds SGLT2 inhibitors from stage 3 CKD, adds finerenone in type 2 diabetes with albuminuria, and maintains RAAS blockade with potassium and eGFR monitoring. Adjuncts include volume-guided ultrafiltration, extended dialysis schedules, structured exercise, and

microbiome modulation. Transplantation reverses LVH in >60% of patients, though residual fibrosis mandates ongoing surveillance.

#### Discussion

UCM exemplifies type 4 cardiorenal syndrome yet continues to be overlooked in CKD care despite its prevalence and lethality. Nephrology must now lead a paradigm shift: UCM should be recognised, screened, and treated as a core complication of CKD rather than a secondary cardiology concern.

#### Implication

Annual UCM screening from CKD stage 3 using strain echocardiography and NT-proBNP trajectories, combined with early SGLT2 inhibitors and non-steroidal MRAs, should become standard nephrology practice. Simplified, contrast-sparing diagnostics and cardiorenal clinics can embed equity across NHS services.

#### Next step

Prospective evaluation across UK centres should test this framework, with outcomes in access equity, rehospitalisation, and survival, positioning UCM care as a benchmark for integrated kidney–heart services.

THI7

## Continuous Glucose Monitoring (CGM) Use in People Living with Diabetes on Maintenance Dialysis: A Retrospective Audit and Observational Cohort Study

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### (A) BACKGROUND

Both hyperglycaemia and hypoglycaemia are commonly noted in people with diabetes undergoing long-term dialysis. Continuous glucose monitoring (CGM) is recommended for use in the dialysis cohort by both the Kidney Diseases: Improving Global Outcomes (KDIGO) and the Joint British Diabetes Societies for Inpatient Care (JBDS-IP) guidelines. However, the evidence surrounding the long-term benefits of continuous glucose monitoring (CGM) use in people with diabetes on maintenance dialysis remains limited. We investigated the potential benefits of CGM use on long-term glycaemic and clinical outcomes in this population.

### (B) METHODS

A retrospective audit and observational cohort study was undertaken across all hospitals within University Hospitals Birmingham (UHB) NHS Foundation Trust, United Kingdom (UK). Clinical records of 55 adults with diabetes on maintenance dialysis using CGM for more than 3 months were accessed. People who had not shared their CGM data with healthcare professionals, non-adherent to CHM use during the study period, or deceased at the time of data extraction, were excluded from the analysis. Trends in glycaemic outcomes including haemoglobin A1C (HbA1C), time in range (TIR), time above range (TAR), time below range (TBR), glucose variability, glucose management indicator (GMI), and hypoglycaemic episodes, were recorded for all subjects. Data was analysed using IBM SPSS Statistics (Version 30).

### (C) RESULTS

CGM utilisation was limited to 6.9% of people with diabetes on maintenance dialysis. A total of 55 subjects were included in the data analysis. The median duration on CGM was 26 months (IQR=19,31). Only 29.1% (n=16/55) had their insulin regimen changed while using CGM. The median TIR remained suboptimal at 38%, with only 18.2% (n=10/55) achieved the recommended target of 70% for the general diabetic population. The hyperglycaemic burden was significant, as reflected by a high median TAR (26% for TAR-very high >13.9 mmol/L, 28% for TAR-high 10.1-13.9 mmol/L) and raised mean GMI of 68.76 mmol/mol. The CGM-derived glucose metrics were summarised in Table 1. 67.3% (n=37/55) of our dialysis

cohort had at least one hypoglycaemia episode over the last 14-days. 10% (n=3/30) of people on in-centre haemodialysis (HD) and home HD developed hypoglycaemia on at least two dialysis days per week. There was a small but non-significant reduction in HbA1C of 0.3 mol/mol [95% CI -5.58, 6.18; p=0.919] following CGM utilisation.

#### (D) CONCLUSIONS

Our audit and study represents the first and largest investigation of long-term benefits of CGM on glucose metrics and clinical outcomes in people with diabetes on maintenance dialysis. While significant improvements in overall glycaemic control were not observed, our findings highlight the need for large-scale real-world data to translate CGM-derived glucose metrics into clinically meaningful improvements in long-term glycaemic and clinical outcomes among people with diabetes on dialysis.

TH18

## Cardiovascular Disease Risk Factors in Haemodialysis: A Scoping Review

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**Introduction:** Cardiovascular risk prediction in those with end-stage kidney disease (ESKD) undergoing haemodialysis (HD) remains sub-optimal. This review aims to identify cardiovascular risk factors specific to this group who are recognised to have the highest cardiovascular morbidity and mortality risk compared among those with chronic kidney disease (CKD).

**Method:** PROSPERO registered review (ID: CRD420251009040). A literature search was performed of the Embase, MEDLINE and Cochrane databases using pre-agreed search terms. Studies were included that investigated risk factors for major adverse cardiac events (MACE) present in patients aged 18 and over receiving haemodialysis. Risk measure data was extracted in the form of hazard ratios (HR). Models fully adjusted for clinical co-variables were analysed preferentially for improved clinical applicability. Risk factors were categorised into demographics, co-morbidities, routine biochemical markers (calcium, phosphate and albumin) and medications. Where applicable, units were standardised to the International System of Units (SI units).

**Results:** Nineteen observational studies were included in the analysis with a sample size ranging from 84 to 162,818 participants. Forty distinct risk factors were identified that include traditional, non-traditional and novel cardiovascular risk predictors. Figure 1 is a forest plot that summarises the risk factors for all-cause mortality (hazard ratios, HR, (95% CI)). Factors that were found to be significant from the scoping review included age, coronary heart disease, peripheral vascular disease, malnutrition, low body mass index, serum calcium and phosphate outside of the accepted reference range, ferritin and raised erythropoietin resistance index. History of renal transplant, independent mobility and normal to high serum albumin levels were found to be protective.

**Conclusion:** This study identifies a distinct set of risk factors, both traditional and unconventional, that are overlooked or absent in the general population. Significant heterogeneity in methods and non-standardised reference ranges limited direct comparison and meta-analysis between studies. However, the findings have identified a list of risk predictors that can inform future research for the development of a cardiovascular risk prediction tool for use in a haemodialysis population.

THI9

## CardioRenalMetabolic Diseases: Using a personalised care approach to improve well-being and reduce future risk of advanced kidney disease: Results from the Harrow CRM Project

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THURSDAY - Moderated Poster Session, HALL Q, March 12, 2026, 10:00 - 11:00

### Introduction:

Cardiorenal metabolic (CRM) disease, is identified by the co-location of multiple disorders including obesity, diabetes, hypertension, cardiovascular disease and chronic kidney disease (CKD). Early intervention is essential to slow CKD progression, reduce cardiovascular risk, and improve quality of life. The Harrow CRM Hub project established a personalised, multidisciplinary pathway to identify high-risk patients, optimise clinical management, and provide access to lifestyle and psychosocial support.

### Methods:

Two groups were identified using EMIS searches. Entry required obesity (BMI >27.5 for BAME, >30 for non-BAME). Cohort 1 included patients with CKD stages 1–5, hypertension, metabolic dysfunction-associated steatotic liver disease (MASLD) or non-diabetic hyperglycaemia (NDH), but not type 2 diabetes. Cohort 2 included patients with type 2 diabetes, with or without CKD.

Clinical records were screened for recent bloods, BMI, waist circumference, blood pressure and urinary albumin–creatinine ratio (uACR). Patients with results within the last three months were invited for a CRM appointment. At the initial clinic, a prescribing clinician reviewed health status, risk scores (QRISK, Heart Age, Kidney Failure Risk Equation, Fib-4 if relevant), and optimised medications. Using the North West London ICS CRM template, a personalised lifestyle plan was co-created. Referrals were made to weight management, IAPT, physiotherapy, welfare support, or social prescribing, with signposting to voluntary sector and digital resources. Follow-up appointments were arranged.

Subsequent monitoring included care coordinator check-in calls, post-clinic questionnaires, and feedback via AccuRx. Blood pressure, weight, waist circumference, HbA1c, lipids and kidney function were repeated at 3–6 monthly intervals.

### Results

In the first 8 months of a 12 month programme, a total of 2089 patients (48.5% female, 51.5% male) were reviewed (age range 20–80 years, female mean 61.5 years, male mean 62.5 years). Following exclusion of 33 outliers, 2,054 patients were available for analysis. Data completeness varied across parameters. (table1)

Clinical outcomes showed consistent improvements:

- Blood Pressure: Of 1,664 patients with paired data, 37.1% achieved ≥5% reduction and 21.5% achieved ≥10% reduction, with an average reduction of 13.95mmHg (p<0.05).

- HbA1c: Of 1,288 patients with paired results, 28.9% achieved  $\geq 5\%$  reduction and 20.1% achieved  $\geq 10\%$  reduction, with an average reduction of 9.01 mmol/mol ( $p < 0.05$ ).
- Weight/BMI: Of 1,740 patients with paired weight measures, 9.9% achieved  $\geq 5\%$  weight loss and 2.8% achieved  $\geq 10\%$  loss, with an average reduction 3.64kg ( $p < 0.05$ ).
- Waist Circumference: Of 326 patients with paired data, 53.3% achieved a reduction in waist circumference (average reduction -5.03 cm).

Discussion:

The Harrow CRM pathway produced meaningful improvements in key risk factors. Clinically significant reductions in BP and HbA1c were achieved, holding the potential to translate into meaningful benefits for patients, including lower risk of cardiovascular events, delayed progression of diabetes and kidney disease, and overall improved quality of life.

Conclusion:

The implementation of a personalised CRM pathway in primary care was associated with improvements in BP, glycaemic control, and weight/BMI. The programme has shown the importance of patients developing a clearer understanding of their condition and clinical teams providing the knowledge and support needed to drive change. This approach represents a scalable model for reducing the burden of CRM disease, preventing progression to advanced CKD and cardiovascular morbidity, and embedding earlier and more meaningful intervention within primary care.

THI10

## Prioritising CKD interventions earlier: A PCN level Quality improvement feasibility project to improve cardiovascular outcomes.

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### Introduction:

Worldwide, CKD (chronic kidney disease) has now surpassed the four major NCD (non-communicable diseases) in terms of size of patient population, mortality rate and socioeconomic costs (1). Suboptimal management of cardiokidney-metabolic (CKM) risk, is contributing. Optimising CKD, requires scalable, effective and affordable solutions that can be operationalised in strained primary care environments as 44.0% of people living with CKD remain undiagnosed (2).

### Methods

In May 2025 CDDFT (County Durham and Darlington Foundation Trust), and a local PCN agreed to work on a community CKM initiative. The single practice PCN pilot site was chosen for swift approval of honorary contracting and geographical proximity.

A novel CKD management optimisation tool from the CDRC (Clinical Digital Resource Collaborative) was employed. This tool, embedded within EMIS and SystmOne clinical systems (EPRs used by most GP practices in England) identifies and prioritises patients who require interventions based on tiered target blood pressure breaches, lipid optimisation, overdue monitoring, RAASi, SGLT2i and MRA use (figure 1). These, combined with CKD staging, create three prioritisation cohorts: highest priority, high priority and lower priority. A PCN Care coordinator reviewed the patient cohorts to ensure completion of recent physical health checks, including blood pressure, blood tests, and urine albumin-creatinine ratio (ACR) using a process map for care pathways (figure 2). Once completed, an experienced renal physician reviewed the records and made holistic multimodality recommendations which were communicated back to the PCN team to action. We excluded patients >75years from analysis because in the UK; the Cockcroft Gault equation is recommended for assessing eGFR above this age and work was flexibly timetabled with specialist renal physician to attend a total of 10hrs/month.

### Results

Of 32000 registered patients, we found 206, but excluded 63 patients >75years. Thereafter we found: highest priority - 38 patients, mean age 77; higher priority – 42 patients, mean age 70; lower priority – 63 patients, mean to 64yrs. In the highest priority group, the

youngest 5 were known to nephrology. This was the case for 5 out of the 6 youngest in the higher priority group.

## Conclusion

Our upper age threshold mirrors the pragmatic balance of efficiency and equity in population wide CKD management (2). Targeting patients most likely to require intervention is a logical approach which is expected to reduce future complications of CKD as well as cardiovascular risk. Task volume is manageable in this example as it reflects low CKD prevalence. To streamline searches and focus resources the tool will be adapted to exclude patients with a transplant or on dialysis and those under the renal team though this relies on good coding. Both these steps make the tool more specific without making it less sensitive. National SPOT CKD screening work enhances disease coding, but must be accompanied by tools to operationalise available interventions to improve outcomes.

(1) Kidney disease: a global health priority. *Nat Rev Nephrol* 2024; 20:421–3.

(2) *British Journal of General Practice* 2020; 70 (693): e285-e293.

(3) Balancing efficiency and equity in population-wide CKD screening. *JAMA Netw Open* 2025;8: e254740.