

# Improving Identification and Preventing Progression of Chronic Kidney Disease

The DiscoverNow CKD Transformation Programme

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AstraZeneca was a founding member of the DiscoverNOW consortium hosted by Imperial College Health Partners. The consortium enabled industry to collaborate compliantly with the health system to improve patient outcomes.











### Project background and overview

There is a growing imperative to better manage people with chronic kidney disease across North West London.

Over the last 10 years there has been considerable work undertaken to integrate CKD management between primary and secondary care, however, a step change was recognised to be necessary.

The Discover-NOW programme was designed to understand the current pathway for the management of people with CKD in North West London and in particular the barriers that prevent optimal management for those at risk or already living with CKD.

Our ambition was to develop simple and effective tools to improve:

- Identification and screening of patients at risk of CKD
- Coding of patients with CKD stage 3-5
- Patient understanding of CKD
- Optimisation of patients with CKD

The project was funded by the NHS National Insights Prioritisation Programme and ran between April 2022 to April 2023. Work continued from April 2023 to finalise the tools.











## Building on the integrated approach to improve kidney care in NWL

### The CKD story so far

# CKD Shared Care

Support primary care manage stable low risk CKD patients

# CKD e-advice service

Consultant-level advice for kidney disease

# CKD Education Nurse

Further develop educational programme and links for Primary care HCPs and Patients

# Connecting Care for Adults

On-site or online GP registry reviews with consultant nephrologist and CKD education nurse

# Virtual Clinic "NWL Kidney Care"

Consultant review of GP records and recording in SystmOne or EMIS

# DiscoverNOW project

Develop tools to identify and optimise CKD patients in primary care









### The DiscoverNOW CKD project approach

### Discovery

### Co-design

### Testing

### Implementation

Map the current CKD pathway to identify barriers to identification and optimisation

Co-create solutions with patients and clinicians that address the largest barriers

Test and iterate the solutions with patients and clinicians

Roll out the solutions to primary care and evaluate their impact









### The DiscoverNOW CKD project team

### Primary care



Dr Neville Purssell Primary Care Lead, CVD & Renal



Dr Tony Willis Clinical Director Diabetes



Dr Raakhee DeSilva GP Partner Central



Laksha Satchitananthan Senior Prescribing Pharmacist

### Nephrologists and renal clinicians



Dr Andrew Frankel Consultant Nephrologist



Joana Teles Clinical Nurse Specialist



Dr Eleonor Sandhu



Dr Darren Parsons Consultant Nephrologist Consultant Nephrologist

### People with lived experience of CKD



Andrew Freeman Patient Representative



Jemma Reast Patient Engagement Lead LKN

### PPIE, Public Health health inequalities and data analysis



Kabelo Murray Research Assistant NIHR



Dorota Chapko Research Fellow Primary Care & Public Health NIHR



Ganesh Sathyamoorthy Assistant Director NIHR



Zia Ul-Haq Senior Data Analyst



Dr Rakesh Dattani Clinical Research Fellow Renal Registrar



Ben Pierce Health Research Senior Manager



Professor Fred Tam Honorary Consultant Nephrologist



Dr Esther Kwong Specialised Commissioning Consultant NHSE & Public Health Consultant NIHR

### Service design and project management



Linda Tarm Clinical Co-Chair & PM CKD Prevention



Matthew Wyatt Senior Innovation Manager ICHP



Livi Bickford-Smith Service Design Lead



Jess Horne Patient Design



Sophie Walker Service Design Consultant









### The North West London CKD toolkit

Patient Identification



Screening



Coding & Diagnosis



Optimisation



Primary care aren't sure which patients have been missed and require reviewing

"Can nephrologists create a definition of a "high risk patient" - GP

- Primary care system searches and guides for downloading
- Visualisations dashboard showing achievement against screening, coding and reviewing activities
- Training video for dashboard

2/3 at risk cohort\* not screened for CKD on annual basis

"I certainly hadn't made the linkage between my hypertension and my kidneys" - CKD patient

- Patient urine ACR explainer
- Primary care training video for practice staff involved in testing

>160K people\* have had test results indicating CKD but remain uncoded

"It relies on the skill of the GP picking up the reading"- GP

- Automated coding guidance from pathology lab
- Primary care diagnosis pathway with virtual education session
- Status alert for uncoded likely CKD patients

Missed opportunities to optimize comorbid patients during other reviews

"No, there us no treatment for CKD 3 is there?" - CKD patient

- Primary care management template for CKD patients
- Links to type 2 diabetes and hypertension templates





Discover-NOW





### Primary care system searches and patient reports

The searches support primary care with the identification of the following patient cohorts:

Patients with test results indicating CKD who might need further tests and/or coding Patients who fall within NICE recommendations for screening via eGFR and uACR who haven't been screened

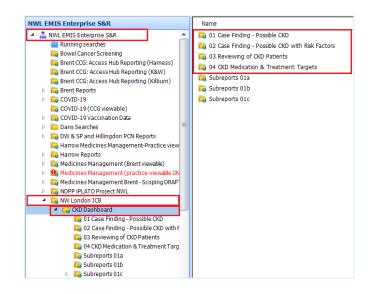
Patients on the CKD register who haven't been reviewed

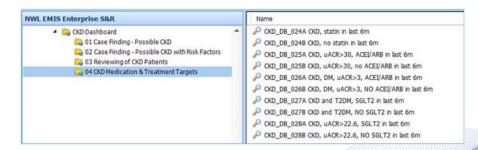
Patients on the CKD register who haven't been optimised according to latest guidelines

Primary care can use the searches to prioritise patients for intervention, for example during a CKD coding audit.

The searches are available in SystmOne and EMIS as reports populated with the practice's population who meet the agreed criteria.

The searches were approved and created centrally by North West London IT following approval by the NWL SystmOne and EMIS boards















### Visualisations dashboard and training video

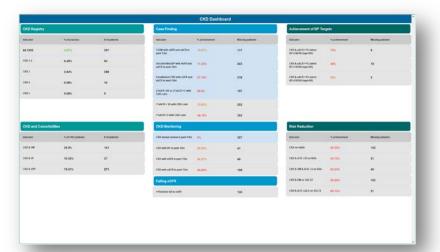
The dashboard supports primary care to see how well they are managing their CKD population with patients grouped in the following cohorts:

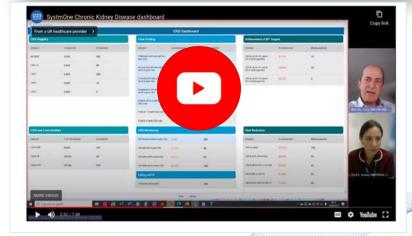
CKD Registry	Case Finding	Achievement of BP targets
CKD and comorbidities	CKD Monitoring	Risk Reduction (Treatment targets)
	Falling eGFR	

Primary care can use the dashboard to understand their progress against targets and prioritise patients for intervention.

The dashboard is available in SystmOne. Practices can contact SystmOne to activate the visualisations function. There is a training video available to help practices to use the dashboard

The dashboard uses the same searches that were approved and created centrally by North West London IT following approval by the NWL SystmOne and EMIS boards.















### Urine ACR explainer for patients

The explainer supports patients at risk of CKD and with diagnosed CKD to understand the importance their annual urine ACR test.

The explainer was created to address the following insights from people at risk of CKD and living with CKD:

Patients aren't aware of the links between type 2 diabetes, hypertension and kidney problems

Patients don't know what the purpose of a urine ACR test is Patients sometimes get sent home without giving a urine sample if it isn't the first of the day

Primary care can attach the explainer a text message when inviting patients to screening, print and give to patients during in person appointments or put up in their practices.

The explainer was co-created by a group of people with lived experience of CKD over the course of four workshops with oversight from a Clinical Nurse Specialist.

CKD Education kit V1. Pub 08/23 Rv 08/2025 Page 2/4



#### The Urine ACR test



### Checking Kidney Health

There are two tests that detect chronic kidney disease:

#### eGFR blood test and urine ACR test

This leaflet focuses on the urine ACR test

#### What jobs do our kidneys do?

The job of our kidneys is to filter waste products and extra wate from our bodies, producing urine

When the kidneys are not working well, they do not filter blood as they should and protein can leak into urine that should stay in the body



#### What does a urine ACR test show?

Testing urine will show us if there is any protein leakage which would be a sign that the kidneys are not working as well as they should. This can happen even if the kidney function test (blood test) is normal

#### How often should I be having these tests?

If you have any of the below conditions, you should have your urine tested once a year as these conditions put you at higher risk of developing chronic kidney disease:

Type 2 diabetes Heart failure High blood pressure Family history of kidney disease





#### The test process step by step

Collect a sample pot from GP practice

GP

Take a sample of your urine. Early morning urine is best if possible

Ensure the pot is labelled with your name, date of birth and the date the sample was taken

Return to GP practice reception on the same day

More questions? Please contact your GP











### Urine ACR screening video for practice staff

The video supports practice staff involved with urine ACR screening to collect urine samples from at risk patients by emphasizing the following:

Patients with hypertension should be screened not just T2D Urine samples should be collected from patients even if not first of day The tests to select in EMIS or SystmOne for an at risk or CKD patient

Practice staff including receptionists, phlebotomists and healthcare assistants can watch this video as part of their training to make the urine sample collection process more standardized. It is not intended to replace existing processes at the practice and should be used as supplementary education.

The video is available on the North West London ICB website













### Automated coding guidance from pathology lab

The coding guidance supports primary care clinicians to accurately code patients for CKD stage 3-5 and decide on their appropriate management.

#### eGFR 45-59 ml/min

If not AKI, consider coding for CKD stage G3a (requires two eGFRs taken 3 months apart & uACR)

Consider appropriate CKD management including RAASi, SGLT2i, blood pressure control & review CVD risk factors

See coding page 1, management pages 2-6 www.nwlondonics.nhs.uk/ckdguidelines

#### ACR 3-70 mg/mmol

If new, repeat morning sample ACR within 2 weeks

Consider coding for CKD and appropriate CKD management including RAASi, SGLT2i, blood pressure control & review CVD risk factors

See coding page 1, management pages 2-6 www.nwlondonics.nhs.uk/ckdguidelines

Pathology labs will send the agreed comments with eGFR and uACR results to practice inboxes. Primary care clinicians will see the comments next to the results as they are reviewing and filing results.

This is available to practices in Hammersmith & Fulham, West London (Kensington & Chelsea), Central London, Ealing and Hillingdon with plans to expand to the rest of North West London.

All practices will see a status alert for patients who have had 2 eGFRs <60 within 3 months and not been coded for CKD or have an incorrect code

Sodium	1	41	mmol/L
Potassium		.0	mmol/L
		7	umol/L
Creatinine			
Estimated GFR	* 4	9	mL/min/1.73m2
NOTE)			
If not AKI, consider coding for	r CKD stage G3a (requi	res two eGFRs	
and the fact, comments are			
taken 3 months apart & uACR).			
taken 3 months apart & uACR).  Consider appropriate CKD manag	ement including RAASi,	SGLT2i, blood	
Consider appropriate CKD manag		SGLT2i, blood	
		SGLT2i, blood	
Consider appropriate CKD manag	risk factors.	SGLT2i, blood	
Consider appropriate CKD manag pressure control & review CVD See coding page 1, management	risk factors. pages 2-6	SGLT2i, blood	
Consider appropriate CKD manag	risk factors. pages 2-6	SGLT2i, blood	

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Patient Status Alerts

Consider referral to weight management service. Action. More

2023/24 ACIGS—Warfarin Monitoring WITHOUT International Normalised Ratio. Action. More

2023/24 DHDAG—High Risk of Dilabetes with no BP recorded in the last 15m to end FY. Action. More

2023/24 DHDAG—High Risk of Dilabetes with no BM recorded in 15m to end FY. Action. More

2023/24 DHDAG—High Risk of Dilabetes Replater with no review of Exercise recorded in 15m to end of FY. Action. More

2023/24 DHDAG—High Risk of Dilabetes With no smoking history recorded in 15m to end of FY. Action. More

WHEP Eligible for influenza vaccination — Over 65: Patient is eligible for influenza vaccination and has no recorded contraindication, refused code and has not received it this significant in the state of the property of the propert
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### Primary care diagnosis protocol with virtual education options

The protocol supports primary care clinicians to ensure patients newly diagnosed with CKD receive timely information about their condition from the most appropriate source for their needs including the following:

"Know your Kidneys" virtual education session self registration YouTube videos on Understanding CKD in English, Gujarati and Polish

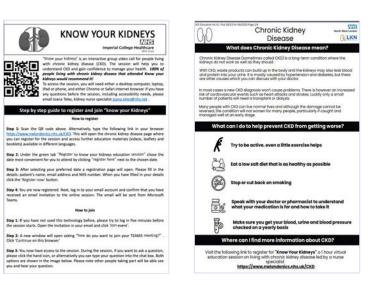
CKD diagnosis pack

Signposting to Kidney Care UK website with accessibility feature

Access to peer support via National Kidney Federation helpline

The diagnosis pack was co-created by group of people with lived experience of CKD over the course of four workshops with oversight from a Clinical Nurse Specialist.

Primary care can signpost patients to the North West London ICB website to access any of the above resources.















### Primary care management template for CKD and comorbid patients

The templates support primary care clinicians to manage and optimise CKD patients according to the latest guidelines. The following features are included:

Coding table

Simplified NWL optimisation guidelines (3 in 3)

Exception reporting for ACEi/ARB and statin

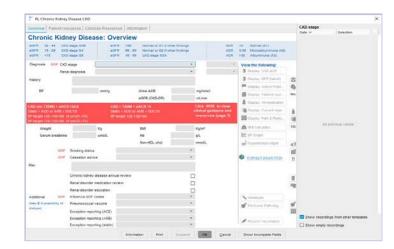
CKD review field for tracking against enhanced service

Template text invitation to Know your Kidneys

SystmOne: Linking from "Kidneys" tab in type 2 diabetes and hypertension template

Primary care clinicians can use the template before and during patient reviews to structure the appointment for example; confirming CKD stage, checking if the patient has been recommended latest therapy.

The template is available in both SystmOne and EMIS.



			10-15 No. Unknown			
Template Runner						
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Hain page	Chronic Kidney Disease: Overview					
Patient resources	Diagnosis					
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Information	ACR >30 Albummura (A3)					
	eGFR >90 Romail or 61 if oth eGFR 60 - 89 Romail or 62 if oth eGFR 45 - 59 CKD stage G2A eGFR 30 - 44 CKD stage G3A eGFR 15 - 29 CKD stage G5 eGFR <15 CKD stage 65	or findings ser faulings				
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	Chronic kidney disease annual review			No previous entry		
	Renal diagnosis		v	No previous entry		
	Examination					
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	Body weight	kg		16-Har 2023 70 kg	(8)	
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### Conclusions and Next Steps

The Discover-NOW programme identified areas where there were hold-ups in relation to the management of CKD in North West London and developed solutions to overcome these barriers.

These tools are now being rolled out across North West London in conjunction with a sector wide local enhanced service for CKD and also in conjunction with North West London Renal 3Ps programme.



The Discover-NOW toolkit will also be made available on the London Kidney Network

Preventing Progression website page

https://londonkidneynetwork.nhs.uk/preventingprogression/











