KINDER study – Kidney Inequalities: Needs, Data, Experiences, Response

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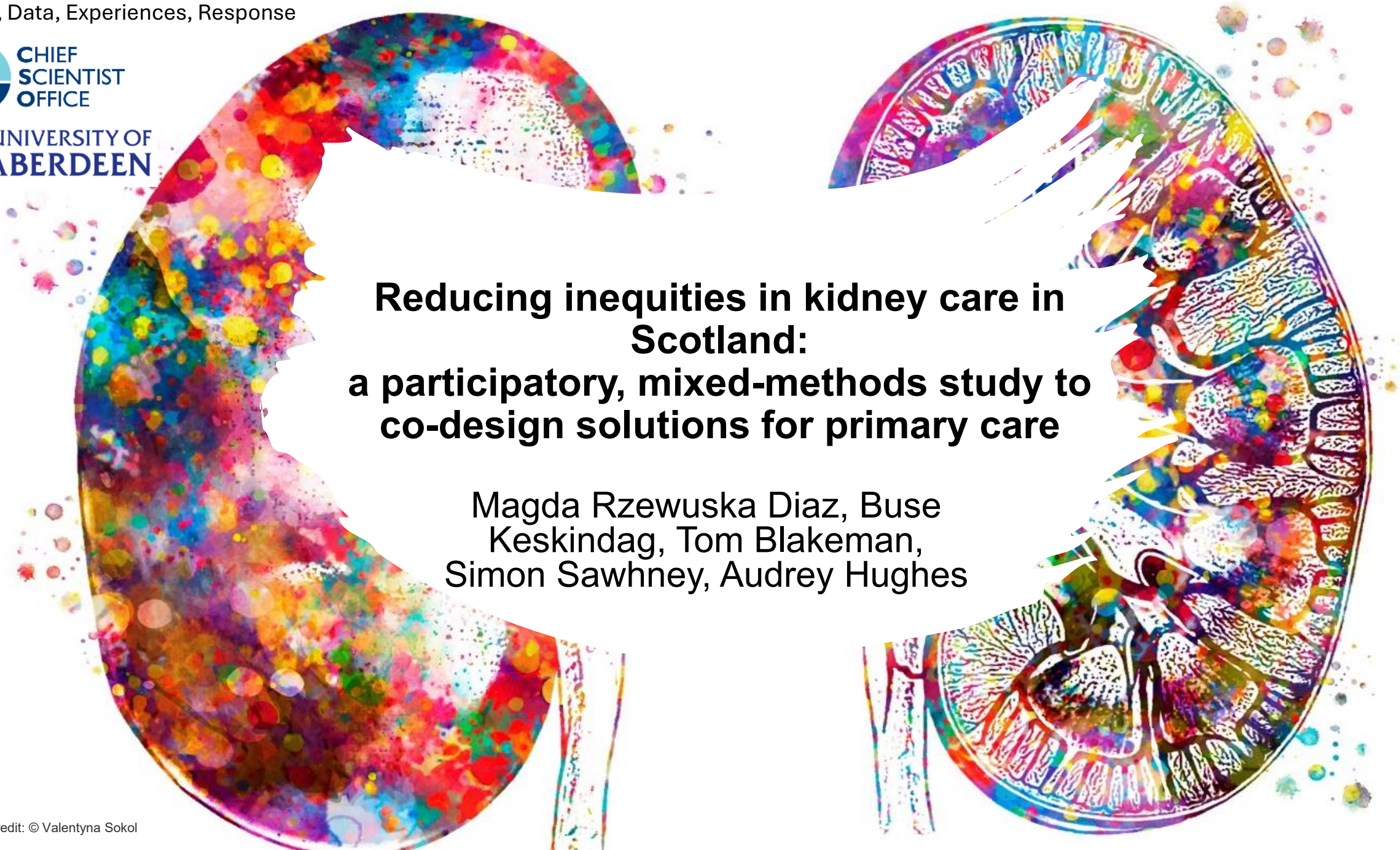

Reducing inequities in kidney care in Scotland: a participatory, mixed-methods study to co-design solutions for primary care

Magda Rzewuska Diaz, Buse Keskindag, Tom Blakeman, Simon Sawhney, Audrey Hughes

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Things I will talk about

- The problem
- What we did
- What we found
- What's next

Early CKD: where inequalities are greatest

Socioeconomic deprivation is linked to higher mortality

3-year mortality:
20% in affluent vs
35% in deprived neighbourhoods

People in deprived areas face delays in kidney care

Deprived households:
- **2× more likely to present late**
- 60% more likely to be treated in A&E
- 75% more likely to miss hospital appointments

Limited resources worsen health and daily functioning

2× higher odds of poor health and daily limitations
3× higher among working-age adults

People in deprived areas face compounding challenges

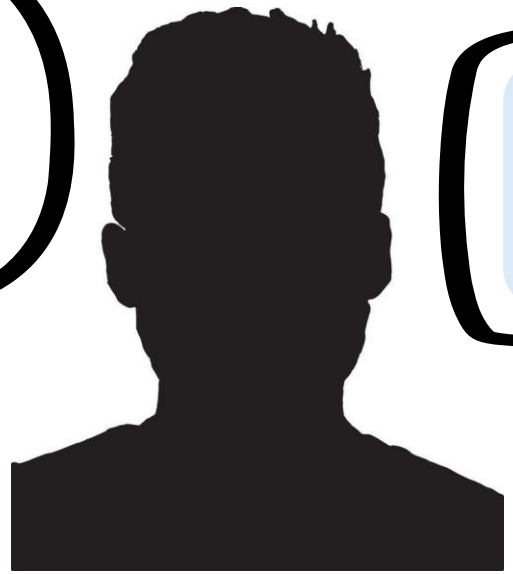
- Poorer mental health
- Learning/language difficulties
- Living alone
- No car access
- Poor health, long-term sickness, sensory impairments

Disparity is greatest at early diagnosis.

Our linked data studies (Sawhney et al., 2023, 2024, 2025)

Having received a late diagnosis at Stage 4, John Smith presented to the nephrology clinic with unmet biopsychosocial needs…

"…no one ever said, 'you need to look after your kidneys'… my father had kidney disease, but I never looked into why… in hindsight, I'd have taken my diabetes more seriously."



"…in the past eight months I lost my job, split from my family, was homeless and living in temporary accommodation…"

"…at my lowest, I was suicidal… living in a homeless hotel with no kitchen, not eating properly… constantly worrying if my condition was getting worse."

Research question

Can we identify the key problems faced by working-age people in deprived areas with the early detection and management of chronic kidney disease in primary care, and co-design feasible and equitable strategies with patients and clinicians to address these challenges?

Core study components

IDENTIFY EARLY KIDNEY CARE PROBLEMS	38 patient interviews, 23 primary care staff, and linked data
EXPRESS AS IMPROVEMENT OPPORTUNITIES	Grouped problems into 19 themes of improvements
PRIORITISE & CONSOLIDATE	19 stakeholders prioritised improvements to primary care-led early kidney care, considering how each would reduce inequity.
POTENTIAL SOLUTIONS	We co-developed 18 doable (APEASE), equitable activities with stakeholders and captured them as logic models.

Greenhalgh et al. (2019); Braun & Clarke (2019), Michie et al. (2013, 2014), Kellogg Foundation (2004)

Stakeholders involved

SYSTEM LEADERS

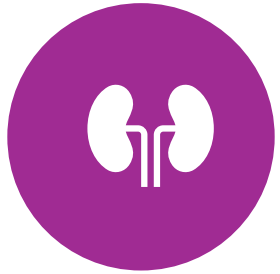
REALISTIC MEDICINE | PUBLIC HEALTH | KIDNEY RESEARCH UK

PRIMARY CARE

GPS | GP PARTNER | GP LEAD | PRACTICE NURSE | PHARMACIST | SOCIAL PRESCRIBING LEAD

SPECIALIST CLINICIANS

DIABETES SPECIALIST NURSES | TRANSPLANT NURSE



LIVED EXPERIENCE

CKD PATIENTS (PRIMARY & SECONDARY CARE)

What we found

Three priority improvement areas

Improve kidney health **messaging**: trusted, consistent, usable

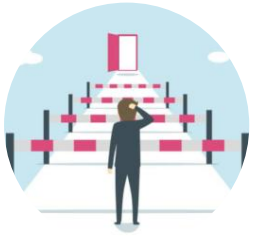
Reduce **barriers** to care access & engagement

Provide a **whole-person** approach to care

These three areas entailed

Messaging:

1. Provide clear, consistent, trusted information on kidney health.
2. Support clinicians with communication tools and guidelines.



Barriers:

3. Improve access to monitoring and practical support.
4. Offer flexible appointment formats and timings.

Whole-person:

5. Strengthen guidance for navigating biopsychosocial challenges.
6. Integrate psychosocial support across services.
7. Ensure continuity to build trusted, relational care for complex needs.

Equitable kidney care: principles emerging from the proposed activities

EQUITABLE PROVISION

- **Proportionate universalism[1]** (matched to need)
- **Targeting[2]** (complex needs-focused support)

EARLY ACTION

- **Proactive** (early risk detection embedded within cardiometabolic care)
- **Early credibility** (trusted, consistent, usable early communication)

PERSON-CENTRED DELIVERY

- **Tailoring** (e.g. sensory issues, literacy, language)
- **Holistic** (bio-psycho-social needs)
- **Trust** (consistent relationships - pharmacists, nurses, social prescribers, peers)

OPERATIONAL ENABLERS

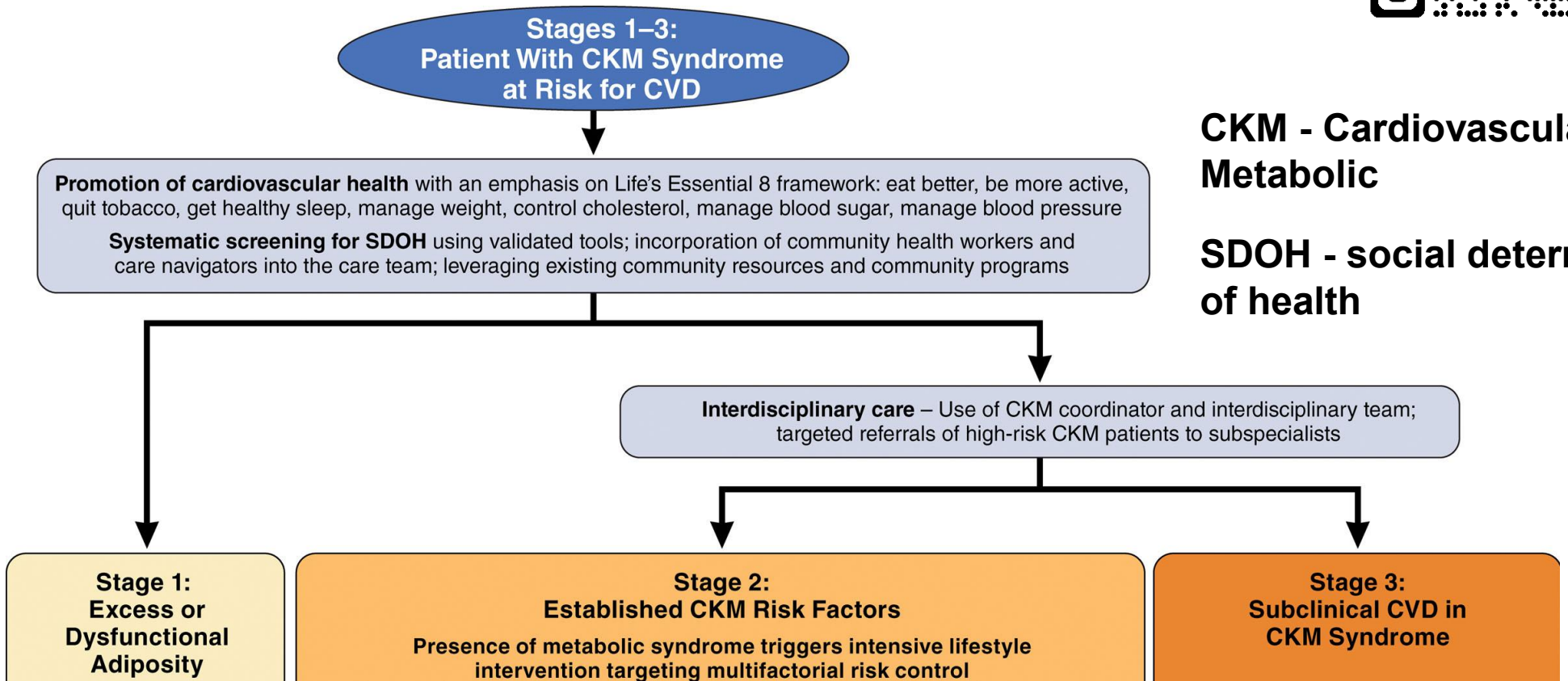
- **Flexibility** (scheduling and contact modes)
- **Collaboration** (across NHS, public health, local authority and third sector)
- **Practicality** (e.g. walking distance)

1- Marmot et al. (2010), 2 - Bailey et al. (2017)

The direction of travel going forward

AHA PRESIDENTIAL ADVISORY

Cardiovascular-Kidney-Metabolic Health: A Presidential Advisory From the American Heart Association

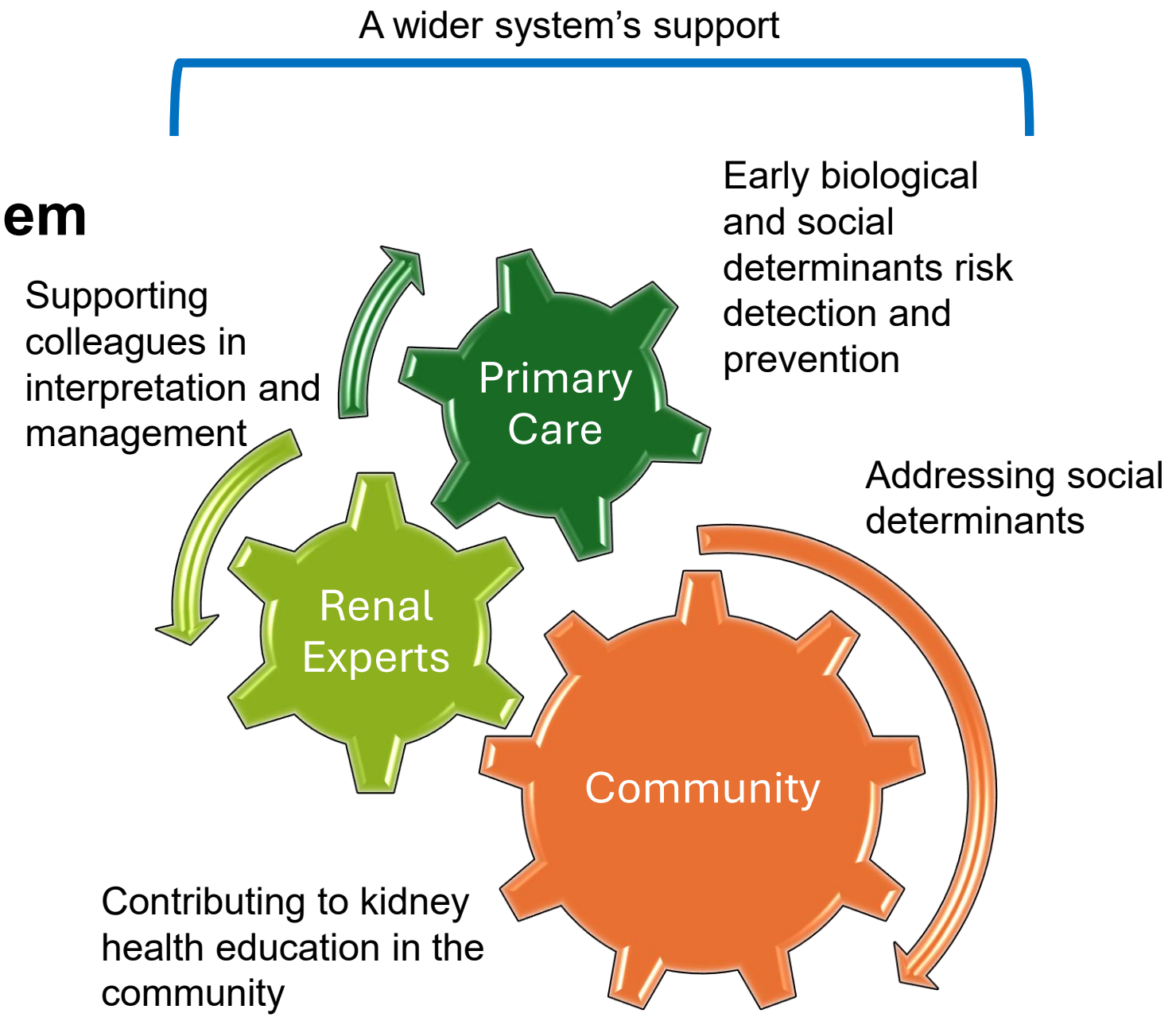


CKM - Cardiovascular-Kidney-Metabolic

SDOH - social determinants of health

Supporting people with complex biopsychosocial needs is everyone's problem

It may be time for renal experts to see themselves less as superspecialists who appear at the end of the pathway, and more as proactive leaders for the communities they serve. Other specialities - such as diabetes - have already shown how this shift can happen. Kidney care needs to be embedded within broader cardiometabolic care, delivered through community-linked primary care and neighbourhood health and care teams.



Acknowledgments

Study participants

Public research partners

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Organisations

NRS Primary Care Network
Kidney Research UK (KRUK)
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Kidney Care UK

Advisory team, especially

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Prof Shantini Paranjothy

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Sample logic model for an activity

Targeting	Working-age people in deprived areas with any long-term condition that puts them at risk of CKD or with early-stage CKD
Inputs	Venues, multi-agency staff, scheduling, operational and promotional support
Activity (behaviour change techniques)	Restructure the primary care setting by co-locating annual health checks, health advice, and support services within community-based venues, hubs or mobile skills units supported by multi-agency collaboration (12.1, 12.2), offering both individual and group sessions.
Outputs	Community-based sessions delivered and attendees (n), services accessed (n)
Outcomes	Absolute increase in early presentation at health services among working-age adults from deprived areas with long-term conditions associated with the risk of CKD (pre-post% point change), multi-service access (%)
Impact	Integrated psychosocial support for CKD across services.
Tailoring	Flexible hours, accessible locations, transport support, and integrated relevant clinical and social care services