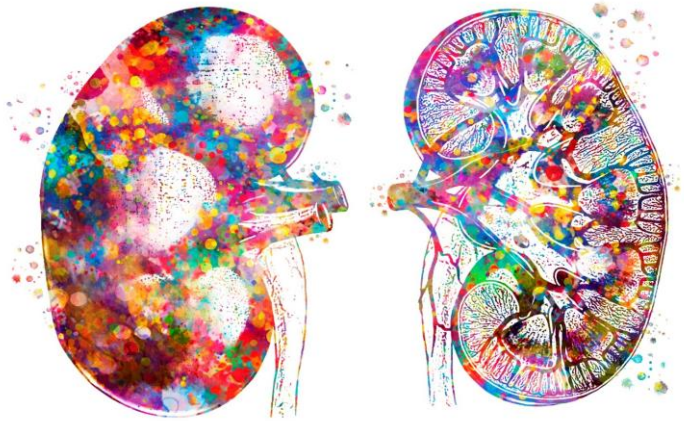
Understanding and reducing inequalities in early kidney health care and outcomes in Scotland



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

Audrey Hughes, Eilidh Cowan, Buse Keskindag,
Tom Blakeman, Magda Rzewuska Dias, Simon Sawhney

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Why early kidney care?

More people developing kidney failure in lower socioeconomic and minority groups

Challenges with access to dialysis and transplantation

"So long as we continue to fight the battle downstream…we are doomed to frustration, repeated failure, and perhaps ultimately to a sicker society"

McKinlay JB. A case for refocusing upstream: the political economy of illness. *American Heart Association* 1975

Prior work “upstream”

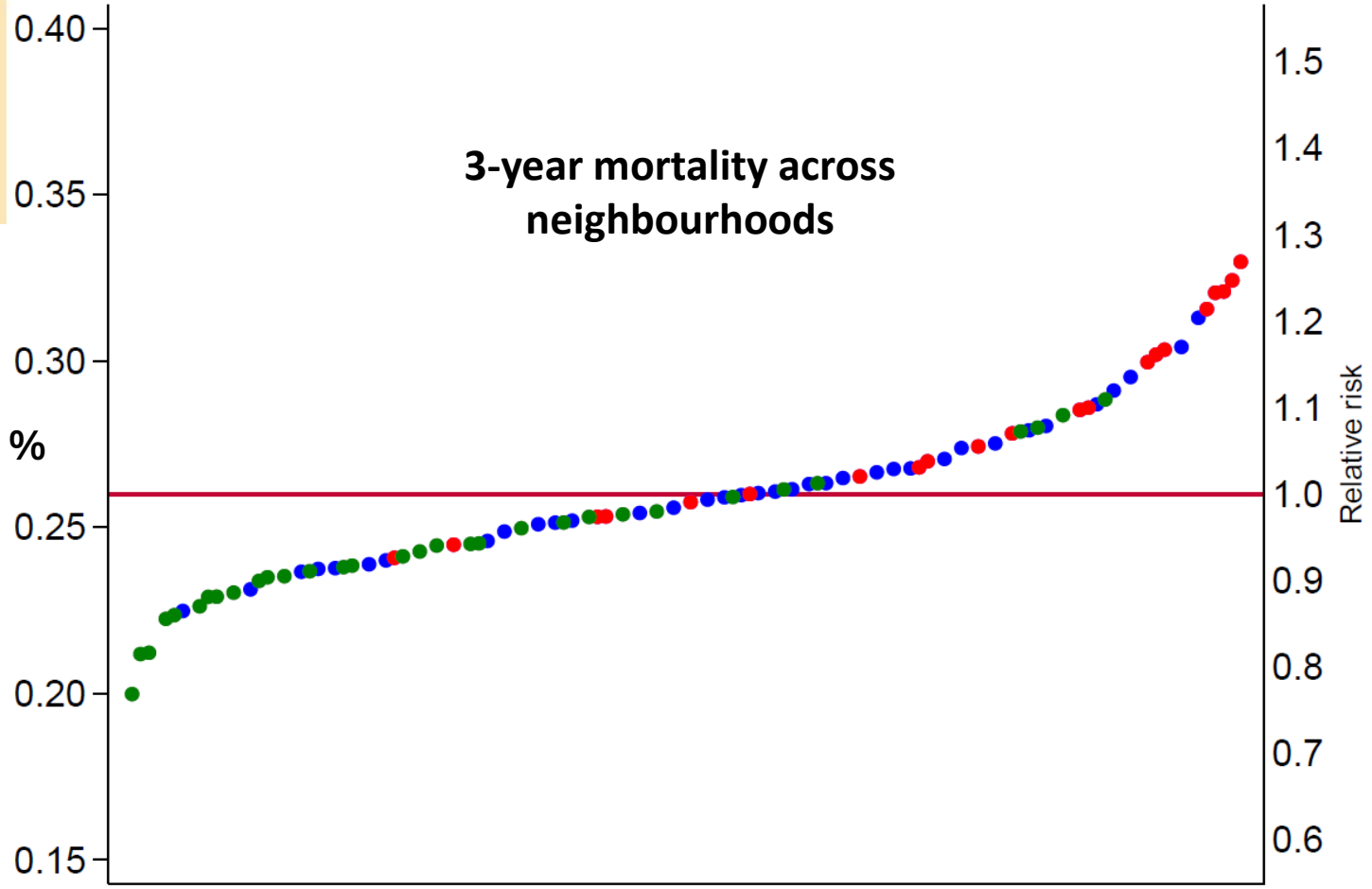
Methods **50k incident kidney disease**

Routine population data
Grampian, UK

Most deprived

Intermediate

Most affluent



Nephrology Dialysis Transplantation, 2023

Need to dig deeper

Relevant sources
Reliable measures
Reasons

"Classification systems both structure and constrain the world they describe: the conceptual framework through which medical reality is stabilised…"

Diagnosis and nosology in primary care. David Armstrong. Social Science & Medicine; 2011

Audrey Hughes PKD Charity
Patient Involvement and Engagement Officer

Nicki Scholes-Robertson
Kidney Patient Advocate
SONG working group

Mike Melvin
Aberdeen Council of Voluntary Organisations (ACVO)

Why link to national census?

“The most expensive single statistical undertaking - getting it right matters… to base important decisions on trusted and high-quality data… in all areas of society”

Extensive validation and stakeholder work for every question

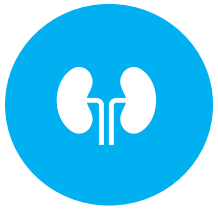
Whole population

Self-reported

Outside of a health context

Office for National Statistics

WP1: areas of focus



Health Outcomes

Clinical Care

Life Participation

Measures: **socioeconomic**, mental health, rurality, social isolation, work

Cohort profile

New cohort formation (GLOMMS-CORE):

Linkage of kidney records and a census of 458,897 North Scotland residents

Incident kidney disease presentations

eGFR <60	**n= 48,546**
eGFR <45	**n= 29,081**
eGFR <30	**n= 16,116**
AKD	**n= 28,097**

% residents presenting with early disease (eGFR <60):

By household:

Professionals (lawyers)	**7.9 %**
Unskilled (cleaners)	**13.4 %**
Unemployed (no job)	**13.5 %**

By neighbourhood quintile:

Most affluent	**8.9 %**
Most deprived	**10.0 %**

Followed up 2011-2021

Kidney International, 2024

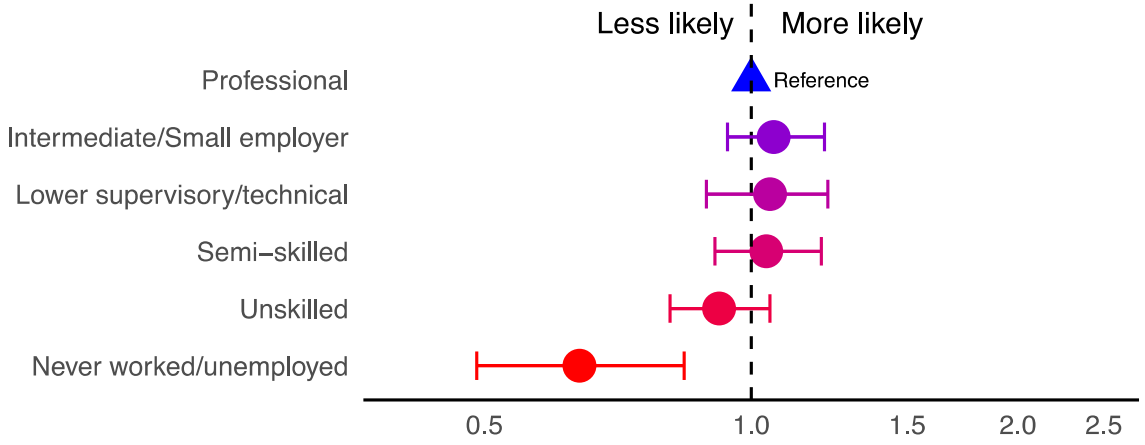
Inequity of health outcomes – separate dimensions of deprivation

	Neighbourhood deprivation quintile				
Household socioeconomic status	5 (affluent)	4	3	2	1 (deprived)
managers/professionals	1.00	1.06	1.18	1.14	1.31
intermediate/small employer	1.16	1.16	1.11	1.26	1.39
lower supervisory/technical	1.23	1.23	1.24	1.29	1.91
semi-skilled	1.29	1.24	1.27	1.36	1.65
unskilled	1.36	1.29	1.37	1.41	1.70
never worked/unemployed	1.98	1.89	1.87	2.04	2.06

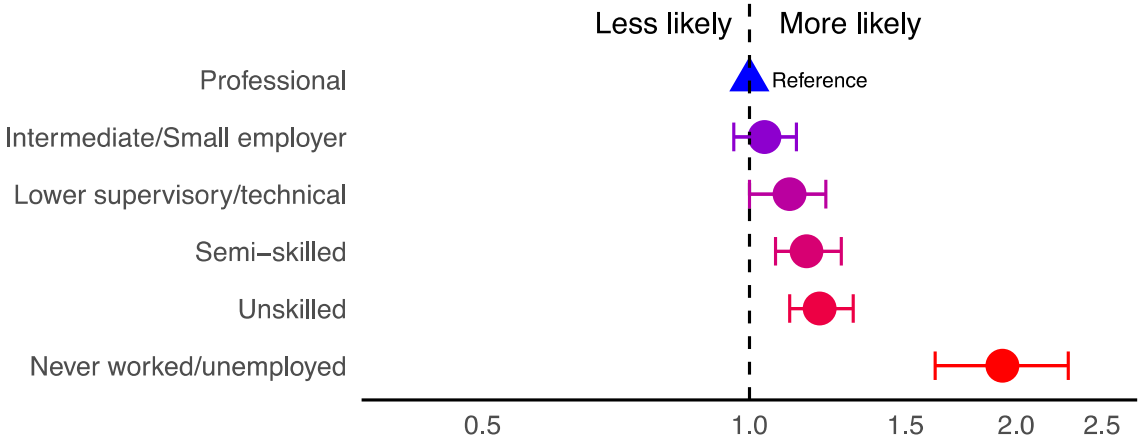
Kidney International, 2024

Inequity of clinical care – permeability

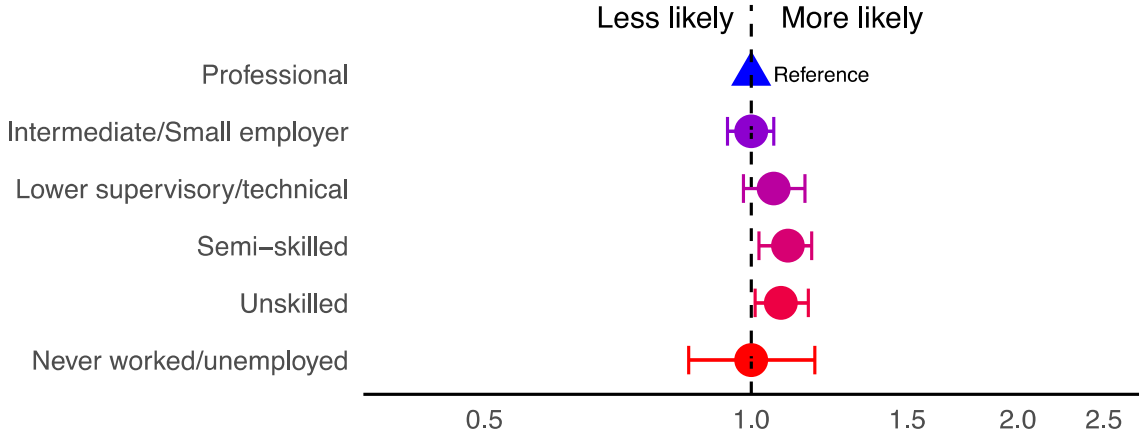
Annual blood screening (diabetes, vascular)



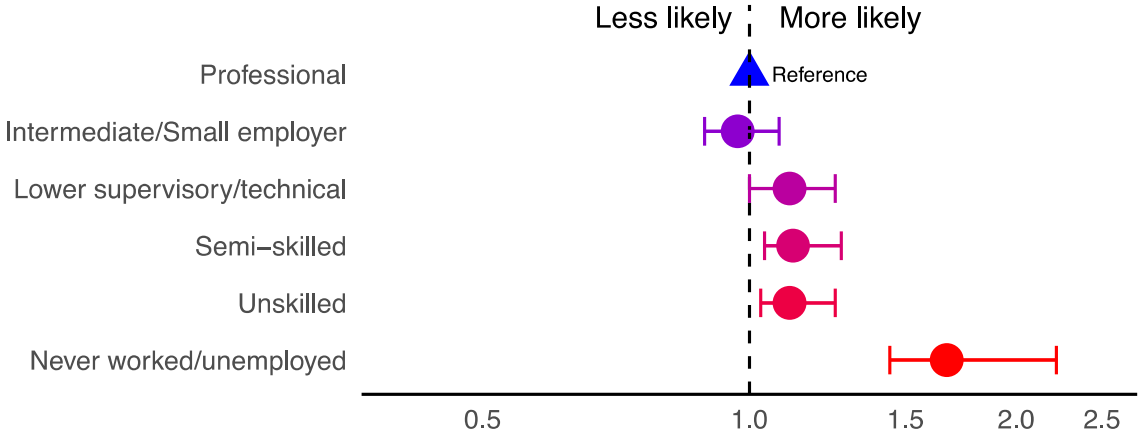
Presenting “late” (skipped CKD 3)



Testing for chronicity / staging



Attending A&E



Struggle to access care

50k people with early CKD	Professional	Low skill job	Unemployed
Mental health condition	3%	5%	12%
Living alone	22%	30%	56%
No access to a car	11%	33%	62%
Learning difficulty	3%	6%	15%
Language difficulty	3%	10%	14%
Hearing difficulty	15%	18%	21%

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*"Sometimes, [going to the doctors] could be hard… **I try to keep money aside to use a taxi** because I got arthritis as well so walking can be problem for me.* (Female, 55-50)

"*I would come into work and my own manager would tell me things like, 'I need to quit because **they are sick of paying an invalid**…'"* (Male, 30-35)

*"**I didn't think there was a problem to even worry about** and I just carried on as normal."*
(Female, 60-65)

SONG-CKD

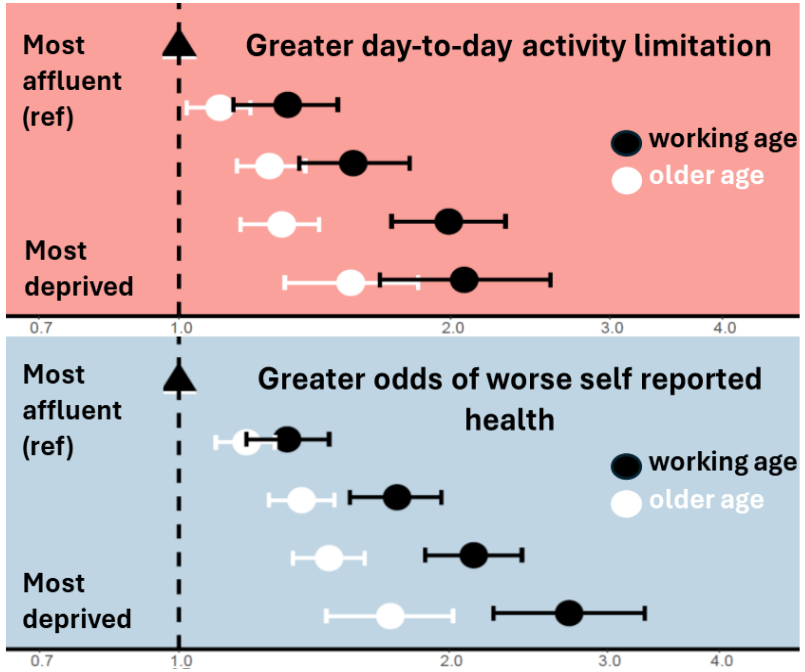
1 CORE OUTCOMES
Critically important to all stakeholder groups
Report in all trials

2 MIDDLE TIER
Critically important to some stakeholder groups
Report in some trials

3 OUTER TIER
Important to some or all stakeholder groups
Consider for trials

Kidney International, 2025

Inequity of day-to-day life participation



(1) *"How is your health in general?"*

(2) *"Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?"*

"I didn't feel I could go to my primary care to talk about it. ***I was worried I'd be wasting their time."***
(Female, 50-55)

"You can't discuss it with them *because you are just there to have those tests that are taken"*
(Male, 50-55)

Reflections

Measuring inequity is tricky - hidden, intersectional

Kidney health care is often inequitable and reactive

Impact of health on day-to-day life is under addressed

What are the boundaries of kidney health and care?