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OPEN LETTER

What primary care can learn from KitNewCare: A framework for sustainable healthcare

[version 1; peer review: 2 approved with reservations]

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Abstract

Background

KitNewCare (KNC) is a multi-centre European initiative to improve the sustainability of kidney care while enhancing quality, prevention, and system efficiency. Although developed within nephrology, its principles are relevant to primary care, where most long-term condition management, prescribing, and diagnostic decision-making occur.

Aim

To explore the transferrability of KitNewCare principles to primary care and identify key lessons for sustainable, high-value general practice.

Discussion

KitNewCare proposes a systems approach to healthcare redesign structured around four pillars: prevention, supported self-care, leaner pathways, and clinician leadership. Prevention aligns closely with primary care's role in mitigating chronic disease progression, while also reducing downstream environmental and system burden. Supported self-care highlights the importance of avoiding overmedicalisation, focusing intensive intervention on those at highest risk while enabling safe reduction of monitoring and intervention in low-risk populations.

The concept of leaner pathways is particularly applicable to general practice, where investigation cascades, monitoring, and defensive

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referrals generate significant downstream workload and potential harm. KitNewCare emphasises reducing low-value steps, strengthening uncertainty tolerance, and supporting more deliberate approaches to testing and referral decisions. Clinical leadership is positioned as central to system change, with clinicians acting as both designers and communicators of more sustainable care pathways.

A key innovation within KitNewCare is its four-factor impact framework, which evaluates outcomes across health, financial, environmental, and social domains simultaneously. This is complemented by developing benchmarking tools that integrate sustainability metrics into routine clinical decision-making. The programme also emphasises at-scale learning, shared implementation, and embedding sustainability within existing quality improvement processes rather than as an additional burden.

Conclusion

KitNewCare offers a transferrable framework for primary care transformation. Its central insight is that sustainability is not separate from clinical quality but embedded within it, emerging from better decisions about when to intervene, when to observe, and how to reduce avoidable harm across the system.

Plain Language summary

KitNewCare is a European programme that aims to make healthcare more sustainable while improving patient outcomes and making better use of resources. Although it was developed within kidney care, many of its principles are relevant to primary care, where most long-term conditions are managed and where decisions about prescribing, testing, monitoring, and referral are made every day.

This article explores how the KitNewCare approach could be applied in general practice. The programme is based on four key ideas: preventing illness before it becomes more serious, supporting people to manage their own health where appropriate, reducing unnecessary steps in care pathways, and empowering clinicians to lead change.

Many of these principles align closely with the challenges facing primary care today. Avoiding low-value tests, appointments, referrals, and treatments can reduce workload, costs, and environmental impact while improving patient experience and outcomes. KitNewCare also encourages healthcare systems to consider health, financial, environmental, and social outcomes together when making decisions and evaluating success.

The central message is that sustainability should not be seen as an additional task for primary care. Instead, it can be achieved through high-quality, patient-centred care that focuses on prevention, reduces unnecessary intervention, makes better use of resources, and

minimises avoidable harm across the healthcare system.

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This article is included in the Adaptation to Climate Change collection.

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1. Introduction

KitNewCare (KNC) is a four year, multi-centre project which aims to improve the sustainability of kidney disease care across Europe.[1] Renal medicine is traditionally a highly carbon intensive area, largely driven by reliance on renal replacement therapy (RRT) and organ transplantation; the project aims to reduce the environmental footprint of kidney care while improving quality, prevention, and system efficiency.

Now in its third year, KNC has thus far focused on reducing the environmental impact of kidney care delivered in secondary and tertiary settings. However, there are clear benefits to bringing primary care into the conversation; although centred on nephrology, KitNewCare's methods are deliberately transferrable, especially to general practice, community services, and integrated care systems.[2]

2. Four pillars of service redesign

KNC offers a compelling blueprint for how primary care could shift from incremental optimisation to whole pathway transformation. It structures the service redesign around four pillars that are highly applicable to primary care: prevention, supported self care, leaner pathways, and clinical leadership.

2.1 Prevention

Primary care is the frontline of prevention, yet this work is often under resourced and undervalued. KitNewCare highlights the role of preventative care as central to sustainability; preventing or slowing the progression of chronic kidney disease reduces the need for dialysis, and hospitalisation with associated travel, resource use and waste.[2] Through targeted screening, and intensive management of individuals at highest risk of progressive kidney disease,[3] primary care can help to reduce future clinical burden, which in turn protects the finite health system capacity and avoids carbon intensive treatments associated with end-stage renal disease.

2.2 Supported self care

However, sustainability in healthcare is not achieved simply through expanding monitoring and intervention for all patients. A more personalised approach is required: identifying those most likely to benefit from proactive management, while avoiding unnecessary medicalisation of stable low risk disease, or normal ageing.[4] KitNewCare emphasises empowering patients to manage long-term conditions confidently and independently, reducing unnecessary clinical contact while maintaining or improving outcomes. This aligns with growing concerns within primary care regarding overmedicalisation, expanding diagnostic thresholds, and the burden created by low value monitoring and intervention in patients at low risk of progression.[5] Sustainable healthcare requires not only earlier intervention for those at highest risk, but also the confidence to safely step back where intensive medical oversight offers little meaningful benefit.[1]

2.3 Leaner pathways

Leaner does not mean less care, it means less wasteful care. KitNewCare applies quality improvement methodologies to remove duplication, low value steps, and unnecessary monitoring.[1] In primary care this could include reviewing the content and frequency of routine blood test panels, rationalising monitoring intervals for stable long-term conditions, and reducing scheduled follow-up where it adds little clinical value.

It could also involve addressing 'investigation cascades', where an incidental or borderline abnormal result triggers a sequence of increasingly complex tests, specialist referrals, and repeated monitoring that may ultimately yield no meaningful change in management but increases patient anxiety, workload, and system strain.[6] In primary care, cascades are particularly relevant because GPs are the entry point of diagnostic uncertainty. A test ordered with good intention in minimally symptomatic, low risk patient can generate an unexpected abnormality that is statistically likely to be benign, but clinically difficult to ignore. Over time, this can convert normal biological variation or incidental findings into a labelled 'condition', with resultant medicalisation, surveillance, and potential harm from overdiagnosis and overtreatment.[7]

A more sustainable approach in primary care therefore requires not only careful test selection, but also the confidence to interpret mild abnormalities in context, avoid reflexive escalation, and communicate uncertainty to patients. As evidenced by the findings of KNC, resisting escalation for incidental findings where further testing is unlikely to improve outcomes improves overall system efficiency and environmental footprint simultaneously.[1] When done thoughtfully and with clear communication, it can be an active and patient-centred clinical decision rather than an omission.

2.4 Clinical leadership

A central tenet of KitNewCare is that the system redesign is clinician-led rather than imposed through managerial targets. Nephrologists are positioned both as leaders- helping to redefine quality and embed sustainability within professional standards- and as advocates for their patients. Drawing on their status as among the most trusted voices in society, clinicians are expected to engage patients and communities to understand why pathway change is necessary.[8]

For primary care, this is particularly important. Efforts to reduce overmedicalisation or unnecessary intervention will not succeed without public trust and clinical legitimacy. These changes must be explained and held within the consultation, rather than delivered as abstract system redesign. Clinicians need to be able to say, with confidence and credibility: 'this approach is safer, kinder, and more appropriate- for you, and for the wider system on which you depend'.

3. Areas of focus for primary care

Kitnewcare advocates a four-factor framework for measuring outcomes across multiple domains, to assess the impact of change on health outcomes, financial costs, social and environmental impacts.[1] This avoids the problem familiar in healthcare where gains in one domain inadvertently generate harms in another. KNC is developing benchmarking dashboards that place sustainability alongside traditional clinical indicators, reflecting the principle that clinicians cannot change what they cannot see. In a primary care context, this could mean prescribing systems that show carbon intensity alongside financial cost, referral templates that highlight high investigation burden, or decision support tools that make cascade risk more apparent.

One of the defining features of KNC is its' explicit recognition that guidelines do not change systems; instead, pooling knowledge, encouraging collaboration and a focus on workforce education have been shown to improve outcomes.[2] Primary care would benefit from a similar at-scale approach, to develop shared learning on low value prescribing and agreed norms on referral thresholds, whilst providing the collective confidence required to de-implement unnecessary care.

Crucially for overwhelmed clinicians, KNC's approach of embedding sustainability as a key component of existing quality improvement activity also avoids the sense of additional workload.

4. Conclusion

KitNewCare offers more than a set of sustainability initiatives within nephrology; it provides a coherent framework for rethinking how high-quality, sustainable healthcare is designed and delivered. For primary care, its value lies not in direct transplantation of kidney-specific interventions, but in its broader principles: that early decisions shape downstream harm or benefit, that value must be judged across multiple domains simultaneously, and that system change is most effective when it is clinician led, visible, and embedded within everyday practice.

Taken together, the four pillars of prevention, supported self-care, leaner pathways, and clinical leadership describe a model of care that is both more restrained and more intentional. They challenge the assumption that more intervention is always better, instead reframing good practice as the ability to intervene early where it matters, hold back where it does not, and continuously reduce waste across the pathway. In doing so, they align closely with the realities of general practice, where uncertainty, multimorbidity, and constrained resources are the norm rather than the exception.

The implications for primary care are both practical and cultural. Practically, they point towards more selective prescribing, more thoughtful investigation, and more confident management of risk without automatic escalation. Culturally, they require a shift in what is recognised as 'good care' - moving away from activity-based measures and towards a more balanced understanding of outcomes that includes environmental and social impact alongside clinical benefit.

KitNewCare reinforces a message that resonates strongly for primary care: sustainability is not an external constraint imposed on clinical work, but a property of good clinical decision making. When care is appropriately targeted, carefully considered, and grounded in what truly benefits patients over time, it is not only safer and more efficient, but inherently more sustainable.

Ethical approval

Ethical approval and consent were not required.

AI statement

AI-based tools and technologies were not used for article content generation.

Disclaimer

The views expressed in this article are those of the author(s). Publication in Open Research Europe does not imply endorsement of the European Commission.

Data availability

Article type (open letter) does not require data.

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Open Peer Review

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Reviewer Report 24 July 2026

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Julie Wright Nunes
University of Michigan, Ann Arbor, USA

Sustainable, systems-based care is important for all chronic conditions, with kidney disease offering a sentinel condition for this type of care. The article could be strengthened-with addressing suggestions below:
1. Justifying importance not as reliant on carbon footprint but rather in saving lives and preserving kidney health.
2. I am not sure the greater community of providers and patients actually believe more care is better as posited in "They challenge the assumption that more intervention is always better..." I would soften this to say maybe in pockets of individuals or attribute to medical prior beliefs on how to balance with the very real medico-legal issues surrounding missing a diagnosis or not treating it fully.

Minor comment, 2nd paragraph, 2.3 leaner pathways: "A test ordered..." is missing "a" before in minimally symptomatic.

Is the rationale for the Open Letter provided in sufficient detail? (Please consider whether existing challenges in the field are outlined clearly and whether the purpose of the letter is explained)
Partly

Does the article adequately reference differing views and opinions?
Yes

Are all factual statements correct, and are statements and arguments made adequately supported by citations?
Partly

Is the Open Letter written in accessible language? (Please consider whether all subject-specific terms, concepts and abbreviations are explained)

Yes

Where applicable, are recommendations and next steps explained clearly for others to follow? (Please consider whether others in the research community would be able to implement guidelines or recommendations and/or constructively engage in the debate)
Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Patient-provider communication, patient health literacy, kidney disease, kidney care, health systems improvement, systems engineering.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 14 July 2026

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Rikke Borg
Zealand University Hospital, Roskilde, Denmark

The Authors have written a letter regarding sustainable initiatives - KitNewCare - from a project in four European sites on chronic kidney disease (CKD) - and how to expand initiatives/interventions to a primary care setting.
It is well written and easy to read.

A lot of the current sustainability discussion in CKD is regarding dialysis requiring large amounts of water and energy, and single-use equipment and plastics (+ patient transportation).
It will be great to spread the message that also by making the wise early decisions in primary care and preventing severe stages of kidney disease health systems will be spared.
Guidelines are there - however, implementation is lacking.

Some points:

Firstly, in my opinion it lacks details regarding elements and results of the project intervention/initiatives in the secondary and tertiary sectors before readers would be able to judge and understand the parts that are applicable in primary care.
The author's state: "KNC offers a compelling blueprint for how primary care could shift from incremental optimization to whole pathway transformation" - I think a few conclusions for the past three years work should be mentioned.

E.g. did the project investigate targeted screening, and intensive management of individuals at highest risk of progressive kidney disease?
Also, a few lines on "transferrable framework for primary care transformation".

Secondly, I think the project is very important to discuss in the setting of the already internationally ongoing "Choosing Wisely" campaigns in several countries. [Ref 1]

Thirdly, did you have any considerations regarding digital solutions to spare face-to-face clinicians' visits; home measuring etc...

Lastly, one could mention the courage it takes to "avoid unnecessary medicalisation of stable low risk disease, or normal ageing" (something we discuss a lot) - and how Primary care caretakers will be involved in the next steps.

References

1. Born K, Levinson W: Choosing Wisely campaigns globally: A shared approach to tackling the problem of overuse in healthcare. *Journal of General and Family Medicine*. 2019; **20** (1): 9-12
Publisher Full Text

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Partly

Does the article adequately reference differing views and opinions?
Partly

Are all factual statements correct, and are statements and arguments made adequately supported by citations?
Yes

Is the Open Letter written in accessible language? (Please consider whether all subject-specific terms, concepts and abbreviations are explained)
Yes

Where applicable, are recommendations and next steps explained clearly for others to follow? (Please consider whether others in the research community would be able to implement guidelines or recommendations and/or constructively engage in the debate)
Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Nephrology; multidisiplinary treatment, cardiovascular risk in kidney disease.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have

significant reservations, as outlined above.