Global Policy Network





Catching the Invisible Risk





Integrating Early Kidney Screening into PMOS Care Pathways: A Policy Brief

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Executive Summary

Chronic kidney disease (CKD) affects around one in ten people in the UK and is frequently diagnosed only after opportunities for prevention have been missed. This policy brief explores whether women with polyendocrine metabolic ovarian syndrome (PMOS**)**, formerly known as PCOS, may represent an overlooked population at elevated risk of CKD. PMOS is increasingly recognised as a multisystem metabolic condition with established links to cardiovascular disease, and emerging evidence suggests a potential association with kidney disease through pathways including chronic inflammation, metabolic dysfunction and oxidative stress. Frequent use of nonsteroidal anti-inflammatory drugs (NSAIDs) for symptom management, e.g., chronic pelvic pain or dysmenorrhea, presents established renal risks. Individuals both with and without PMOS commonly utilise NSAIDs for symptom management. However, evidence is insufficient to determine if NSAID exposure is higher among the PMOS population, and elevated usage should not be assumed.

Although the evidence remains preliminary and does not justify changes to clinical guidelines at this stage, it highlights an important gap in current prevention efforts. Notably, NICE's draft PMOS guideline includes monitoring for diabetes and cardiovascular disease but does not address kidney health, creating a risk that any emerging CKD burden in this population will remain unidentified.

This brief recommends a proportionate, evidence-generating response rather than immediate changes to clinical practice. A feasibility and co-design study should be undertaken to determine whether kidney health awareness and referral can be integrated into PMOS care in an acceptable and practical way. Community pharmacy is proposed as a promising setting for early testing because of its accessibility, frequent patient contact and existing experience in CKD risk identification. The brief also calls for consideration of kidney health signposting within the developing NICE PMOS guideline, the design of any future pathway with equity at its core, and the establishment of a cross-sector working group involving endocrinology, nephrology, primary care, pharmacy and patient representatives. Together, these measures would allow policymakers to investigate a plausible but unconfirmed risk while supporting the NHS ambition to strengthen prevention, reduce health inequalities and identify disease earlier.

Abbreviation list

CKD – Chronic Kidney Disease

PMOS – Polyendocrine Metabolic Ovarian Syndrome

PCOS – Polycystic Ovarian Syndrome

NSAID – Nonsteroidal Anti-inflammatory Drugs

NICE – National Institute for Health and Care Excellence NHS - National Health Service eGFR – estimated Glomerular Filtration Rate

UACR – Urine Albumin-to-Creatinine Ratio

GP – General Practitioner

Introduction

Chronic kidney disease is common, costly, and frequently invisible until advanced. It affects roughly one in ten people in the UK, and approximately 50% of these cases remain completely undiagnosed leaving millions unaware of their condition until it reaches a critical stage, such as kidney failure, heart attack, or stroke (Kidney Research UK, 2024; 2026). Current UK guidance defines and stages CKD by kidney function and evidence of damage, and sets out how risk should be assessed and managed once identified (NICE, 2021, NG203); but that framework assumes a patient has already been flagged as at risk. Earlier identification is known to slow progression and reduce downstream renal and cardiovascular harm (KDIGO, 2024), which makes the question of who gets identified early, and who doesn't, a systematic health equity issue rather than an unpredictable clinical variance.

This brief looks at one population that sits outside current CKD prevention thinking: women with polyendocrine metabolic ovarian syndrome (PMOS), the recently renamed PCOS (Teede et al., 2026). PMOS affects an estimated 5–18% of women of reproductive age globally, with variation by population and diagnostic criteria. It is increasingly understood as a multisystem metabolic condition rather than a purely reproductive one, with cardiovascular risk now formally recognised as part of its clinical picture (Tay et al., 2024). Emerging evidence points to at least two plausible pathways connecting PMOS to elevated kidney risk specifically: intrinsic metabolic features of the syndrome, and frequent NSAID use for symptom management, which carries an independently established nephrotoxic risk in the general population (Nderitu et al., 2013; Zhang et al., 2017). NSAIDs are commonly used for dysmenorrhoea (Cherlin et al., 2026) in the general population and have established renal risks, but the prevalence and intensity of NSAID exposure among women with PMOS are not well characterised. Medication exposure should therefore be measured prospectively in any feasibility study.

The developing NICE guidance on PMOS (NICE, 2026) addresses the assessment and management of established long-term metabolic and cardiovascular risks. However, whether PMOS itself warrants additional CKD risk assessment or screening remains uncertain. Existing NICE CKD guidance (NG203) already recommends assessment for individuals with recognised CKD risk factors, including diabetes and hypertension. This highlights an opportunity to explore whether kidney-health awareness and identification of established CKD risk factors could be more explicitly integrated into PMOS care, without introducing routine PMOS-specific CKD screening. This is the gap this brief examines: whether, and how, kidney health awareness and referral could

be built into PMOS care before that guidance is finalised, and whether community pharmacy, as the most frequently accessed part of primary care, is a realistic setting to test this.

Problems Identified

1. The evidence is still early

A Mendelian randomisation study has reported evidence consistent with a possible causal association between PCOS and CKD, with an odds ratio of 1.180 (95% CI 1.038–1.342) (Du et al., 2023), and proposed mechanisms chronic inflammation, oxidative stress, and hormonal and metabolic dysfunction are biologically plausible (Peng et al., 2025). However, this finding requires cautious interpretation, and the magnitude and clinical implications of any independent CKD risk remain uncertain. Frequent NSAID use for symptom management adds a further, independently documented layer of nephrotoxic risk (Baker and Perazella, 2020; Nderitu et al., 2013; Zhang et al., 2017). Overall, causality, the scale of added risk, and implications for service design remain unsolved. These uncertainties underscore the need for a structured investigation.

2. NICE guidance gap

PMOS is not currently an explicit indication for kidney testing. However, women with established CKD risk factors such as diabetes or hypertension should already be assessed under NICE NG203. NICE's draft PMOS guideline addresses diabetes and cardiovascular risk but does not address kidney health, despite the overlapping risk pathways outlined above. The policy gap is therefore not universal absence of renal monitoring, but whether PMOS should trigger kidney-health education and structured assessment of established CKD risk factors

3. No pathway exists for this population

Community pharmacy offers accessibility and medicines expertise, making it a potentially promising setting for kidney-health risk identification. Point-of-care eGFR and UACR testing is already deployable in community settings, and an emerging evidence base suggests pharmacists can support CKD risk identification and management. However, evidence for community-pharmacy case-finding remains heterogeneous, much of it comes from outside the UK, and some cited work is still at the protocol stage. Furthermore, none of these systems have been adapted or tested specifically for PMOS. As a result, readiness for a PMOS-kidney pathway should not be presumed. Any feasibility study should therefore map equipment, training, quality assurance, funding, data sharing, referral processes and follow-up capacity before clinical testing is piloted.

4. PMOS care is often fragmented and long-term risks may be under-discussed

Care for PMOS is frequently fragmented, leaving its long-term health risks under-discussed. Evidence highlights systemic delays, inconsistent information, and minimal discussion regarding long-term comorbidities like metabolic dysfunction. While expanding walk-in pharmacy access is proposed to bridge these gaps, its ability to actually improve patient engagement must be rigorously tested rather than assumed.

5. Risk is unlikely to be evenly spread

PMOS presentation and severity are known to vary by ethnicity (Sendur and Yildiz, 2021), reflecting the wider, well-established pattern of unequal CKD risk and diagnosis across ethnic groups in the UK. Any future pathway that ignores this risks replicating existing inequalities rather than closing them, so equity needs to be built into the pathway from the design stage, not added afterwards.

Recommendations

1. Commission a feasibility study

NHS England should invite an ICB-led consortium, supported through an appropriate NIHR funding route, to undertake a staged feasibility and co-design study. Primary outcomes should include eligibility and recruitment rates, uptake, acceptability, completion of risk assessment, referral completion, unsuccessful-contact rate, staff time, test failure/quality-control issues, costs and inequalities in each pathway step. Progression criteria should be agreed prospectively.

2. Close the guidance gap

At annual review, consideration should be given to providing general kidney-health and NSAIDsafety information, identifying established CKD risk factors listed in NG203, and managing or testing in line with existing NICE guidance. Routine PMOS-specific screening should not be introduced unless supported by feasibility and outcome evidence.

3. Test community pharmacy as the delivery setting

NHS England and Integrated Care Boards should explore community pharmacy as the setting for early-stage testing of a PMOS-kidney pathway, building on the existing evidence base for pharmacyled CKD risk identification (Ardavani et al., 2025; Tesfaye et al., 2023) and available point-of-care eGFR/UACR testing technology (Shephard et al., 2016). Pharmacy's frequency of contact may make it a practical, low-barrier entry point for a population that can be underserved by appointmentbased care.

Phase 1 should co-design and assess pathway feasibility without introducing PMOS-only screening. Phase 2, subject to predefined progression criteria, should pilot eGFR and UACR testing in participants with established CKD risk factors. The protocol should specify consent, quality assurance, repeat testing, GP notification, urgent escalation, closed-loop referral, and responsibility for follow-up.

4. Design for equity from the outset

Recruitment, uptake, valid test completion, referral, repeat testing and follow-up should be reported using pre-specified equity variables, including ethnicity and Index of Multiple Deprivation, with accessible materials and interpretation support monitored. Use a PROGRESS-Plus-informed data plan and report missingness.

5. Bring the right people together

NHS England should sponsor an ICB-hosted multidisciplinary steering group with PMOS livedexperience representation, primary care, community pharmacy, gynaecology/endocrinology, nephrology, public health, laboratory medicine and data-governance expertise. Its first outputs should be an evidence map, logic model, eligibility algorithm, minimum dataset, safety and referral protocol, equity plan and progression criteria.

Conclusion

The link between PMOS and CKD is not yet proven, and this brief does not claim otherwise. But the combination of a plausible biological mechanism, an emerging (if preliminary) evidence base, a specific and time-limited guidance gap, and an already accessible delivery setting in community pharmacy makes this a reasonable area for structured early-stage investment. Pursuing a feasibility study, engaging with the developing PMOS guideline, and incorporating equity considerations from the outset would represent a proportionate response to genuine uncertainty, rather than a call to change clinical practice ahead of the evidence. It also fits squarely within the shift toward prevention set out in the NHS Long Term Plan (NHS England, 2019): identifying risk before it becomes disease, in a setting people already trust and visit regularly. Accordingly, this brief recommends that NHS England commission an ICB-led, multidisciplinary evidence review and codesigned feasibility study of kidney-health risk assessment within PMOS care, while maintaining the position that routine PMOS-based CKD screening should not be introduced until feasibility, safety and clinical value have been established.

References

Ardavani, A., Curtis, F., Hopwood, E., Highton, P., Katapa, P., Khunti, K. and Wilkinson, T.J. (2025).
Effect of pharmacist interventions in chronic kidney disease: a meta-analysis. *Nephrology Dialysis Transplantation*, 40(5), 884–907. https://doi.org/10.1093/ndt/gfae221

Baker, M. and Perazella, M.A. (2020). NSAIDs in CKD: Are they safe? *American Journal of Kidney Diseases*, 76(4), 546–557. https://doi.org/10.1053/j.ajkd.2020.03.023

Du, Y., Li, F., Li, S., Ding, L. and Liu, M. (2023). Causal relationship between polycystic ovary syndrome and chronic kidney disease: A Mendelian randomization study. *Frontiers in Endocrinology*, 14, 1120119. https://doi.org/10.3389/fendo.2023.1120119

KDIGO (2024). KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. *Kidney International*, 105(4 Suppl.), S117–S314. https://kdigo.org/guidelines/ckd-evaluation-and-management/

Kidney Research UK (2024). *Kidney disease: a UK public health emergency*. Peterborough: Kidney Research UK. https://www.kidneyresearchuk.org/

Kidney Research UK (2026). *Undiagnosed chronic kidney disease endangers millions of lives.* Peterborough: Kidney Research UK. https://www.kidneyresearchuk.org/

NHS England (2019). *The NHS Long Term Plan.* https://www.longtermplan.nhs.uk/

NICE (2021, updated). *Chronic kidney disease: assessment and management* (NG203). London: National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/ng203

NICE (2026). *Polyendocrine Metabolic Ovarian Syndrome (PMOS): draft guideline.* NICE guideline in development GID-NG10436. London: National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/gid-ng10436

Nderitu, P., Doos, L., Jones, P.W., Davies, S.J. and Kadam, U.T. (2013). Non-steroidal anti-inflammatory drugs and chronic kidney disease progression: a systematic review. *Family Practice*, 30(3), 247–255. https://doi.org/10.1093/fampra/cms086

Peng, H., Li, Z., Zhu, Q., Huang, J., Ruan, J., Gao, Y. and Chen, J. (2025). Unraveling the connection between PCOS and renal complications: current insights and future directions. *Diabetes Research and Clinical Practice*, 224, 112235.

Sendur, S.N. and Yildiz, B.O. (2021). Influence of ethnicity on different aspects of polycystic ovary syndrome: a systematic review. *Reproductive BioMedicine Online*, 42(4), 799–818. https://doi.org/10.1016/j.rbmo.2020.12.006

Shephard, M., Causer, L. and Guy, R. (2016). Point-of-care testing in rural, remote and Indigenous settings. In M. Shephard (ed.), *A Practical Guide to Global Point-of-Care Testing.* CSIRO Publishing, pp. 343–354. https://doi.org/10.1071/9781486305193-ch28

Tay, C.T., Mousa, A., Vyas, A., Pattuwage, L., Ramezani Tehrani, F. and Teede, H. (2024). 2023 International Evidence-Based Polycystic Ovary Syndrome Guideline Update: Insights From a Systematic Review and Meta-Analysis on Elevated Clinical Cardiovascular Disease in Polycystic Ovary Syndrome. *Journal of the American Heart Association*, 13(9), e033572. https://doi.org/10.1161/JAHA.123.033572

Teede, H.J., Bahri Khomami, M., Morman, R., Laven, J.S.E., Joham, A.E., Costello, M.F., Patil, M.,
Rees, D.A., Berry, L., Cree, M.G., Zhao, H., Norman, R.J., Dokras, A. and Piltonen, T., on behalf of the Global Name Change Consortium (2026). Polyendocrine metabolic ovarian syndrome, the new name for polycystic ovary syndrome: a multistep global consensus process. *The Lancet*, 407(10545), 2329–2339. https://doi.org/10.1016/S0140-6736(26)00717-8

Tesfaye, W., Krass, I., Sud, K., Johnson, D.W., Van, C., Versace, V.L., McMorrow, R., Fethney, J., Mullan, J., Tran, A., Robson, B., Vagholkar, S., Kairaitis, L., Gisev, N., Fathima, M., Tong, V., Coric, N. and Castelino, R.L. (2023). Impact of a pharmacy-led screening and intervention in people at risk of or living with chronic kidney disease in a primary care setting: a cluster randomised trial protocol. *BMJ Open*, 13(12), e079110. https://doi.org/10.1136/bmjopen-2023-079110

Zhang, X., Donnan, P.T., Bell, S. and Guthrie, B. (2017). Non-steroidal anti-inflammatory drug induced acute kidney injury in the community dwelling general population and people with chronic kidney disease: systematic review and meta-analysis. *BMC Nephrology*, 18, 256. https://doi.org/10.1186/s12882-017-0673-8

Cherlin, T., Mohammed, S., Strydesky, S., Ottey, S., Sherif, K. and Verma, S.S. (2026). Understanding pain in women with polyendocrine metabolic ovarian syndrome: health risks and treatment effectiveness. *Elife*, 14, RP103875. https://doi.org/10.7554/elife.103875



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