

Towards Greener Prescribing in General Practice

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March 2025

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Executive summary

This paper explores the challenges faced by general practice in implementing sustainable prescribing. It outlines the actions governments and other relevant bodies across the UK can take to dramatically reduce carbon emissions from primary care, which simultaneously improve patient outcomes and support prevention efforts

Climate change has been described by the World Health Organization as 'a fundamental threat to human health"¹ Whilst it has had a direct impact on individual health outcomes, it also presents a challenge for health systems which are not well-equipped to deal with the impacts of climate change. Lord Darzi's 2024 independent investigation of the NHS in England highlights that whilst there have been some key developments in reducing emissions through addressing the carbon footprint of estates and targeting emissions from supply chains, there are still some significant challenges ahead. Substantial ambition and momentum will be needed if the NHS is to reach its goal of becoming the first net-zero health service.²

The Royal College of General Practitioners (RCGP) recognises reducing NHS carbon emissions as a key strategic priority which is critical to the future of planetary health – the interdependent and interconnected health of our planet and humankind.³ However, greener healthcare strategies can also lead to a gold standard of care, improved patient experience and outcomes, and healthier and happier lives.

Over half of carbon emissions from primary care come from prescribing.⁴ Taking action to minimise prescriptions of 'unnecessary' medications is one of the most effective ways to enhance patient outcomes whilst reducing the environmental impacts from providing patient care. Enhancing preventative and alternative methods of care can reduce activities which produce higher levels of carbon emissions, while also reducing medication side effects, costs, and the complexity for patients managing multiple conditions and treatments.

Of course, some prescribing is essential and in the best interest of patients. However, its environmental impact can be reduced by improving the information available to patients and clinicians about medication options. Additionally, actions such as reviewing the entire supply-to-disposal chain, expanding access to medication recycling schemes, and raising public awareness of safe medicine disposal can further help mitigate its effects.

These positive changes, however, will only reach their potential if general practice has the time, resources and support to shift to greener prescribing. General practice is at crisis point after years of underfunding from governments across the UK and poor workforce planning, which has led to fewer fully qualified GPs working in the sector.⁵ This creates a challenging environment for practices to address overprescribing and polypharmacy. A system-wide strategy is necessary to support the delivery of greener prescribing.

This paper provides recommendations for policy action to meet these ambitions for tackling carbon emissions and improving patient care, focusing on the following key areas:

Reducing overprescribing and implementing 'realistic medicine' and 'prudent health' principles:

- 1. Governments and NHS bodies across the UK should adopt the principles of realistic medicine and prudent health to promote shared decision-making between healthcare staff and patients, and to minimise unnecessary medical interventions.
- 2. Governments and health system leaders should provide the support and resources needed for trained primary care teams to carry out 'Comprehensive and Structured Medication Reviews' (CMR & SMR) for every patient in need, improve quality of prescribing and improve patient safety and outcomes. This should help to ensure medications are effective and necessary, and that suitable alternatives or dosage reductions are considered where appropriate.

Expanding effective non-medical and nature-based interventions:

- 3. NICE and SIGN should update their guidelines to incorporate non-medical and nature-based interventions as a specialised category, where evidence of benefit is available.
- 4. Governments across the UK should ensure sufficient long-term investment in voluntary and community services which can provide access to evidence-based non-medical and nature-based interventions, with a focus on areas of high deprivation.

Reducing the environmental impact of prescribing:

- 5. NICE and SIGN should include information about the environmental impact of medicines in their guidelines and publications.
- 6. The 'Joint Formulary Committee (JFC)' responsible for the content of the British National Formulary (BNF) should support methods to include more information on the environmental impact of different medicines.
- **7.** All NHS medical procurement processes should include an environmental impact assessment, requiring the pharmaceutical industry to provide standardised environmental impact information.
- 8. Medicines recycling and re-use schemes, with a particular focus on inhalers, should be expanded across the UK.
- 9. Electronic prescribing should be expanded across all UK NHS settings to reduce the use of paper prescriptions and unnecessary patient travel.

Supporting general practice to address green prescribing:

- **10.** Governments across the UK should adapt existing GP funding incentive schemes to encourage a stronger focus on delivering quality improvement approaches to sustainable healthcare.
- **11.** Health research funders and relevant NHS bodies should invest in research and evaluation of interventions aiming to reduce the environmental impact of prescribing.
- **12.** Education and training providers that support staff working in primary care should develop more training on environmental sustainability.
- **13.** Governments across the UK should allocate dedicated funding to support the recruitment of sustainability leads at practice network or cluster level.

By taking these actions to support the adoption of more sustainable prescribing, general practice can play a key role in addressing the climate crisis and supporting patients to stay healthier for longer with less reliance on medications.

Background

Approximately 25% of the NHS's carbon emissions overall are linked to medicines,⁶ and around 60% of emissions in primary care come from prescribing.⁷ Reducing the environmental impacts of prescribing is the most significant direct measure general practice can take for the environment. There are significant benefits to public health as well as the environment from reducing overprescribing. Approximately 15% of hospital admissions in over-65s are caused by the adverse effects of medicines.⁸ Antimicrobial resistance (AMR) has been identified as one of the top global public health threats, where bacteria, viruses, fungi and parasites no longer respond to antimicrobial medicines.⁹ This is being exacerbated by the overuse or misuse of antimicrobial medicines to prevent and treat infections in people, as well as in animals and plants.

There is a growing evidence base that non-medical interventions can be effective in positively impacting health and reducing the need for medication. For example, social prescribing - referring or connecting people to non-medical activities, groups, information or other support in the community - is increasingly considered to be a promising intervention for improving wellbeing, although further evaluations are still needed to understand the extent of its benefits on health.¹⁰ Research has also indicated that regularly visiting local green spaces is associated with greater mental wellbeing and a lower likelihood of anxiety/depression medication usage.¹¹

Increasing focus on evidence-based, non-medical interventions, and reducing reliance on medical prescribing, aligns with the principles expressed through what has been termed 'Realistic Medicine'¹² in Scotland and 'Prudent Health'¹³ in Wales. The principles underlying both realistic medicine and prudent health promote sustainability in healthcare by emphasising efficient resource utilisation, cost-effective practices, preventive care, and focussing on long-term health outcomes.

To inform this paper, we held a series of workshops with our members and discussions at RCGP UK Council to gather views and experiences. We collated positive examples of how green prescribing approaches have been implemented within general practice which are highlighted in the report.



Reducing overprescribing and implementing 'realistic medicine' and 'prudent health' principles

During our engagement workshops, many GPs emphasised that addressing overprescribing should be a key priority for reducing carbon emissions while simultaneously improving overall patient care. In 2021, the Department of Health and Social Care's (DHSC) review on addressing overprescribing within the NHS found that 10% of items dispensed in primary care in England were inappropriate, generating a large volume of unnecessary waste.¹⁴ Not only does this drain already limited NHS resources, it also does not result in the best outcomes for patients, with research showing that 6.5% of hospital admissions are due to adverse medicine effects, rising to 20% in those over 65.¹⁵ However, given the significant pressures facing general practice, due to years of underfunding from governments and poor workforce planning, meaningful shifts to reduce the reliance on prescribing will only be possible as a system-wide and adequately resourced strategy. This strategy needs to be underpinned by the principles of 'prudent health' and 'realistic medicine'.

Prudent health in primary care refers to an approach that prioritises evidence-based, patient-centred care while efficiently utilising healthcare resources. It involves tailoring treatments to individual patient needs, reducing unnecessary tests and interventions to avoid potential harm and promoting preventive measures.¹⁶ This approach encourages shared decision-making between healthcare professionals and patients, empowering them to collaborate on health management. In a similar way, realistic medicine aims to provide high-quality, sustainable healthcare that is responsive to patient needs and is mindful of resource constraints.¹⁷

Whilst the above principles are already being considered within some elements of current policy and practice in primary care, a significant shift would be required to see them fully implemented across the UK. For example, RCGP Scotland's 2021 joint statement with other leading healthcare organisations called for 'the Scottish Government, including the Chief Medical Officer, to enable the delivery of a Realistic Medicine approach to prescribing by developing a supportive infrastructure for green social prescribing', together with a range of other key actions to reduce the environmental impact of prescribing and medicines use.¹⁸

DHSC's 2021 review into overprescribing recommended both systemic changes, including more national guidelines for non-pharmaceutical interventions, and cultural changes, such as supporting a public shift from favouring medicines over other health interventions.¹⁹ Building on this review, the NHS England Medicines Optimisation Executive Group (MOEG) provides key strategies for tackling overprescribing and polypharmacy at Integrated Care Board level in England.²⁰ Structured medication reviews (SMRs), which are thorough assessments conducted by clinicians with their patients regarding the effectiveness of the medications they are taking, are recommended by MOEG as the most effective intervention in reducing problematic polypharmacy. SMRs are already widely used in many parts of the UK and have been shown to reduce prescribing by 9.9% and to be especially beneficial when utilised as a part of a multidisciplinary and collaborative approach to reducing unnecessary prescribing.^{21,22} Supporting a quality improvement, evidence-based approach can be helpful in ensuring medication reviews or other interventions to reduce prescribing have the optimal positive impact, as shown by case study 1 below.

In October 2024, the RCGP and the Royal Pharmaceutical Society (RPS) published a Repeat Prescribing Toolkit.²³ This toolkit is designed to enhance the consistency, safety, and efficiency of repeat prescribing systems, which can ultimately help to reduce the ongoing prescription of unnecessary medicines.



A co-ordinated system-wide approach to tackling polypharmacy is important in making cultural shifts in prescribing practices. For this to be successful it must be well supported by governments and national NHS bodies across all four nations of the UK. A key priority for governments and relevant bodies across the UK should be to shift care away from overmedicalisation to a more holistic, whole-person and preventative model of care.

Recommendations

- Governments and NHS bodies across the UK should adopt the principles of realistic medicine and prudent health to promote shared decision-making between healthcare staff and patients, and to minimise unnecessary medical interventions.
- Governments and health system leaders should provide the support and resources needed for trained primary care teams to carry out 'Comprehensive and Structured Medication Reviews' (CMR & SMR) for every patient in need, improve quality of prescribing and improve patient safety and outcomes. This should help to ensure medications are effective and necessary, and that suitable alternatives or dosage reductions are considered where appropriate.

Case study 1: Charlotte Keel Medical Practice, Bristol -Quality improvement project (QIP) on deprescribing iron

Background:

The British Society of Gastroenterology guidelines recommend a once-daily dosing regimen for oral iron supplementation, as it is associated with better absorption and fewer side effects, compared to multiple daily doses. Despite this, Watergate Primary Care Network observed that many patients are still prescribed iron supplements multiple times a day. Iron absorption can also be reduced when taken with certain medications, such as proton pump inhibitors (PPIs), or with some foods and beverages like tea or coffee. The study wanted to test whether optimising iron prescribing, by adhering to a once-daily regimen and educating patients on proper administration could improve patient outcomes, while reducing costs and environmental impact.

Aim

The aim of the project was to improve patient care by reducing the prescription rates of multiple daily doses of iron supplements at Charlotte Keel Medical Practice and to educate patients on how to maximise iron absorption and minimise side effects.

Intervention

A trainee doctor conducted a quality improvement project (QIP) to address iron deprescribing. The intervention included:

- Auditing iron supplement prescribing over one month to determine the number of patients taking once, twice, or thrice-daily doses.
- Reviewing the records of patients on multiple daily doses and switching those on long-term iron supplementation to once-daily dosing.
- Presenting the findings and recommendations to general practitioners (GPs) at the practice and sharing guidance via email to encourage once-daily prescribing.
- Creating a text message to inform patients on how to take iron tablets effectively and how to incorporate more iron into their diet.

Outcome

After one month, a re-audit revealed significant improvements in prescribing practices. The project enhanced patient education regarding diet and reduced the risk of medication-related side effects. Furthermore, the shift to once-daily iron supplement prescribing is projected to save the practice over £2,500 per year (based on ferrous fumarate (iron) tablet prices in November 2023).

Expanding effective non-medical and nature-based interventions

UK Governments have been setting goals to shift care from hospital settings into the community and to a more preventative approach for a number of years. This is expected to be a central focus of the upcoming 10 Year Health Plan in England.²⁴ The aim is to enable patients to more easily access the care they need closer to home, to have a better patient experience and to keep people heathier for longer, alleviating the strain on hospitals and the wider health system. However, a major shift of resources, an overhaul of workforce planning, and a system-wide change will be required to achieve this.

One approach that can contribute towards more preventative care is through nature-based interventions, which utilise nature-based activities such as gardening and outdoor exercise to comprehensively support both mental and physical health. Access to green spaces - recreational places with grass, trees and vegetation - has been linked to a decrease in the prevalence and symptoms of various chronic conditions, including anxiety, obesity, and cardiovascular disease.²⁵ Studies suggest that the presence of nature can have a positive impact on physical and mental health, supporting the idea that exposure to green environments can play a key role in promoting wellbeing.²⁶ Using evidence-informed, shared decision-making for nature-based interventions can help patients understand their options and how these interventions may alleviate symptoms.

Green social prescribing has been trialled and implemented to varying degrees across different parts of the UK. For example, in 2018, local health boards and local authorities in Scotland piloted the Green Health Partnership (GHP) programme which aimed to facilitate and promote green health initiatives by focusing on five key aims over the first three years of operation.²⁷ Evaluations demonstrate that the scheme increased the number of nature-based health interventions available and awareness of the benefits of using them. The GHP model has since been embedded across Lanarkshire, receiving further funding for the programme to continue, in addition to being incorporated into the NHS Scotland Climate Emergency and Sustainability strategy 2022-26, with the goal of embedding it as mainstream practice in Scotland's healthcare.²⁸

A key barrier for primary and community care staff to engage with green social prescribing is the lack of resources and information. A 2023 DHSC report, 'Exploring perceptions of green social prescribing among clinicians and the public,' highlights the need for increased awareness/promotion of these alternative interventions.²⁹ Practices, wider community services, and patients need to be supported with easy access to up-to-date information on relevant and accessible nature-based activities in their local area.

In April 2021, NHS England launched their green social prescribing programme, which offers support to patients through trained community link workers who introduce non-medical methods to improve patients' mental and physical health, including nature walks, community support groups, gardening, and conservation volunteering. Results from evaluating the efficacy of this programme showed 'positive improvements in mental health and wellbeing and strong engagement in communities experiencing high levels of social inequalities that affect health and wellbeing'.³⁰ As a result, green social prescribing schemes continue to be offered across various Integrated Care Boards in England, and a toolkit has been created to support local health systems to connect with their local communities. Other non-medical interventions that offer advantages for both patients and the environment can involve initiatives that promote access to healthier, more sustainable diets, as demonstrated in case study 2 on the next page.

A lack of funding for voluntary and community sector organisations is constraining the success of social prescribing efforts in general practice, as this limits the services to which link workers can refer patients. This is particularly acute in areas of high deprivation, where access to information about nature-based interventions and wider support for patients and carers is often the least available.

Recommendations

- NICE and SIGN should update their guidelines to incorporate non-medical and nature-based interventions as a specialised category, where evidence of benefit is available.
- Governments across the UK should ensure sufficient long-term investment in voluntary and community services which can provide access to evidence-based non-medical and nature-based interventions, with a focus on areas of high deprivation.

Case study 2: Watergate Primary Care Network (PCN) - VegBox pilot

Background

Watergate Primary Care Network identified that diets in the UK tend to be energy-dense but low in nutritional value, contributing to an increased prevalence of chronic diseases such as obesity, cardiovascular disease, diabetes, and mental health conditions. The economic burden of poor diets is significant, costing the UK an estimated £5.1 billion annually due to diet-related ill health.* This project looked at addressing these issues through innovative approaches that improve access to nutritious foods and promote healthier lifestyles.

Aim

The aim of the project was to improve the health outcomes of low-income patients with Type-2 diabetes or pre-diabetes by providing access to fresh, seasonal vegetables alongside education and support to encourage healthier dietary habits.

Intervention

In April 2023, Watergate Primary Care Network (PCN) secured funding to provide annual subscriptions for a small seasonal vegetable box, delivered weekly for a year, to 12 patients across three GP practices (Narrowcliff Surgery, Newquay Health Centre, and Petroc Group Practice). The intervention included:

- A weekly vegetable box containing seasonal produce.
- Weekly emails detailing updates from the orchard supplying the vegetables.
- Recipes designed to make use of the vegetables in the box.

Patients were referred by social prescribers and health coaches, focusing on those diagnosed with Type-2 diabetes or pre-diabetes and from low-income households. Patient weight and levels of HbA1c (a blood test indicating a person's average blood sugar levels over the past two to three months) were recorded at the start and end of the project, along with patient feedback.

Outcome

Interim results for six participants with complete data showed:

- A decrease in HbA1c levels, ranging from 1-37 mmol/mol.
- An average weight loss of 12.2kg, reflected in reduced BMI.

The project also provided additional benefits, including social interaction at pick-up points, which patients found valuable. The scheme was noted as a complement to ongoing health coaching sessions.

Additional funding has been secured to continue the VegBox subscriptions. Future enhancements will include cooking lessons and a supply of store cupboard essentials to further improve accessibility and impact.

*Office for Health Improvement and Disparities (2022). Climate and health: applying All Our Health.

Reducing the environmental impact of prescribing

Reducing unnecessary medical prescribing is essential, but a significant level of prescribing will remain necessary to treat illness. One action that can reduce the environmental impact of these medicines is shifting to medical options that have a less harmful impact. A majority of carbon emissions in primary care comes from medicines, and a significant proportion of this is from the propellant in metered-dose inhalers (MDIs) which is estimated to contribute 22%.³¹ Shifting to dry powder inhalers (DPIs) or soft mist inhalers (SMIs), which do not contain high carbon propellants, can benefit both the environment and patients.

In November 2024, The National Institute for Health and Care Excellence (NICE) updated guidelines on the usage of short-acting beta-2 agonists (SABA), the most widely used blue 'reliever' inhaler/medication, when prescribing for patients, citing environmental and health risks.³² The Woodberry Wetlands PCN (case study 3), targeted asthma patients overusing SABA inhalers (which also have a high carbon emission). By improving education for patients, improving asthma management plans, and encouraging suitable patients to transition to DPIs, the initiative reduced SABA overuse, enhanced symptom control, and lowered carbon emissions by 1,972 kg CO2e per year. However, this approach may not be an appropriate option for all patients, and shared, informed decision-making between patients and clinicians about switching to these alternative options is crucial.

Throughout our engagement and research, we identified a clear need for further information and tools to be available in primary care. These should help to facilitate informed shared decision-making between patients and clinicians about the options available to the patient. It is critical that any such changes prioritise patient preference and health, ensuring that prescribing decisions focus on what is best for the patient.

There are opportunities to utilise better digital methods to deliver greener services, for example, by expanding the use of the NHS 'Electronic Prescription Service', which enables prescribers to transmit prescriptions electronically directly to a dispenser.³³ This reduces the use of paper, and it can also help to reduce the need for patient travel between services, for example to collect repeat prescription requests. This method aims to streamline the prescribing and dispensing process, making it more efficient and convenient for both patients and healthcare professionals. Whilst e-prescribing services (EPS) are widely available in general practices across England, they have yet to be fully implemented in Scotland, Wales or Northern Ireland - although Scotland plans to expand them in 2026. Well-connected and coordinated electronic prescribing needs to be rolled out across all healthcare settings - including hospitals - to minimise risks such as fragmentation and reach its full potential.



It is also important that greater efforts are made to expand safe disposal, recycling and reuse of medicines, and that these options are simple and easily accessible to primary care services and patients. Some health boards have started to build on their campaigning efforts to reduce medicine wastage and improve recycling,³⁴ but much more could be done to build on these efforts across the UK.

Beyond efforts within primary care and the wider health system, significant action is also needed throughout the supply chain to tackle the climate impact of medicines. Additional initiatives could include improving systematic consideration of environmental sustainability in drug procurement processes and more stringent requirements on pharmaceutical companies to detail the ecological impacts of their medications, which can help to inform procurement decisions as well as patient choice about which medicine is best for them. A promising example is the 'YewMaker' project, which created the Medicines Carbon Footprint Classifier (MCF) in 2024. This introduced a standardised method to estimate the carbon footprint per dose of small molecule medicines, which can support clinicians to practice carbon-informed prescribing as a part of clinical decision-making.³⁵

Recommendations

- NICE and SIGN should include information about the environmental impact of medicines in their guidelines and publications.
- The 'Joint Formulary Committee (JFC)' responsible for the content of the British National Formulary (BNF) should support methods to include more information on the environmental impact of different medicines.
- All NHS medical procurement processes should include an environmental impact assessment, requiring the pharmaceutical industry to provide standardised environmental impact information.
 - As part of this, the pharmaceutical industry should be required to make information about the environmental impact of medicines readily available in a standardised data format.
 - Once this information is available, systems should be developed to ensure that it is easily accessible to clinicians in primary care (and patients) to support clinical decision-making.
- Medicines recycling and re-use schemes, with a particular focus on inhalers, should be expanded across the UK.
- Electronic prescribing should be expanded across all UK NHS settings to reduce the use of paper prescriptions and unnecessary patient travel.



Case study 3: Reducing the environmental impact of inhalers in patients with Asthma across a Primary Care Network -Woodberry Wetlands PCN (The Heron Practice and Allerton Road Medical Centre)

Background

The Woodberry Wetlands Primary Care Network (PCN) recognised the need to reduce the environmental impact of asthma care by focusing on inhaler prescribing practices. The NEL Asthma guidelines were adapted to prioritise reducing the use of short-acting beta-2 agonists (SABAs) in a metered dose inhaler (MDI) form, switching therapies to encourage the use of dry powder inhalers (DPIs) for patients with suitable inhaler techniques, and shifting attention to maintenance and reliever therapy in those overusing SABAs. SABA overuse is often linked to a variety of factors, including misunderstandings about asthma management plans, poor inhaler techniques, unawareness of remaining medication in inhalers, and suboptimal asthma control influenced by lifestyle and environmental factors. Additionally, anxiety in some asthma patients can contribute to overuse.

Aim

To collaborate as a PCN in improving asthma care for patients using high levels of SABAs with the following objectives:

- Enhance staff understanding of updated asthma guidelines to improve asthma reviews.
- Implement a system to promptly alert clinicians of SABA overuse (six or more SABAs per year).
- Conduct asthma reviews to improve patient care, reduce SABA overuse, and decrease the PCN's carbon footprint.

Intervention

The initiative targeted patients who had requested six or more SABA inhalers in the past 12 months. These patients were invited for face-to-face reviews via text message.

Pharmacists in each practice were briefed on the updated asthma guidelines, the importance of greener inhaler prescribing, and strategies to incorporate these into patient consultations. During asthma reviews, pharmacists focused on:

- Educating patients about their asthma management plans.
- Identifying opportunities to step up treatment for better symptom control.
- Reducing overordering of SABA inhalers.
- Switching patients to DPIs where appropriate.

Outcomes

The intervention produced several benefits:

- Improved Asthma Care: Patient education and quality reviews reduced SABA overuse, resulting in fewer consultations for worsening symptoms or exacerbations.
- Better Condition Control: Enhanced asthma management reduced the need for frequent appointments, saving staff time.
- Environmental Impact: The initiative reduced carbon emissions by 1,972 kgCO2e per year, equivalent to driving 5,824 miles in an average car.
- Cost Savings: The project saved approximately £640 per year in prescription costs.
- **Empowered Patients:** Ongoing discussions enabled patients to better understand and manage their asthma, fostering long-term health benefits.

This project demonstrates how a targeted approach to asthma care can simultaneously improve patient outcomes, reduce environmental impact, and optimise healthcare resources.

Supporting general practice to implement greener prescribing

Addressing climate-related issues can sometimes be seen as a lower priority by both patients and clinicians at a time when patients are experiencing difficulties getting an appointment due to the current pressures in general practice. General practice is facing unprecedented workforce and workload pressures, with 71% of UK GPs finding their job 'extremely' or 'very' stressful' in 2022.³⁶ As of January 2025, NHS data shows there were 28,235 fully qualified full time equivalent GPs in England, 3.9% fewer than in September 2015; therefore the number of patients per GP increased by 16.5% in this period.³⁷ Equivalent workforce data is not available across other parts of the UK, but we consistently hear of unmanageable workload pressures across all four nations.³⁸ This means there is limited time for GPs on the front-line to engage in learning activities and implement changes towards net zero, or to have meaningful conversations about the potential impact of medicines with patients during a typical 10-15 minute consultation.

RCGP has long called for significantly more resources for general practice to build capacity and enable GPs to spend more time with their patients. However, this will take time. One option for supporting GPs to identify time to engage in sustainability work in the short-term, could be through utilising the existing Quality Outcomes Framework (QOF) in England (Qualities improvement framework (QIF) in Wales) to incentivise quality improvement activities related to sustainability in general practice. However, there are mixed views amongst GPs about the effectiveness of QOF, and this may not be the most effective long-term solution. Overall, there needs to be sufficient capacity in the health service if it is going to truly shift to a greener model.

Alongside the need for further information about the impact of medicines on the environment as outlined in the section above, GPs have reported that they would benefit from additional training and guidance about how to implement new approaches to sustainable healthcare and prescribing based on evidence and best practice. However, there is currently limited evidence in this area, and limited capacity for GPs and their teams to engage in trialling new quality improvement initiatives.

Whilst sustainable activity should be embedded throughout the health service, dedicated leadership, support and funding are needed at practice and network levels. With general practice under immense workload pressures overall, further support is urgently needed to enable sustainable activities, which will benefit the effectiveness of NHS services, the health of our patients, and the health of the planet.

Recommendations

- Governments across the UK should adapt existing GP funding incentive schemes to encourage a stronger focus on delivering quality improvement approaches to sustainable healthcare:
 - For existing incentive schemes such as the Quality Outcomes Framework (QOF) in England, there should be a reduction in the number of indicators and a shift to high-level indicators that address health inequalities, sustainability, prevention, and multi-morbidities.
 - Fund quality improvement projects (QIPs) which support GPs in implementing sustainability.
- Health research funders and relevant NHS bodies should invest in research and evaluation of interventions aiming to reduce the environmental impact of prescribing.
- Education and training providers that support staff working in primary care should develop more training on environmental sustainability.
- Governments across the UK should allocate dedicated funding to support the recruitment of sustainability leads at practice network or cluster level.

Acknowledgements

We would like to extend our thanks to the clinicians and experts in sustainability healthcare who attended the roundtable held in March 2024, whose invaluable expertise and insights have significantly contributed to this report.

We are also grateful to the RCGP climate leads and representatives for their insights, support and guidance in the development of this report, ensuring it reflects the importance of green prescribing in general practice. We would also like to thank RCGP Council members, Faculties and our Patient and UK Carers Partnership Group for their important input into this paper, ensuring it recognises the challenges facing general practice and the need to prioritise any co-benefits for the climate and for patient care.

Finally, we would like to highlight the case studies we received as part of developing this report and express our thanks to the colleagues who submitted them, enriching this work with real-world examples.



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Published March 2025

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