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General Practice Registrar-Led Community Lifestyle Medicine Group Consultations in Primary Care: A Quality Improvement Feasibility Evaluation

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Abstract

Background

Modifiable lifestyle behaviours are major drivers of chronic disease, particularly among older adults living with multimorbidity, yet scalable preventive models remain limited. Group consultations may offer a scalable route to preventive lifestyle support, but delivery depends on a primary-care workforce skilled in behaviour change and group facilitation. General practice (GP) registrar-led models that combine patient care with workforce development are not well described.

Methods

We conducted a single-arm, pre-post quality improvement feasibility evaluation of a GP-registrar-led programme across two north London boroughs in mid-2025. The intervention combined clinician physical activity training, multimodal recruitment through a GP, and a four-week community-based group consultation course (RESET) covering movement, nutrition, sleep, stress, habit formation, purpose, and social connection. Reach, baseline need, retention, direct cost, participant feedback, and exploratory pre-post self-reported outcomes were assessed descriptively.

Results

A total of 79 clinicians attended the training. Of the 149 patients who registered interest, 38 commenced the programme and 29 completed all four weeks (76% retention; 126 patient-sessions). Participants were older and high-need: mean age 64.1 years, 97% with at least one long-term condition, 68% multimorbid, 79% with a cardiometabolic condition, and only 21% meeting the aerobic activity guideline. Direct cost was £133.72 (£1.06 per patient-session; £4.61 per completer), excluding in-kind contributions. Among 21 matched respondents, self-rated scores improved across all seven domains, with the largest mean changes in exercising regularly (+0.81) and sleep-hygiene confidence (+0.62); self-reported aerobic-guideline attainment rose from 19% to 43% and strength or balance activity from 48% to 76%. Acceptability was high: 64% of post-course respondents definitely and a further 27% possibly wished to continue with an extended programme, and feedback highlighted the value of doctor-led delivery and peer support.

Conclusions

This GP-registrar-led lifestyle medicine group consultation model was feasible within routine primary care under supportive local conditions, reached a high-need multimorbid population, and produced encouraging short-term self-reported signals. Given the uncontrolled design, small matched sample, short follow-up, and reliance on self-reported outcomes, the findings indicate feasibility and promise rather than effectiveness. Longer-term, controlled, multi-site evaluation is needed to assess behavioural, clinical, economic, and educational outcomes.

Categories: Family/General Practice, Quality Improvement, Preventive Medicine
Keywords: behaviour change, general practice training, group medical visits, lifestyle medicine, multimorbidity, physical activity, polypharmacy, primary care, quality improvement, shared medical appointments

Introduction

Chronic disease is strongly shaped by modifiable lifestyle behaviours, including physical inactivity, poor diet, inadequate sleep, and chronic stress. These behaviours commonly coexist with multimorbidity and polypharmacy, contributing to persistent symptoms, impaired function, treatment burden, and high healthcare use [1,2]. Physical inactivity alone is estimated to account for 6-10% of the burden of major non-

communicable diseases and around 9% of premature mortality worldwide [3]. Lifestyle medicine, defined broadly as the evidence-based use of behavioural interventions across movement, nutrition, sleep, stress, and related domains, is therefore increasingly recognised as central to prevention and long-term condition management in routine primary care [4].

Primary care is well placed to deliver lifestyle support, but doing so within standard consultations is difficult. Clinicians report limited time, competing priorities, and variable confidence and training in lifestyle counselling, with physical activity a clear example: it is among the most evidence-based lifestyle interventions, yet is inconsistently addressed in routine healthcare, and clinicians often lack both confidence and practical referral pathways [5,6]. Patients also need more than brief advice. Awareness of the recommendations is limited; in one general-practice evaluation, only around 14% of patients correctly identified national physical activity guidelines [7]. A local preliminary survey conducted at a contributing practice (unpublished data) found a similar pattern: of 60 patients, fewer than half (45%) were aware of the aerobic activity recommendation, only 10% of the strength recommendation and 3% of the guidance on reducing sedentary behaviour, measured against the UK Chief Medical Officers' Physical Activity Guidelines [8]. Crucially, most respondents felt that information alone would not change their behaviour, pointing to a need for delivery models that add repeated contact, practical skills, reinforcement, and social support.

UK health policy increasingly prioritises prevention, personalised care, and a shift from hospital-based treatment towards community-based support, including social prescribing and voluntary-sector partnerships that can connect clinical advice with ongoing, socially embedded behavioural support [9-11]. Yet scalable, evaluated mechanisms for delivering structured preventive lifestyle care in real-world primary care remain limited.

Group consultations are one promising response. By combining clinical input, structured education, and peer support within a single session, they can support self-management more efficiently than repeated one-to-one appointments. Systematic review evidence suggests that group medical care and shared medical appointments can improve patient experience, self-efficacy, and selected health outcomes, although effects vary by condition and context [12,13]. UK qualitative work has shown that group consultations can foster peer learning, support multidisciplinary working, and allow a more holistic discussion of long-term conditions, while also requiring substantial effort, facilitation skill, and organisational support to establish and sustain [14,15]. Early UK work applying group consultations to lifestyle medicine has reported acceptability and improvements in perceived health and well-being [16].

Group consultations may therefore be particularly suited to lifestyle medicine, where these behaviours are interdependent rather than isolated clinical issues. Yet group consultation delivery, behaviour-change counselling, and structured lifestyle medicine are not yet embedded as routine components of general practice (GP) training. A GP-registrar-led model could address both gaps at once, extending patients' access to structured lifestyle support while developing the future primary-care workforce's capability in preventive, group-based care, consistent with educational theory on experiential learning through authentic, supervised practice [17,18]. To our knowledge, such a dual-purpose, registrar-led lifestyle medicine group consultation model has not previously been described or evaluated.

In this context, a GP-registrar-led community lifestyle medicine initiative, 'Move More Month', was developed and implemented in two diverse, multi-ethnic north London boroughs of mixed socioeconomic profile. The initiative paired a clinician-facing component, physical activity consultation training used as a concrete entry point for broader lifestyle consultation skills, with a patient-facing four-week group consultation course, RESET (Routine, Eating, Sleep, Exercise, Thoughts), spanning movement, nutrition, sleep, stress, habit formation, purpose, and social connection. This quality improvement feasibility evaluation aimed to assess whether the model could be implemented within routine primary care, describe its reach and retention, characterise the baseline needs of participants, estimate direct programme costs, and explore short-term self-reported changes to inform future controlled evaluation.

This article was previously presented as an oral presentation at the 9th ECOSEP Congress (European College of Sports and Exercise Physicians), Düsseldorf, Germany, November 20-22, 2025.

Materials And Methods

Study design and setting

This was a single-arm, pre-post quality improvement feasibility evaluation conducted between June and July 2025. The group consultation sessions were delivered at a local community hall, accessed free of charge through Bounds Green Group Practice's existing community links. Participants were referred from multiple GPs across two diverse, multi-ethnic north London boroughs of mixed socioeconomic profile, Enfield and Haringey. Adults registered with any GP in the two boroughs were eligible if they had lifestyle-related health goals or long-term conditions for which the referring clinician considered lifestyle support relevant. Exclusion criteria were not formalised, although patients requiring urgent medical assessment, or those unable to participate safely in a group setting, were not directed to the course. No formal pre-participation screening tool (such as the Physical Activity Readiness Questionnaire, PAR-Q) was used; safety was

supported by referring-clinician judgement, a safety briefing at the introductory session, and optional seated and lower-intensity activity alternatives.

The evaluation was not designed to estimate effectiveness. Reporting follows the Standards for QUality Improvement Reporting Excellence (SQUIRE 2.0) [19]. The programme was treated as a complex, context-dependent service intervention, for which feasibility and implementation learning were appropriate first-stage outcomes before larger-scale effectiveness evaluation [20]. No medications or procedures were administered: the programme comprised education, group facilitation, and lifestyle counselling delivered as a service. Participants were referred through routine clinical pathways and were not assigned by the evaluation team to any intervention or comparator.

Ethical considerations

This project was undertaken as a service evaluation and quality improvement project within routine GP. Its classification was assessed using the UK Health Research Authority (HRA) decision tool, which confirmed that NHS Research Ethics Committee review was not required [21]. The project was agreed by the GP partners at Bounds Green Group Practice, the lead site and host for the group consultations, and was conducted under that practice's clinical governance arrangements. Other participating practices contributed clinician training attendance and patient referrals into the service, and no separate governance approval was sought from them. Because the evaluation used anonymous questionnaires collected within routine care, formal written consent was not required: participants were informed of the purpose of data collection and of their right to decline or withdraw, and voluntary completion and return of the anonymous questionnaire was taken as consent to participate. No patient-identifiable data were collected, and all responses were recorded anonymously using participant-assigned numbers. The evaluation was conducted in accordance with the principles of the Declaration of Helsinki.

Programme theory

The programme theory was that clinician training would increase capability to initiate lifestyle conversations and identify suitable patients, multimodal recruitment would create accessible routes into the programme, and the group consultation course would provide repeated contact, peer support, practical skills, and goal-setting. The GP-registrar-led delivery model was also intended to create experiential learning in preventive care, lifestyle counselling, interprofessional working, and group consultation facilitation. The course was informed by the COM-B model of behaviour change [22], selected behaviour-change techniques including goal setting, action planning, problem solving, and social support [23], and habit formation principles [24].

Intervention

Move More Month comprised three connected components. First, Moving Medicine Physical Activity Clinical Champions (PACC) training was delivered to clinicians across participating practices over four sessions, three online and one in person, between June and July 2025, concurrently with recruitment and course delivery [25]. The training drew on the Moving Medicine resources, including their publicly available presentation materials, and covered the health benefits of physical activity and how to raise and support it in brief consultations; an additional session addressed the role of physical activity in obesity and alongside GLP-1 prescribing. Physical activity served as the entry point for broader lifestyle consultation skills. Training aimed to support clinicians to hold brief, structured physical activity conversations and signpost eligible patients to the course; clinicians were not trained to lead exercise sessions.

Second, recruitment used a multimodal strategy led by direct GP and clinician referral. Additional routes included social-prescriber, health-coach, and care-coordinator signposting; GP-practice waiting-room flyers carrying a QR-code sign-up; and targeted text messaging through Accurx (Accurx, London, UK). Referring clinicians were made aware of the programme and its referral route through practice meetings, posters in clinical rooms, and the PACC clinician training sessions.

Third, the four-week group consultation course, RESET, was delivered as one session per week over four consecutive weeks from late June to July 2025, following a structured lifestyle medicine curriculum adapted, with permission, from BAPS Charities' wellNESS programme, an established community well-being programme. Across the four weeks, the sessions progressed through foundations of lifestyle medicine and habit formation, nutrition, movement with sleep and stress management, and purpose with social connection and sustainability planning. Every session combined teaching, facilitated group discussion, practical skills, and goal setting. The full session-by-session curriculum is provided in Appendix A.

Delivery team and practical arrangements

Sessions were delivered by a rotating volunteer team drawn from four GP registrars, a foundation-year doctor, a physician associate, and a health coach, with at least four staff present at each session; the practical physical-activity demonstrations were led by team members experienced in delivering exercise sessions. Each session involved approximately 30 minutes of set-up and 60-90 minutes of delivery. A venue risk assessment covered ventilation, fire safety, infection control, and accessibility for older participants.

Data collection

Anonymous pre-course questionnaires recorded demographic data, long-term conditions, medication use, health behaviours, physical activity, sleep, stress, social support, and self-rated scores across the following seven five-point domains: sleep quality, confidence in establishing habits, ability to exercise regularly, dietary choices, ability to manage stress, confidence in sleep hygiene, and overall health. Higher scores indicated better outcomes. These self-rated items were study-specific and non-validated. Sleep duration was recorded only as a categorical band (Table *1*) and was too coarse to use as a pre-post outcome; thus, the sleep-quality and sleep-hygiene-confidence items were used for the pre-post comparison.

Physical activity was assessed with two single self-report items, each answered as always, sometimes, or never. One item mirrored the UK aerobic guideline of 150 minutes of moderate activity or 75 minutes of vigorous activity weekly; the other asked about undertaking strength or balance activity on at least two days, combining muscle-strengthening with balance and flexibility examples such as stretching and tai chi [8]. Post-course questionnaires repeated the physical activity and self-rated items and recorded feedback on the course components, perceived usefulness, and interest in continuation. The full pre- and post-course questionnaires are provided in Appendices B and C.

Responses were linked at the individual level by a self-generated participant code (questionnaire item 1); uniqueness was not enforced, and in one instance, two participants independently chose the same code. Session attendance, course completion, the number of patient-sessions delivered, and the number of clinicians trained were recorded in attendance registers. Direct costs were recorded against receipts. The programme received no external or grant funding; all staff time was voluntary, and direct consumable costs were met by the delivery team and reimbursed by the host practice.

Outcomes

Feasibility outcomes were clinician training attendance, patient expressions of interest, commencement, course completion, retention, number of patient-sessions delivered, direct programme cost, and participant feedback. Baseline descriptive outcomes included demographic characteristics, long-term conditions, multimorbidity, cardiometabolic conditions, medication use, health behaviours, sleep, stress, and social support. Exploratory short-term outcomes were matched pre-post changes in the seven self-rated domains and self-reported physical activity.

Statistical analysis

Statistical analyses were performed using PSPP (GNU PSPP, version 2.1.0; Free Software Foundation, Boston, MA, USA). Categorical data are presented as frequencies and percentages, and continuous data are presented as means with standard deviations (SDs). Missing data were not imputed; analyses were based on available cases, with denominators reported where data were incomplete, for example, age was available for 32 of 38 baseline respondents.

Within-participant change was assessed in the 21 participants with matched pre- and post-course questionnaires. The seven self-rated five-point items, although ordinal, were treated as continuous for descriptive purposes, and mean change scores for each item are presented with 95% confidence intervals derived from paired within-participant differences using the t-distribution with n - 1 degrees of freedom. Self-reported aerobic-guideline attainment, defined as responding ‘always’, and any regular strength or balance activity, defined as responding ‘always’ or ‘sometimes’, are reported as frequencies and percentages before and after the programme.

Confidence intervals are presented as measures of precision. Given the feasibility design and small sample, formal hypothesis testing was not undertaken, and p-values are not reported. Direct programme cost was calculated as total direct cost and as cost per patient-session and per completer.

Results

Clinician training

Across four PACC training sessions, three delivered online and one in person, with one session recorded for later access, 79 clinicians were recorded as attending. Attendance across the four sessions was 12, 39, 10, and 18 clinicians (range 10 to 39), the largest being a borough-wide teaching session, with no individual attending more than one session. Because some online participants shared a login and could not be counted individually, this total likely underestimates the number of clinicians reached. Clinical staff requested further sessions, indicating continued demand.

Recruitment, reach, and retention

A total of 149 patients registered interest through the online sign-up form (Appendix D). Of the 144 who indicated their intended attendance, 75 (52%) planned to join the full four-week course, 34 (24%) intended to attend some sessions, and 48 (33%) were interested but unable to attend at the scheduled time

(participants could select more than one option). Among the 38 participants who attended and completed the baseline questionnaire, the most common referral route was the patient's own GP (63%), followed by a social prescriber, health coach or care coordinator (18%), and targeted text messaging (13%); practice flyers and word of mouth accounted for the remainder. Participants were referred from more than 17 GP practices across the two boroughs.

Attendance registers recorded that 38 participants commenced week 1 and 29 completed all four weeks, representing 76% retention and generating 126 patient-sessions. Thirty-eight participants completed a baseline questionnaire, and 22 participants completed a post-course questionnaire; 21 of these could be linked across both time points and formed the matched sample for the pre-post comparison (Figure *1*).

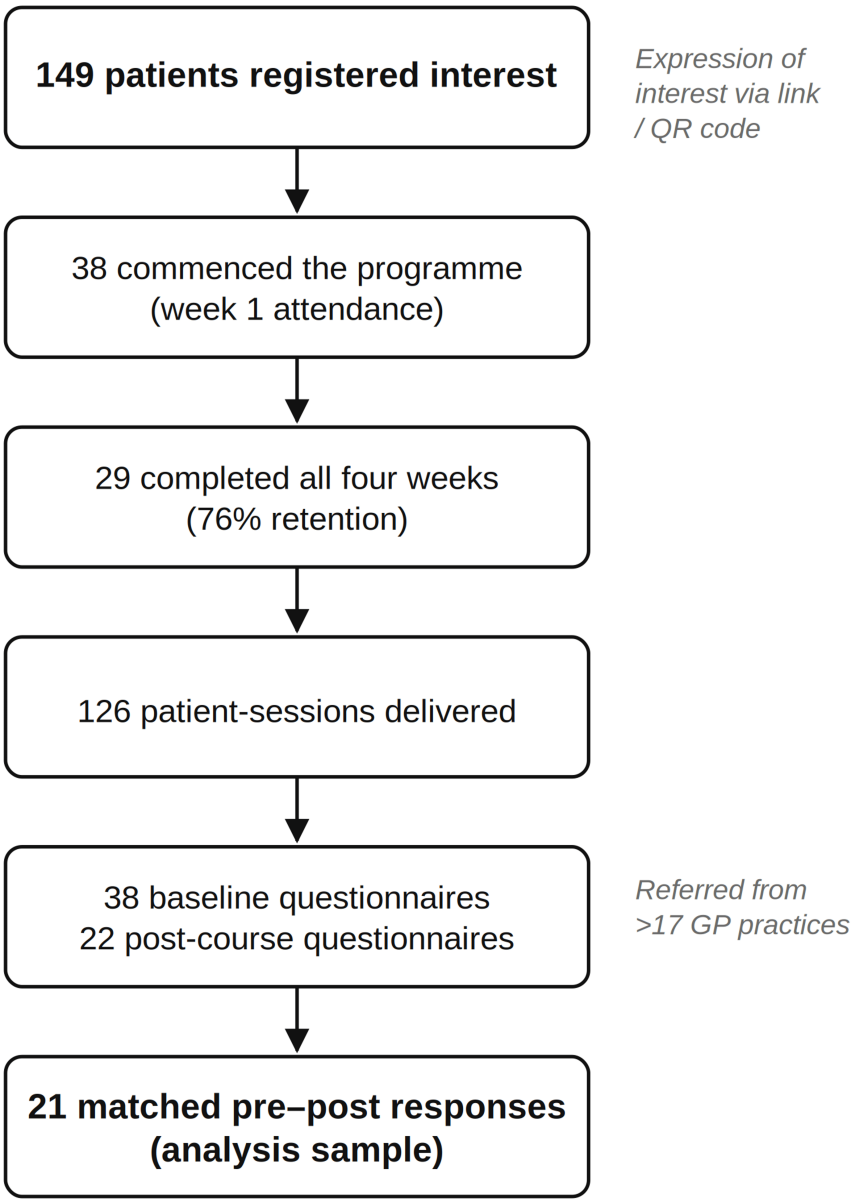


FIGURE 1: Participant flow from expression of interest to matched analysis sample

Flow of participants through the four-week programme. Of 149 patients who registered interest, 38 attended week 1 and commenced the programme, 29 completed all four weeks (76% retention), and 126 patient-sessions were delivered. Thirty-eight participants completed a baseline questionnaire, and 22 completed a post-course questionnaire; 21 could be linked across both time points to form the matched pre–post analysis sample. Participants were referred from more than 17 GPs across the two boroughs.

GP, general practice; QR, quick response

Baseline health and lifestyle profile

The course reached an older, high-need population (Table *1*). Mean age was 64.1 years, and 68% were females. Almost all participants had at least one long-term condition (97%), 68% were multimorbid, and 42% had three or more conditions. Cardiometabolic conditions were common (79%), including hypertension (45%), high cholesterol (29%), diabetes (24%), high BMI (24%), and heart disease (13%). Mental health conditions were reported by 34%, chronic pain or musculoskeletal conditions by 32%, respiratory conditions by 29%, and cancer by 8%. Polypharmacy was common: 92% were on regular medication and 39% were on four or more medications.

Characteristic	n (%)
Age (years), mean (SD), reported by 32	64.1 (15.5)
Female	26 (68)
Retired	18 (47)
Unemployed	7 (18)
Long-term conditions	
≥1 long-term condition	37 (97)
Multimorbid (≥ 2 conditions)	26 (68)
≥3 conditions	16 (42)
Any cardiometabolic condition	30 (79)
Hypertension	17 (45)
High cholesterol	11 (29)
Diabetes	9 (24)
High BMI	9 (24)
Heart disease	5 (13)
Anxiety, depression or other mental-health condition	13 (34)
Respiratory (asthma/COPD)	11 (29)
Chronic pain/musculoskeletal	12 (32)
Cancer	3 (8)
Medication	
On regular medication	35 (92)
Four or more medications	15 (39)
Health behaviours and well-being	
Meeting aerobic activity guideline	8 (21)
Any regular strength or balance activity	18 (47)
Current smoker	3 (8)
Drinks alcohol	11 (29)
Sleeps < 6 hours per night	19 (50)
No stress-management strategy	14 (37)
Does not feel supported by family/friends/community	8 (21)
Previously attempted to improve health	28 (74)

TABLE 1: Baseline characteristics of participants (n = 38)

Long-term condition categories are not mutually exclusive. Physical activity was self-reported using two single items (always/sometimes/never). Meeting the aerobic guideline denotes responding ‘always’ to undertaking 150 minutes of moderate or 75 minutes of vigorous activity weekly. The strength/balance item combined muscle-strengthening and balance activities (e.g., yoga, Pilates, stretching, tai chi); ‘any regular strength or balance activity’ denotes responding ‘always’ or ‘sometimes’ and is not a measure of strict twice-weekly guideline attainment.

SD, standard deviation; BMI, body mass index; COPD, chronic obstructive pulmonary disease

At baseline, only 21% reported regularly meeting the aerobic physical activity guideline and fewer than half (47%) reported any regular strength or balance activity. Half reported sleeping fewer than six hours per

night, 37% reported having no stress-management strategy, and 21% did not feel supported by family, friends, or community. Most participants (74%) had previously attempted to improve their health. Participants' stated goals, including improving energy, weight loss, increasing physical activity, improving diet, better sleep, and reducing medication, closely matched the course content.

Cost

Direct programme cost was £133.72 (Table 2), equating to £1.06 per patient-session and £4.61 per completer. Substantial in-kind contributions included free community-venue access, approximately 48 hours of voluntary clinical staff time, and donated educational and promotional resources.

Item	Cost
Refreshments (teas, coffees, water, cups, and plates)	£35.00
Healthy snacks and paper goods	£55.65
Stationery (pens, markers, printing)	£20.00
Soft-tissue release balls	£23.07
Total direct cost	£133.72

TABLE 2: Direct programme costs

The table includes direct programme costs only and excludes in-kind contributions (free community-venue access, approximately 48 hours of voluntary clinical staff time, and donated educational and promotional resources). Costs reflect a single four-week programme cycle.

Self-reported outcomes and physical activity

Among the 21 matched respondents, self-rated scores improved across all seven measured domains, with the largest mean changes in ability to exercise regularly, confidence in sleep hygiene, confidence in establishing habits, and confidence in dietary choices (Table 3). The confidence intervals for ability to exercise regularly, confidence in establishing habits, and confidence in dietary choices excluded zero; confidence in sleep hygiene bordered zero. Confidence intervals for overall health, stress management, and sleep quality were wider and crossed zero. No domain declined.

Domain (5-point scale)	Pre mean	Post mean	Mean change (95% CI)
Ability to exercise regularly	2.90	3.71	+0.81 (0.24 to 1.38)
Confidence in sleep hygiene	3.14	3.76	+0.62 (0.00 to 1.24)
Confidence in establishing habits	3.24	3.81	+0.57 (0.08 to 1.06)
Confidence in dietary choices	3.43	3.90	+0.48 (0.01 to 0.95)
Overall health rating	2.86	3.19	+0.33 (-0.11 to 0.77)
Ability to manage stress	2.95	3.24	+0.29 (-0.19 to 0.77)
Sleep quality	3.14	3.24	+0.10 (-0.46 to 0.65)

TABLE 3: Pre-post self-rated outcomes among matched respondents (n = 21)

Values are matched pre-post means (n = 21); mean change is shown with its 95% CI, derived from paired within-participant differences. No formal hypothesis testing was performed; higher scores indicate better outcomes.

CI, confidence interval

Self-reported physical activity also increased among matched respondents. Baseline percentages in this subgroup differed slightly from the full sample owing to the smaller denominator: 4 (19%) of 21 matched respondents reported meeting the aerobic guideline at baseline, compared with 8 (21%) of 38 in the full baseline sample. Within the matched subgroup, the proportion reporting aerobic-guideline attainment rose from 4 of 21 (19%) to 9 of 21 (43%), and those reporting any regular strength or balance activity rose from 10

of 21 (48%) to 16 of 21 (76%). Among post-course respondents, 64% definitely and a further 27% possibly wished to continue with an extended programme.

Qualitative feedback and safety

Free-text feedback was summarised descriptively. Participants valued the doctor-led delivery, which one described as a positive and distinctive feature of the programme, and appreciated the stress-management, sleep, and nutrition content, as well as the practical exercise demonstrations. Frequently reported benefits included the opportunity to meet and learn from others, peer support, and, for some, reduced social isolation, and several participants described adopting new habits they intended to continue. Several participants wanted the programme to continue. The most common suggestion for improvement was the provision of written handouts or session summary sheets; a few participants also noted difficulty hearing during sessions and wished for more content tailored to their individual conditions. During the physical-activity components, some older participants found the planned exercises too intense and were offered seated and lower-intensity alternatives. No other adverse events or safety concerns were reported. The delivery team reported professional fulfilment and identified a need for additional group-facilitation training for non-medical staff.

Discussion

Main findings

This quality improvement feasibility evaluation found that a GP-registrar-led community lifestyle medicine group consultation model - combining clinician physical activity training, multimodal recruitment through a GP and a four-week community-based course - was deliverable within a local primary-care system. It reached an older, highly multimorbid population with substantial lifestyle-related need, retained 76% of participants who commenced the course, was delivered at very low direct financial cost under supportive local conditions, and generated encouraging short-term self-reported improvements in confidence and physical activity among matched respondents. These findings should be interpreted as feasibility and implementation signals rather than evidence of effectiveness.

Patient-level feasibility and need

The baseline data suggest that the programme reached a clinically relevant population for lifestyle medicine. Participants had high levels of multimorbidity, cardiometabolic disease, chronic pain, mental-health conditions, sleep difficulty, and polypharmacy, a profile for which single-disease and brief-advice models are often poorly suited [1,2]. The finding that 74% had previously attempted to improve their health suggests that many participants did not lack motivation but needed structured support, practical tools, and social reinforcement. This aligns with the rationale for group-based lifestyle medicine: patients with complex, interacting needs may benefit from a format that addresses multiple lifestyle domains together rather than adding further fragmented advice.

Relationship to group consultation literature

The findings are consistent with wider evidence that group consultations and shared medical appointments can support self-management, peer learning, and patient experience for long-term conditions, although the evidence base remains heterogeneous and context-dependent [12,13]. UK implementation studies have also emphasised that group consultations can allow more holistic conversations and multidisciplinary working, but require careful preparation, facilitation skill, administrative coordination, and organisational support [14,15,26]. The closest UK lifestyle medicine comparator, a GP-led lifestyle medicine group consultation service, similarly reported acceptability and improvements in perceived health and well-being [16]. The present evaluation extends this literature by describing a GP-registrar-led model, a multimorbid community population, a linked clinician-training component, explicit quality improvement framing, and itemised direct-cost reporting.

Behaviour change mechanisms

The short-term self-reported changes are plausible in relation to the programme design. RESET combined education, repeated contact, goal-setting, action planning, practical demonstrations, and peer support, consistent with COM-B, behaviour-change technique specification, and habit formation principles [22-24]. The largest mean improvements were in domains directly targeted by the course: ability to exercise regularly, confidence in sleep hygiene, confidence in establishing habits, and confidence in dietary choices. However, four weeks is unlikely to be sufficient to demonstrate durable habit formation, and the outcomes were self-reported immediately after the programme [27]. These changes should therefore be regarded as early signals of acceptability and perceived capability rather than evidence of sustained behavioural change.

Implementation and system design

The model is best understood as a complex service intervention rather than a patient education course alone. Clinician training was linked to a clear referral destination; multimodal recruitment created several routes into the programme; and community delivery connected primary care with voluntary-sector assets.

Most participants heard about the programme through their GP or another primary-care professional, suggesting that trusted clinician recommendation was an important route into attendance. This supports the idea that clinician education and patient-facing group support may reinforce one another when designed together within the same local system rather than as separate initiatives.

From an implementation perspective, the evaluation measured several early outcomes, including reach, commencement, retention, acceptability, direct cost, and cross-practice referral. In the language of implementation research, these map most closely to feasibility, acceptability, and early adoption [28]. They do not establish fidelity, penetration across the wider system, sustainability, or maintenance. In line with contemporary guidance on complex interventions, the findings are most useful for refining the programme theory, delivery process, and future evaluation design rather than for drawing effectiveness conclusions [20].

GP registrar workforce development

The GP-registrar-led element is a distinctive feature of the model. Group consultations and in-depth lifestyle support are not yet routine parts of general-practice training, despite increasing policy emphasis on prevention and community-based care. Embedding delivery within general-practice specialty training created a dual opportunity: to extend preventive support locally while giving registrars authentic experience in lifestyle counselling, physical activity conversations, group facilitation, interprofessional working, quality improvement, and collaboration with community partners. This is consistent with educational theories of experiential and workplace-based learning, in which capability develops through participation in supervised, meaningful clinical activity [17,18].

However, educational outcomes were not formally measured. The project can therefore only suggest workforce-development potential. Future iterations should assess registrar confidence, consultation behaviour, group-facilitation skill, perceived educational value, and subsequent use of lifestyle medicine approaches in routine practice. The clinician training itself attracted strong attendance across practices and prompted requests for further sessions, suggesting demand for accessible physical-activity and lifestyle-consultation training within primary care, although its effect on clinician practice was not formally evaluated.

Cost and sustainability

The cost findings warrant careful interpretation. Direct expenditure was very low, and even simple itemised cost reporting is useful because detailed direct-cost data are uncommon in comparable service evaluations. However, these figures exclude substantial in-kind inputs, including free community-venue access, donated resources, and approximately 48 hours of voluntary clinical staff time. Valued indicatively at 2025/26 NHS salary rates for the delivery team (foundation and GP registrar doctors, a physician associate and a health coach), these approximately 48 hours represent the order of £1,200 before employer on-costs, overheads, and London weighting, and appreciably more once these are included, roughly 10 times the direct expenditure. The findings therefore show that the model can be delivered with low direct expenditure under favourable local conditions; they do not establish cost-effectiveness or straightforward scalability in a commissioned form. A fuller economic evaluation would need to include planning time, staff time, training, venue costs, administrative support, and downstream service outcomes.

Recruitment and delivery learning

The gap between initial interest and attendance is an important feasibility finding. Several factors likely contributed: registration was a low-commitment online expression of interest rather than a firm booking; the interval between advertising and the first session was short; and sessions ran on a fixed weekday evening, which may not have suited all patients. Future iterations could use a longer recruitment window, firmer booking and confirmation processes, reminder calls or texts, a waiting list for subsequent cohorts, and more flexible scheduling. Participants also identified a clear, low-cost improvement: the provision of written session summaries or handouts, together with better room audibility. Delivery learning further included the need to adapt exercises for older participants and to prepare facilitators for one-to-many consulting, group dynamics, and safety modifications.

Limitations

Several limitations qualify these findings. Most fundamentally, this was a single-arm, pre-post quality improvement evaluation delivered in one locality and was not designed to estimate effectiveness. Without a comparison group, observed changes cannot be attributed confidently to the intervention and may reflect regression to the mean, expectancy effects, secular trends, or the influence of participating in any supportive programme.

The sample was small, particularly 21 participants with matched pre-post data. Pre- and post-course responses were linked using anonymous self-assigned codes that were not guaranteed to be unique; one code was shared by two participants, introducing minor uncertainty into a single matched pair; excluding this pair does not materially change the findings. Matched respondents may have been the most engaged participants, limiting generalisability. The programme was delivered with free venue access secured through

established local practice links and a motivated volunteer clinical team; thus, results may not transfer directly to settings without similar resources.

Outcome measurement was also limited. The self-rated items were study-specific and non-validated, and physical activity was captured using two single, non-validated self-report items on a coarse three-point scale. The strength/balance item combined muscle strengthening, balance, and flexibility activities and therefore does not reflect strict attainment of the twice-weekly muscle-strengthening guideline. Physical activity was self-reported rather than objectively measured, and self-report measures may overestimate actual activity [29].

Follow-up was immediate post-programme only; thus, durability of any perceived gains is unknown. Four weeks is unlikely to be sufficient to establish stable habits for many behaviours, and no maintenance or continuation phase was evaluated [27]. The evaluation also did not collect objective clinical outcomes such as weight, waist circumference, blood pressure, HbA1c, lipids, prescribing change, healthcare utilisation, quality of life, or treatment burden.

Important implementation and educational outcomes were not formally measured. These included intervention fidelity, facilitator competency, referral conversion processes, adoption by individual practices, sustainability, and registrar educational outcomes. Because the model is presented partly as a workforce-development intervention, its educational impact was described rather than formally evaluated, and registrar confidence, capability, and subsequent practice change were not directly measured.

Implications and future research

Despite these limitations, the evaluation has practical implications. First, it provides pragmatic evidence that a GP-registrar-led lifestyle medicine group consultation model can be organised and delivered within routine primary care in a way that is acceptable to patients and aligned with policy priorities around prevention, personalised care, and community-based support [9,10]. Second, it supports designing clinician education and patient-facing group support together: training clinicians to hold better lifestyle conversations may have greater practical value when they have a credible referral destination, while group programmes may recruit more successfully when endorsed by trusted primary-care clinicians. Third, the project offers a model for aligning workforce development with service innovation, provided registrar involvement is supervised, educationally purposeful, and not simply unpaid additional labour.

A logical next stage would be a multi-site controlled study with longer follow-up at 3, 6, and 12 months. Future evaluations should include validated patient-reported measures, more robust and validated assessment of physical activity, including separate items for muscle-strengthening and balance, objective clinical outcomes where feasible, treatment burden, quality of life, healthcare utilisation, prescribing outcomes, and a fuller economic analysis including staff time and implementation costs. Implementation outcomes should include feasibility, acceptability, adoption, fidelity, and sustainability. Educational outcomes should include registrar confidence, lifestyle counselling capability, group-facilitation competence, and subsequent use of preventive-care approaches in routine practice.

Conclusions

This quality improvement feasibility evaluation suggests that a GP-registrar-led community lifestyle medicine group consultation programme can be implemented within routine primary care and is acceptable to patients and clinicians under supportive local conditions. The model reached an older, multimorbid population with substantial lifestyle-related need, retained most participants (76%) who commenced the course, and was delivered at low direct financial cost. Short-term improvements in self-rated confidence and self-reported physical activity are encouraging, but the uncontrolled design, small matched sample, short follow-up, and reliance on self-reported outcomes mean that the findings should be interpreted as evidence of feasibility and promise rather than effectiveness. Longer-term, controlled, multi-site evaluation is needed to determine whether this model can produce durable behavioural or clinical benefit while also supporting GP registrar development in preventive, group-based care.

Appendices

Appendix A: Four-week RESET programme curriculum

The RESET (‘Move More Month’) course was delivered as one session per week over four consecutive weeks (late June to July 2025), following a structured lifestyle-medicine curriculum adapted from BAPS Charities’ wellNESS programme with permission. Every session combined teaching, facilitated group discussion, practical skills, and goal setting.

Week 1 - Foundations and habits. What is lifestyle medicine; the five pillars of health; and the science of habit formation. Activities: completing a lifestyle scorecard; exploring habit loops; and setting SMART goals, with a focus on how daily choices affect chronic-disease prevention.

Week 2 - Nutrition. Core nutrition concepts and common diet myths; recognising emotional eating; nutrition-label literacy; and balanced-plate design. Activities: practical plate-building and label-reading exercises.

Week 3 - Movement, sleep, and stress. Types of physical activity (cardio, strength training, non-exercise movement); sleep hygiene and circadian rhythm; and science-based stress management and resilience. Activities: practical, age- and office-friendly exercise demonstrations.

Week 4 - Purpose and sustainability. Importance of social connection; values-based health decisions; overcoming obstacles; and creating lasting routines. Activities: Life Balance Wheel assessment; a personal 'why' statement; wellness challenges; and open Q&A with celebration of progress.

Appendix B: Pre-course questionnaire

Anonymous questionnaire completed at baseline. Items marked 'required' were compulsory; all others were optional. Self-rated items 24-30 used a five-point scale (1 = very poor to 5 = very good).

1. What is your assigned number? (required) - Free text; self-generated linkage code

2. What is your age? (required) - Free text (years)

3. Gender identity (required) - Single choice: Female; Male; Non-binary; Other; Prefer not to say

4. Employment status (required) - Single choice: Full-time; Part-time; Self-employed; Unemployed; Student; Retired; Prefer not to say

5. Postcode (first part only, e.g. N10) (required) - Free text

6. Have you made any previous attempts to improve your health? - Single choice: Yes; No

7. If yes, which of the following have you tried? - Multiple choice: Dietary changes; Exercise plan; Meditation/mindfulness; Sleep hygiene; Reducing alcohol/smoking; Other

8. How successful were these attempts overall? - Single choice: Very successful; Somewhat successful; No change; Made things worse

9. What are your current health goals? - Multiple choice: Weight loss; Improve energy; Manage stress; Better sleep; Improve mood; Increase physical activity; Improve diet; Reduce medications

10. Do you have any medical conditions? - Single choice: Yes; No

11. If yes, please tick any that apply - Multiple choice: High blood pressure; Diabetes; High cholesterol; Heart disease; High BMI; Breathing issues (e.g. asthma or COPD); Cancer; Chronic pain; Anxiety and/or depression; Any other mental-health condition

12. Are you currently taking any regular medications? - Single choice: Yes; No

13. If yes, how many? - Single choice: 1; 2; 3; 4; 5; >5

14. Do you currently…? - Multiple choice: Smoke; Drink alcohol; Use recreational drugs; Neither

15. Who usually prepares your meals? - Multiple choice: Self; Family/partner; Restaurant/takeaway; Shared rotation

16. Each week, do you do 75 minutes of vigorous exercise (e.g. running, sport) OR 150 minutes of moderate exercise (e.g. walking, cycling, swimming), or a combination? (required) - Single choice: Always; Sometimes; Never

17. Each week, do you build strength and/or improve balance on at least two days (e.g. yoga, gym, Pilates, stretching, tai chi)? (required) - Single choice: Always; Sometimes; Never

18. What limits your ability to exercise? - Multiple choice: Time constraints; Pain/injury; Lack of motivation; No access to equipment; Lack of knowledge

19. Do you enjoy exercise or any physical activity? - Single choice: Yes; No; Sometimes

20. Main sources of stress in your life (select up to 3) - Multiple choice: Work; Family responsibilities; Financial pressure; Health issues; Relationships

21. How do you currently manage stress? - Multiple choice: Exercise; Meditation; Talking to others; Hobbies; I don't have any strategies

22. Do you feel supported by family, friends, or your community? - Single choice: Yes; No

23. On average, how many hours do you sleep per night? - Single choice: <4; 4-6; 6-8; >8

24. How would you rate your sleep quality? - 1 (very poor) to 5 (very good), single choice

25. Rate your confidence in understanding how to establish good habits (required) - 1 (very poor) to 5 (very good), single choice

26. Rate your confidence around making informed dietary choices (required) - 1 (very poor) to 5 (very good), single choice

27. Rate your confidence in establishing sleep-hygiene behaviours (required) - 1 (very poor) to 5 (very good), single choice

28. Rate your ability in managing stress (required) - 1 (very poor) to 5 (very good), single choice

29. Rate your ability in exercising regularly and safely (required) - 1 (very poor) to 5 (very good), single choice

30. In general, how would you rate your overall health (required) - 1 (very poor) to 5 (very good), single choice

31. How did you find out about today? (required) - Single choice: My GP; Social prescriber/health coach; Word of mouth; Flyer in GP practice; Text message sent to me; Other

Appendix C: Post-course questionnaire

Anonymous questionnaire completed after the four-week course, linked to the pre-course questionnaire by the participant's self-generated number. It repeated the two physical-activity items and the seven five-point self-rated domains, and added course-feedback items.

1. What is your assigned number? (required) - Free text; self-generated linkage code

2. Each week, do you do 75 minutes of vigorous exercise (e.g. running, sport) OR 150 minutes of moderate exercise (e.g. walking, cycling, swimming), or a combination? (required) - Single choice: Always; Sometimes; Never

3. Each week, do you build strength and/or improve balance on at least two days (e.g. yoga, gym, Pilates, stretching, tai chi)? (required) - Single choice: Always; Sometimes; Never

4. Do you enjoy exercise or physical activity? (required) - Single choice: Yes; No; Sometimes

5. How would you rate your sleep quality? (required) - 1 (very poor) to 5 (very good), single choice

6. How would you rate your confidence in understanding how to establish good habits? (required) - 1 (very poor) to 5 (very good), single choice

7. How would you rate your confidence around making informed dietary choices? (required) - 1 (very poor) to 5 (very good), single choice

8. How would you rate your confidence in establishing sleep-hygiene behaviours? (required) - 1 (very poor) to 5 (very good), single choice

9. Rate your ability in managing stress (required) - 1 (very poor) to 5 (very good), single choice

10. Rate your ability in exercising regularly and safely (required) - 1 (very poor) to 5 (very good), single choice

11. In general, how would you rate your overall health? (required) - 1 (very poor) to 5 (very good), single

choice

12. Do you have any general feedback on the programme, both positive and negative? (required) - Free text

13. What did you find most useful, and why? (required) - Free text

14. Would you be interested in a longer version of the programme? - Single choice: Yes; No; Maybe

15. If 'Yes' above, is there anything in particular you would like us to cover? (required) - Free text

Appendix D: Online sign-up form

Web-based expression-of-interest form used for recruitment. One hundred and forty-nine people registered; the attendance item permitted more than one selection.

1. Timestamp - Automatically recorded on submission

2. Which sessions are you planning to come to? - Multiple choice (more than one may be selected): I am interested and will be joining the full course; I am interested but can only attend some of the sessions; I am interested but cannot attend this time; Other (free text)

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

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