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Physicians' approaches to lifestyle modification for weight management: a protocol for a qualitative evidence synthesis

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Abstract

Background Overweight and obesity are highly prevalent worldwide and pose a serious public health issue, contributing to increased morbidity, mortality, and healthcare costs. Effective weight management improves health outcomes and quality of life, yet in routine clinical practice, implementation of existing guidelines remains inconsistent. Primary care physicians play a crucial role in the prevention and management of obesity, often serving as the first point of contact for patients. The 5A framework offers a structured, evidence-based approach for weight management in clinical settings. However, qualitative analysis of their implementation remains limited. This qualitative evidence synthesis aims to identify, appraise and synthesise available qualitative evidence on physicians' weight management approaches within primary care settings using the 5A framework to identify factors that facilitate or hinder its effective implementation.

Methods A qualitative evidence synthesis will be conducted using Covidence software, focusing on peer-reviewed studies published from 1 January 2005 to 31 December 2025. Searches will be performed across four databases using targeted terms related to primary care physician, qualitative research, and weight management. Eligibility screening, critical appraisal, data extraction, and synthesis will be carried out independently by at least two reviewers. The synthesis will be guided by framework analysis, applying deductive coding mapped to the 5A framework. Findings will be appraised for methodological quality, and the Confidence in the Evidence from Reviews of Qualitative Research approach will be used to assess the level of confidence for each review finding.

Discussion This qualitative evidence synthesis will provide a comprehensive overview of current primary care physician approaches to weight management mapped to the 5A framework, offering insights into how these approaches vary according to patient demographic, clinical, and health system factors. The synthesis will help identify contextual factors affecting the delivery of evidence-based weight management in primary care, highlight gaps between guideline recommendations and real-world practice, and pinpoint areas for targeted training, resource allocation, and policy development. Ultimately, the findings can inform strategies to enhance the implementation of structured weight management in primary care settings, leading to improved patient engagement and better health outcomes.

Systematic review registration This protocol has been registered with the International Prospective Register of Systematic Reviews (PROSPERO); registration number is CRD420251126971.

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Keywords Weight management, 5A framework, Qualitative evidence synthesis, Obesity, Primary care, Lifestyle intervention approaches

Background

Overweight and obesity are recognised as major risk factors for a wide range of diseases, including type 2 diabetes mellitus, cardiovascular disease, certain cancers, and sleep apnoea [1]. As a chronic condition, obesity requires long-term treatment strategies. Despite its public health significance, there are still persistent gaps in effective weight management. Common approaches or recommendations offered in outpatient settings include lifestyle, pharmacological, and surgical interventions. Treatment goals can focus on complication management, risk reduction, or weight loss. Regardless of the myriad treatment options, lifestyle interventions comprising healthy eating and increased physical activity remain universally recommended to be the foundation of obesity management.

Primary care physicians (PCPs) are well-positioned to identify and manage obesity early as they often serve as the first point of contact in the healthcare system. However, inconsistency in lifestyle counselling remains common, and many patients report receiving little to no behavioural guidance from their PCPs [2]. This gap reflects a broader implementation challenge between clinical recommendations and routine practice [3]. Some PCPs perceive obesity management as beyond their core responsibilities, attributing weight outcomes primarily to patient motivation [4].

A significant amount of energy has been devoted to identifying the barriers that providers encounter when addressing weight issues [5–7]. Gaining an overview of the current practices of the PCP in weight management can reveal where routine practice diverges from clinical guidelines. This insight enables the targeting of resources and training to the areas of greatest need.

The initial 5A framework, originally developed for smoking cessation, provides a structured approach to behavioural counselling comprising five steps: (a) Ask about current behaviours and readiness to change; (b) Advise on behavioural changes, (c) Assess health risks and behaviours, (d) Assist with planning and resources to achieve goals, and (e) Arrange follow-up, referrals or ongoing support to maintain progress [8]. Vallis et al. subsequently adapted the framework for obesity counselling in primary care, introducing "Agree" domain as a distinct step to obtain explicit patient buy-in on the treatment plan, while incorporating "Arrange" within the "Assist" domain [9]. Given that both versions are represented across the literature, this qualitative evidence synthesis adopts a six-domain coding structure, Ask, Advise, Assess, Agree, Assist, and Arrange, to ensure comprehensive capture of relevant constructs across included studies.

Using this framework as an analytical lens, this qualitative evidence synthesis aims to identify, appraise and synthesise qualitative evidence on how PCPs deliver lifestyle modification advice for weight management in outpatient practice.

Methods/design

Criteria for considering studies

To guide the formulation of our eligibility criteria for this qualitative evidence synthesis, we applied the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) framework, as presented in Table 1.

Type of studies

Studies employing (a) qualitative study designs using an identifiable qualitative method, such as phenomenology, grounded theory, and case studies and its findings can be extracted separately; and/or (b) qualitative data collection methods, such as interviews, focus group discussions, and observations; and/or (c) qualitative analysis methods, such as thematic analysis, content analysis, and narrative analysis, will be included. Quantitative studies and mixed-methods studies analysing only open-ended or free text questions or where the qualitative findings cannot be extracted separately will be excluded.

Type of participants

Studies that report the perspectives and experiences of medical doctors delivering care in primary care or community settings on weight management with the general adult population (aged 18 years and above) will be included. Studies focusing solely on specialists working in obesity, endocrinology, or metabolic clinics will be excluded. Studies that focus solely on the perspectives and experiences of healthcare professionals other than medical doctors, such as nurses, pharmacists and clinic assistants, will be excluded, as will studies involving mixed professional samples where physician-specific findings cannot be separated. Studies that focus solely on medical doctors working with non-adult populations (aged below 18 years), such as children and adolescents, will be excluded. When studies include both adult and adolescent populations, only those that independently report findings for adults will be retained. Studies that

Table 1 SPIDER framework description

	Inclusion	Exclusion
Sample	• Medical doctors delivering care in primary care or community settings (i.e., PCPs) on weight management with the general adult population (aged 18 years and above)	• Healthcare professionals who are not medical doctors (e.g., nurses, pharmacists, clinic assistants) • Medical doctors working solely with non-adult populations (children/adolescents) • Medical doctors working solely with niche patient populations (e.g., people with disabilities, people with specific mental health conditions)
Phenomenon of Interest	• Beliefs, attitudes, perceptions, experiences, approaches and practices of medical doctors towards lifestyle modification and advice for weight management	• Focus solely on surgical or pharmacological interventions (e.g., bariatric surgery, weight-loss drugs)
Design	• Qualitative research designs (e.g., phenomenology, grounded theory, case studies) • Studies using qualitative data collection methods (e.g., interviews, focus groups, observations) • Studies using qualitative analysis methods (e.g., thematic analysis, content analysis, narrative analysis)	• Quantitative studies • Mixed-methods studies that analyse only open-ended or free-text responses, or where qualitative findings cannot be extracted separately
Evaluation	• Exploration of perspectives, experiences, attitudes, beliefs, approaches or practices towards lifestyle modification for weight management	• Studies without evaluation of perspectives, experiences, attitudes, beliefs, approaches or practices relevant to lifestyle modification for weight management
Research type	• Studies published in English between 1 January 2005 and 31 December 2025 (inclusive) • Peer-reviewed articles from any geographical regions • Studies set in primary care or outpatient settings	• Studies in languages other than English • Studies focused solely on inpatient settings

Table 2 Search strategy: keywords and Boolean operators for MEDLINE (via PubMed)

Database	Search terms
MEDLINE (via PubMed)	(((((("Physicians"[MeSH] OR "physician*"[tiab] OR "doctor*"[tiab] OR "General Practitioners"[MeSH] OR "general practi*"[tiab] OR "GP"[tiab] OR "Physicians, Family"[MeSH] OR "family physician*"[tiab] OR "family doctor*"[tiab] OR "Physicians, Primary Care"[MeSH] OR "Primary Health Care"[MeSH] OR "primary health care"[tiab] OR "primary care"[tiab] OR "Family Practice"[MeSH] OR "family practice"[tiab] OR "General Practice"[MeSH] OR "general practice"[tiab])) AND (("belief*"[tiab] OR "Attitude"[MeSH] OR "attitude*"[tiab] OR "Perception"[MeSH] OR "perception*"[tiab] OR "perspective*"[tiab] OR "experience*"[tiab] OR "experienced"[tiab] OR "experiencing"[tiab] OR "approach*"[tiab]))))) AND ((("Overweight"[MeSH] OR "overweight"[tiab] OR "obes*"[tiab]) OR (("Weight Loss"[MeSH] OR "weight loss*"[tiab]) OR ("Weight Reduction Programs"[MeSH] OR "weight reduction program*"[tiab] OR "weight management"[tiab])) OR ("5A"[tiab] OR "5As"[tiab] OR "5A's"[tiab] OR "5-A"[tiab] OR "5-As"[tiab] OR "5 A"[tiab] OR "5 As"[tiab] OR "five A*"[tiab])))) AND ("interviews as topic"[Mesh] OR "focus groups"[Mesh] OR narration[Mesh] OR qualitative research[Mesh] OR "personal narratives as topic"[Mesh] OR "Observational Studies as Topic"[Mesh] OR "Grounded Theory"[Mesh] OR ((("semi-structured"[TIAB] OR semistructured[TIAB] OR unstructured[TIAB] OR structured[TIAB] OR informal[TIAB] OR "in-depth"[TIAB] OR indepth[TIAB] OR "face-to-face"[TIAB] OR guide[TIAB] OR guides[TIAB]) AND (interview*[TIAB] OR discussion*[TIAB])) OR ("focus group"[TIAB] OR "focus groups"[TIAB] OR qualitative[TIAB] OR ethnograph*[TIAB] OR fieldwork[TIAB] OR "field work"[TIAB] OR "key informant"[TIAB])))

focus solely on niche patient populations, such as people with disability, or people with specific mental conditions, will be excluded as the weight management approach toward these populations may differ.

Phenomenon of interest

Studies examining medical doctors' beliefs, attitudes, perceptions, experiences, approaches or practices towards lifestyle modification and advice will be included. Studies that focus solely on surgical or pharmacological treatments and interventions, such as bariatric surgery, will be excluded.

Primary outcome

The primary outcome is to identify and map PCPs' reported approaches, practices, and perspectives on lifestyle modification for weight management onto the 5A framework. This outcome will allow us to systematically characterise which components of the framework are addressed in clinical encounters, highlight variations in delivery and identify gaps in practices.

Type of settings

Studies from all geographical regions will be included. Studies examining perspectives and experiences of medical doctors in the primary care or outpatient settings will be included. Studies that focus solely on the inpatient setting will be excluded.

Type of articles

Articles published between 1 January 2005 and 31 December 2025 (inclusive), and in the English language will be included. The publication dates were selected so that papers in the past twenty years would be included, ensuring this qualitative evidence synthesis includes updated studies. The planned final search date is estimated to be in January 2026. Only peer-reviewed articles will be included as this protocol aims to conduct a comprehensive review of primary studies that have undergone formal peer review to ensure methodological quality.

Search strategy

The search strategy was developed collaboratively and finalised through consensus among three team members with expertise in qualitative research and systematic review methodology and a physician from the metabolic clinic, to ensure both comprehensiveness and alignment with the qualitative evidence synthesis objectives. The search strategy was subsequently reviewed by senior librarians, who guided the team through the Peer Review of Electronic Search Strategies (PRESS) approach [10]. Searches will be conducted in databases which include MEDLINE (via PubMed), CINAHL, Embase, and PsycINFO. Additionally, hand searches of reference lists from all included studies and relevant reviews will be performed to identify further eligible publications.

The search will combine controlled vocabulary and free-text keywords structured around three conceptual components: Population, Phenomenon of Interest, and Research Type, linked using Boolean operators. The search strategy was adapted for each database to account for database-specific syntax and subject heading equivalents. For CINAHL, MeSH terms were replaced with CINAHL Subject Headings where applicable. For Embase, Emtree subject headings were used as equivalents. For PsycINFO, APA thesaurus terms were applied. Free-text terms were retained across all databases with minor syntax adjustments to ensure compatibility. The finalised search terms for MEDLINE (via PubMed) are presented in Table 2.

Screening and review process

All search results will be imported into a systematic review software, Covidence, for de-duplication. Subsequently, two reviewers will independently screen titles and abstracts within the systematic review software to assess the eligibility. Thereafter, full texts of potential articles will be downloaded and assessed, as well as having their data extracted. Discrepancies at any stage will be resolved through discussion, or if needed, adjudication by a third reviewer.

Data extraction

Data extraction will be supported by the artificial intelligence functionally available within the Covidence software to assist in identification, organisation and preliminary extraction of relevant data; human reviewers will make all eligibility decisions and generate interpretive findings independently. All AI-assisted outputs will be reviewed and verified by human reviewers. The extracted data will then be reviewed independently by two reviewers using a customised and standardised Microsoft Excel template developed specifically for this qualitative evidence synthesis. The template will capture descriptive and methodological details, including the following: first author, year of publication, country of origin, study aims, study settings, PCP characteristics, sampling and recruitment methods, final sample size, method(s) of data collection, data analysis method, types of lifestyle medicine prescribed (e.g., 6 pillars of lifestyle medicine [11]—Nutrition, Physical Activity, Restorative Sleep, Stress Management, Avoidance of Risky Substances, and Social Connection), themes and subthemes identified on PCP approaches towards weight management.

Quality appraisal

All included studies will be assessed for methodological quality using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Qualitative Research [12]. The checklist consists of 10 items, assessing elements such as congruity between research methodology and research questions and objectives, representation of participant voices and ethical considerations.

At least two independent reviewers will appraise each selected study using the 10 items within the checklist. The reviewers will discuss any discrepancies in scoring through thorough discussion and consult a third reviewer if consensus cannot be achieved. The results of the appraisal will be tabulated and presented in the final qualitative evidence synthesis. All studies meeting the eligibility criteria will be retained regardless of the JBI appraisal scores and will be incorporated into the GRADE-CERQual assessment of confidence of the qualitative evidence synthesis findings. Reviewer observations about the methodological quality across studies will be noted and considered in the discussion of the final qualitative evidence synthesis.

Data analysis and synthesis

Data will be analysed and synthesised using the 5A framework. However, variations of the 5A framework exist within literature, including different combinations of Ask, Assess, Advise, Agree, Assist, and Arrange domains. For the purposes of this qualitative evidence synthesis, all combinations of the 5A framework will be considered and synthesised. This structured method will allow findings from diverse qualitative studies to be mapped against the core components of the 5A framework. The synthesis will proceed through familiarisation with the data, coding according to the framework, charting data into the 5A framework categories, and interpreting patterns and relationships within and across studies. The unit of analysis will be the individual study findings, which may comprise participant quotations, study authors' interpretation, or both. Data that do not align with the 5A framework will be coded inductively and integrated as supplementary findings to capture organisational, contextual or systemic influences not encompassed by the 5A framework. Themes and subthemes of these supplementary findings will be reported independently of the 5A framework findings. This approach will enable the identification of commonalities, divergences, and context-specific factors influencing PCP-delivered lifestyle modification for weight management.

Familiarisation and coding

The synthesis process will begin with thorough familiarisation with the extracted data. Initial coding will be deductive, with codes mapped onto the 5A framework categories. Codes that do not map onto the 5A framework will be coded inductively instead. This method of coding ensures that data are interpreted within the established theoretical model while remaining open to novel insights that may extend or challenge the framework. Disagreements in coding will be resolved through discussion between at least two reviewers, with a third reviewer consulted if consensus cannot be reached.

Charting

Data will be charted into the 5A framework categories, enabling comparisons across studies and contexts. For example, "Ask" will capture whether permission is granted to broach the weight management topic, "Assess" codes will capture how PCPs identify and evaluate patients' readiness for change, while "Advise" codes will describe how PCPs communicate recommendations for weight management. The "Agree" stage will highlight

shared goal-setting processes, "Assist" will reflect support strategies, and "Arrange" will cover follow-up and referral mechanisms.

Mapping and interpretation

Throughout the synthesis, attention will be paid to variations by healthcare setting, PCP characteristics, and patient populations to elucidate contextual factors influencing implementation. Findings will be presented narratively, supported by illustrative quotes from included studies, and summarised in tables aligned with the 5A framework categories. This approach will inform recommendations for enhancing PCP training and support tools to improve lifestyle modification counselling in weight management.

Assessment of certainty

The GRADE-CERQual (Confidence in the Evidence from Reviews of Qualitative research) will be applied to assess the confidence of each qualitative synthesis review finding. Four components will be evaluated: (1) the methodological limitations of primary studies that contribute to a synthesis finding, (2) the relevance of the included studies to the research question, (3) the coherence of the synthesis finding, and (4) the adequacy of included data. Each finding will be rated high, moderate, low, or very low level of confidence, alongside documentation of justifications. The results of the GRADE-CERQual assessment will be presented in a summary of qualitative findings (SoQF) table, which will summarise each qualitative synthesis review finding alongside its confidence rating and explanatory justification. The use of GRADE-CERQual in this qualitative evidence synthesis will enhance the rigour of this qualitative evidence synthesis and increase transparency in our process and findings.

Discussion

This qualitative evidence synthesis protocol addresses a critical gap in understanding how structured, evidence-based approaches to weight management, such as the 5A framework, are implemented within primary care. While previous research has demonstrated the potential of the 5A framework in supporting effective patient-centred weight management, its translation into everyday clinical practice has been inconsistent.

This qualitative evidence synthesis is timely, given the rising prevalence of obesity worldwide and the increasing burden on PCPs to provide accessible, effective, and sustainable interventions.

By synthesising qualitative evidence, this qualitative evidence synthesis aims to move beyond quantitative outcomes and provide deeper insights into the contextual, cultural, and systemic factors that influence implementation. The findings are expected to highlight the interplay between patient engagement, PCP capacity, and health system support, revealing how factors such as time constraints, training, communication skills, and organisational priorities shape the adoption of structured weight management strategies. Importantly, this qualitative evidence synthesis will also identify the facilitators that enable successful implementation, such as team-based care models, clear clinical pathways, and supportive policy environments.

By integrating evidence across diverse healthcare settings, this synthesis will generate a nuanced understanding of what supports or hinders PCPs in applying evidence-based lifestyle counselling frameworks.

The anticipated outcomes of this qualitative evidence synthesis will be directly relevant to policymakers, practitioners, and researchers. For policymakers, the synthesis will offer evidence to guide the allocation of resources and the design of policies that support consistent implementation of weight management guidelines. For clinicians, the findings will provide practical insights into strategies that enhance patient engagement and align evidence-based frameworks with the realities of routine practice. For researchers, the synthesis will point to underexplored areas that require further investigation, particularly in diverse cultural and healthcare contexts.

Ultimately, this work will contribute to closing the gap between evidence and practice, supporting the delivery of more effective weight management in primary care and improving health outcomes for patients with overweight and obesity. Findings will inform the development of practical tools, training modules, and implementation strategies that enable PCPs to more effectively support patients in achieving sustainable weight management.

Abbreviations

GRADE-CERQual	Confidence in the Evidence from Reviews of Qualitative research
JBI	Joanna Briggs Institute
MOH	Ministry of Health
PCP	Primary care physician
PROSPERO	International Prospective Register of Systematic Reviews
SoQF	Summary of qualitative findings
SPIDER	Sample, Phenomenon of Interest, Design, Evaluation, Research type

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Authors' contributions

EC, JL and JO conceptualised the study design and developed the study methodology. EC managed the project and provided expertise in the design

of the systematic review. EC, JL and JO drafted the initial draft and AY reviewed and revised the draft. All authors read and approved the final manuscript. AY is the guarantor of this review.

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Not applicable.

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Competing interests
The authors declare no competing interests.

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