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Who are we listening to? A Systematic Scoping Review of Surveys Exploring Patient Satisfaction, Care Experience, And Access to Primary Care Services

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Title: Who are we listening to? A Systematic Scoping Review of Surveys Exploring Patient Satisfaction, Care Experience, And Access to Primary Care Services

Abstract

Background: Globally, patient surveys are used to improve quality of primary care services. Survey items lacking an equity focus may limit the applicability of findings, leading to changes in services that are not tailored to the needs of underserved populations (e.g., socially disadvantaged populations and those with greater needs).

Aim: To review the global literature to 1) identify validated surveys used to evaluate quality in primary care and 2) assess if these surveys were designed for underserved populations (using the Candidacy Framework: a tool designed to examine equity in primary care).

Design and setting: The Arksey and O'Malley framework for systematic scoping reviews guided the study. All findings were reported according to the PRISMA-Equity 2012 guidelines.

Method: Five datasets Medline, CINHAL, PsycINFO, Embase, and Web of Science and reference lists of relevant published literature were systematically searched to identify studies that reported validated quantitative survey to assess access of primary care services, and/or care experience and patient satisfaction.

Results: From 5,404 records, 69 articles were included, and 46 unique surveys identified. Twenty-one articles (30%) reported a survey tailored to underserved populations or contexts. Most survey items mapped to permeability of services, with few focused on adjudication by healthcare professionals or digital care experience. Tools assessing dimensions of quality in primary care often overlook the potentially nuanced experience of underserved populations (e.g., ableism, racism).

Conclusions: Our findings revealed a significant gap in efforts to understand the factors that privilege some populations and disadvantage others, potentially widening the primary care divide.

Keywords: Primary care, candidacy, equity, surveys, access, patient experience, scoping review

How this fits in

Patient surveys are central for quality improvement and increasingly influence policy and financial incentives in primary care (e.g., their role in the latest UK Healthcare Plan). However, our findings suggest that most surveys consistently fail to capture the perspectives of underserved populations. These omissions risk unsafe practice, misinterpretations of patient needs, and the widening of inequalities. In primary care, this means survey results should be interpreted with caution and complemented with proactive strategies to ensure feedback leads to improvement in patients' experience of general practice care. Where possible, policymakers and clinical teams design equity-focused surveys to explore primary care access, ideally in collaboration with the target communities to ensure care remains accessible and inclusive.

Single short sentence summarising the research

Patient surveys in primary care inconsistently address the needs and experiences of underserved populations, potentially widening the primary care divide.

1. Introduction

Patient surveys are globally used to evaluate the quality of healthcare services (1, 2) and increasingly influence policy and financial performance incentives (e.g., their role in the latest UK Healthcare Plan) (3). Patient surveys typically measure three dimensions of healthcare delivery: access barriers (multidimensional, structural, and systemic factors), care experience (patients' interaction with healthcare services), and patient satisfaction (patients' expectations of the care they received)(4). Findings from these surveys inform service improvements and guide efforts to reduce inequalities. In primary care, patient surveys play a key role in capturing how individuals recognise symptoms and seek help, which are essential insights for early diagnosis and for shaping prevention and treatment management strategies (5, 6).

More recently, research has focused on how patients negotiate access to services with healthcare professionals (a concept known as candidacy) (7). The Candidacy Framework is increasingly recognised for providing nuanced insights into how these complex interactions shape help-seeking behaviours and patient experiences (8-10). It comprises seven interrelated features (Table 1): 1. identification of candidacy (how people identify their eligibility for services), 2 & 3. navigation and permeability of the healthcare system (ease to progress through services), 4. appearance at services, (ability to articulate the need for care), 5. adjudication by healthcare professionals (professionals' gatekeeping roles), 6. offers and resistance (suitability of services and patient acceptance), and 7. operation and local production (local context shaping equity). In primary care, candidacy offers a critical perspective to understand health equity and elucidate the multidimensional factors that shape care experience and access to general practice (9, 11).

In parallel, the rapid digitalisation of primary care services, such as the UK's radical shift "*from analogue to digital"* (3) and similar transformation across Europe (12), has highlighted the importance of understanding access to digital care and how patients navigate increasingly complex digital pathways (concept know as digital candidacy) (13). However, it remains unclear the extent to which existing patient surveys are equipped to capture these evolving dimensions, including how patients negotiate access and navigate digital services. This question is particularly critical for underserved populations, defined in this review as socially disadvantaged groups and those with greater needs who often face unique challenges to access and navigate healthcare services (e.g. people living with a disability, linguistic minorities)(14, 15).

Furthermore, it is unclear whether existing patient surveys are accessible to all individuals, and whether outcome measures are designed to capture the insights of underserved populations. Surveys that lack inclusive design principles (e.g., using supportive images, suitable reading age), and fail to incorporate equity-oriented constructs (e.g., digitally excluded groups) risk overlooking the unique experiences of these groups (16). Consequently,

findings may not be representative and subsequent service changes may unintentionally perpetuate or exacerbate inequalities in primary care (17, 18).

To address these gaps, we conducted a scoping of the global literature with the following aims:

1. Identify and catalogue validated surveys that assess care experience, patient satisfaction, and access to primary care services (including face-to-face and digital services).
2. Map survey items to the Candidacy Framework (including digital candidacy).
3. Document which surveys were specifically designed to understand the needs and experiences of underserved populations.

Table 1. Candidacy Framework and definitions tailored to the review.

Candidacy Stages(19)	**Original definitions** (19)	**Definitions tailored to the review (primary care and underserved populations).**
1. Identification of candidacy	"Process by which individuals come to view themselves as legitimate candidates for particular services"	The process by which underserved populations (and/or their carers) come to view themselves as legitimate candidates for primary care services.
2. Navigation of services	"Knowing how to make contact with appropriate services in relation to candidacy."	Knowledge of primary care services available and ability to access services. Some determinants that may hinder or prevent access are transport costs, time costs, convenient appointment times, and availability of language translation services.
3. Permeability of services	"Includes the level of explicit and implicit gatekeeping within a service and the complexity of its referral systems; in addition, it refers to the 'cultural alignment' between users and services."	Ease with which underserved populations can access services. Includes levels of gatekeeping within service, the complexity of the referral system, and the 'cultural alignment' of services with underserved populations' needs and values.
4. Appearance at services	"The work that individuals must do to assert their candidacy in an interaction with a health care professional."	Underserved populations' ability to assert their candidacy by presenting at primary care and cancers services, articulating their issues, and articulating their 'need' for care.
5. Adjudication by healthcare professionals	"Candidacy as expressed by service-users is validated or otherwise by healthcare professionals, and this influences subsequent offers of services."	A person's candidacy is judged by healthcare professionals, subsequently influencing the person's progression through services and access to care. Adjudication may disadvantage certain underserved populations by perceiving them as either 'deserving' or 'undeserving'.
6. Offers of/ resistance to services	"Emphasises that follow-up services may be appropriately or inappropriately offered and that these may or may not be acted upon by service-users."	Underserved populations may accept, or refuse offers at multiple stages in their journey to treatment including resisting offers for treatment (e.g., referral, treatment, reconstruction).
7. Operating and local production	"This incorporates factors that influence decisions about subsequent service provision (e.g., the resources available for addressing candidacy) and the kinds of contingent relationships that develop between professionals and service-users over a number of encounters)."	Incorporates factors at societal and macro levels that influence candidacy, such as the availability of local resources for addressing candidacy, and the relational aspects that develop between the healthcare provider and patient over multiple visits.

2. Methods

Full description of the methodology is available in our ScR protocol published in the Open Science Framework platform (20).

Throughout this review, we will use the term primary care services (PCS) to refer to general practice, acknowledging that terminology varies across countries (e.g., United States: Family practice) but generally refers to the same concept of primary care.

2.1. Design, search strategy, and selection criteria

This review followed the Arksey and O'Malley Framework for scoping review (ScR)(21) and the PRISMA-Equity 2012 reporting guidelines (22).

The search strategy and eligibility criteria were developed by the team and discussed with a librarian (EB). Five databases were used: Medline, CINHAL, PsycINFO, Embase, and Web of Science guided by a search strategy comprised of a systematic combination of keywords, MeSH terms, and Boolean operators AND/OR (Supplementary Table S1). The searches were conducted between December 2024 and June 2025. We included peer reviewed articles published in English between 2007 (when the first General Practice Patient Survey in the United Kingdom (UK) was available)(23) and 2025. The focus was on articles that reported quantitative surveys validated for use with adults aged 18 and over and studies that reported surveys to assess access of primary care services, and/or care experience and patient satisfaction with services they received.

Reference lists of included papers were hand-searched for any further relevant papers. The identified articles were imported onto Zotero® reference manager and then exported to Rayyan® online manager. All duplicates were removed, and the remaining articles were screened against eligibility criteria (see below).

2.2. Literature selection and charting of the data

Four authors (ME, EH, AH, CFS) independently screened the identified articles. First, authors (blinded and grouped in pairs) screened titles and abstracts for relevance. Where discrepancies existed between reviewers, the team discussed and resolved these before proceeding to full-text screening. Then two authors (ME, EH) followed a similar process to assess the full texts. Data extraction was performed by two authors (ME, EH).

2.3. Data analysis and interpretation

First, we produced a summary of characteristics of included articles comprising author (Year), country, name of measure used, purpose of the study, dimension(s) of interest (access, experience, satisfaction, or combination), condition, target population, whether the survey was tailored to underserved groups/which group, and theoretical frameworks (Supplementary Table S2).

For clarity, we grouped the included articles into three categories: new (article reported a new developed survey); translated version (article reported a survey translated into another language); or adapted (article reported a survey designed for specific groups or context). Additionally, we reviewed the reference lists to identify the original instrument from which surveys were translated or adapted and catalogued them. The original version of each included survey was catalogued and is presented in Table 2.

Second, two authors (ME, EH) extracted all items from surveys reported in the included articles (new, translated, and adapted versions). Researchers reviewed whether survey items were underpinned by equitable, inclusive, and intersectional principles (24, 25), and assessed how each item aligned with the seven features of the Candidacy Framework, including digital candidacy as an extra feature (Supplementary Table S3). Reviewers discussed and resolved discrepancies and descriptively summarised findings in section 3.2. and 3.3.

2.4. Patient and public involvement (PPI)

A diverse PPI group (41 participants) informed and guided the review (20).

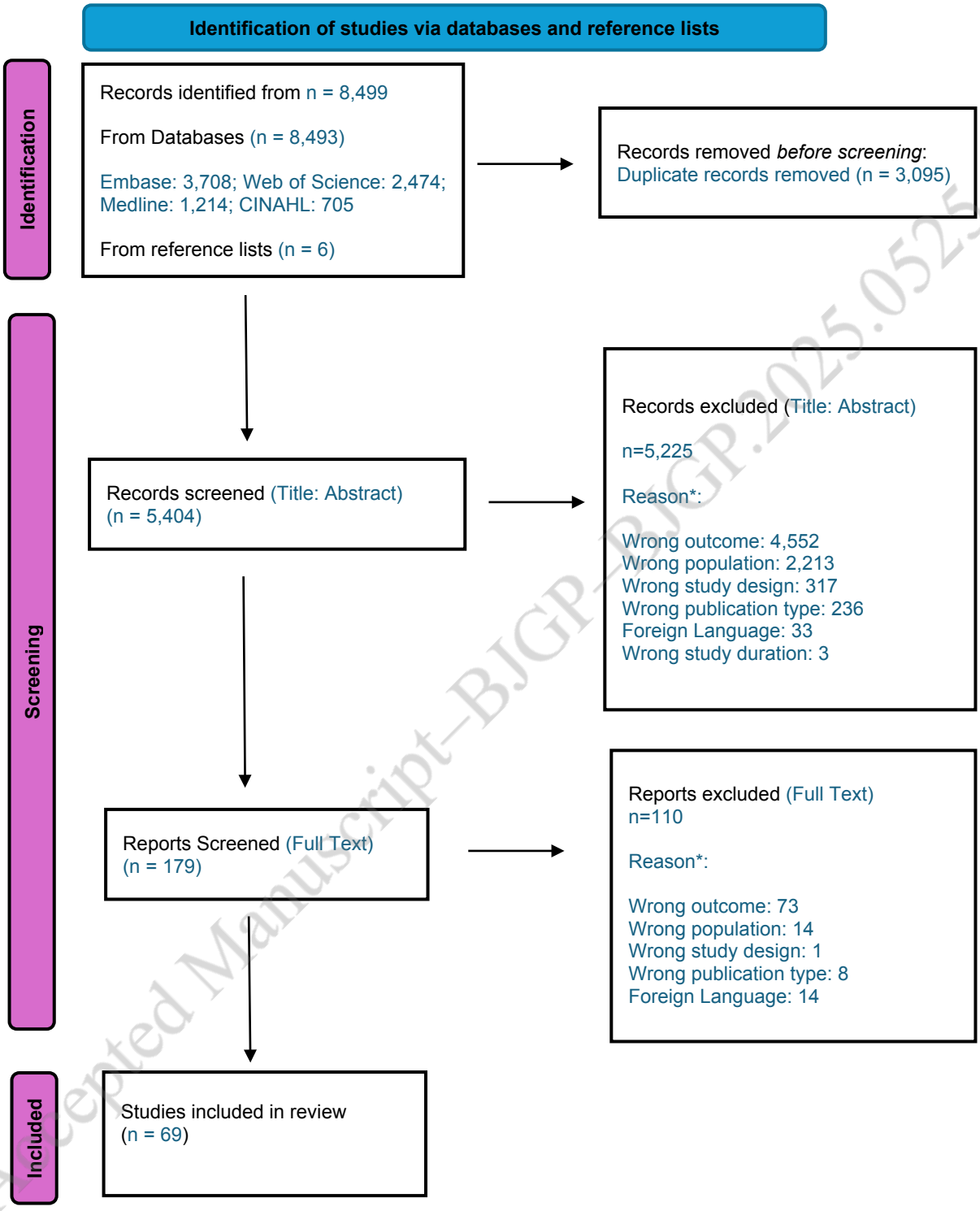
2.5. Methodological quality appraisal

Consistent with the recommendations for scoping reviews (i.e. our focus was conceptual and aimed at mapping the available evidence)(26, 27), we did not conduct a risk bias assessment or quality appraisal of the included articles. However, two reviewers (ME, EH) confirmed all included articles reported evidence-based validated surveys.

3. Results

A total of 8,493 studies were identified through electronic searching, and their references exported to exported to Rayyan® online manager (of these 3,095 were duplicates). Six additional studies were identified through hand-searching. After duplicates were removed, 5,404 papers underwent title and abstract screening. Of these, 5,225 did not meet the inclusion criteria. Following full-text screening (n=179), 69 studies were included in the ScR (Figure 1).

Figure 1. PRISMA Flow Diagram



*Reason for exclusion: Some studies were excluded for mor than one reason (e.g., wrong outcome *and* population)

3.1. Summary of study characteristics

Supplementary Table S2 shows a comprehensive summary of the characteristics of articles included (25, 28-95). The studies demonstrated a broad geographical distribution, with representation from Africa (n=3), Asia (n=16), Europe (n=24), North America (n=15), South America (n=4), and Oceania (n=7).

We grouped the included articles into three categories: new (article reported a new developed survey, n=26), translated version (survey into another language, n=15), and adapted (article reported a survey designed for specific groups or context, n = 28). Fifty articles focused on any health condition and 19 focused on specific conditions, such as breast cancer or diabetes. A few studies clearly indicated the theoretical framework underpinning the design of their surveys (n=12). None used candidacy specifically.

Table 2. Summary of distinct surveys identified in articles included in the scoping review (n=46).		
Acronym	**Name**	**Dimension of healthcare**
RA-ASPC	Revised Adult Primary Care Assessment Scale (92)	Access and experience
Not specified	Understanding women's experiences seeking help for feeling anxious, overwhelmed and/or struggling to cope after having a baby (52)	Access and experience
MSSE	Measuring Mammography-specific Self-efficacy (28, 96)	Access
HBM	Health Belief Model questionnaire (86)	Access
NZHS	New Zealand Health Survey (76)	Access
HCI	Health Care Insecurity measure (85)	Access
SES-PSSP	Self-Efficacy Scale for Pap Smear Screening Participation (88)	Access
Not specified	Primary health care quality assessment tool (51)	Access
Not specified	Effective Availability and Accommodation subscale (54)	Access
MHQ	M.A.L.E. H.E.L.P. Questionnaire (63)	Access
CARE	The consultation and relational empathy measure (97)	Experience
PEQ	Patient Experience Questionnaire for primary care mental health (70)	Experience
CAM	Cancer Awareness Measure (98)	Experience
GPPS	General Practice Patient Survey (44)	Experience
EUROPEP	European Task Force on Patients Evaluations of General Practice (99)	Experience
MCG-CAHPS	Medicare Consumer Assessment of Healthcare Providers and Systems (100)	Experience
PEICS	Patient Experience of Integrated Care Scale (101)	Experience
PCAT	Primary Care Assessment Tool Short Form (102)	Experience
GPAQ/S	General Practice Assessment Questionnaire (62, 71, 94, 103)	Experience
PCPCM	Patient-Centred Care Measure (50, 64, 87, 95)	Experience
NPE	Primary Care Continuity questionnaire (65)	Experience
PDRQ-9	The Patient-Doctor Relationship Questionnaire (77)	Experience
DDPRQ-10	The Difficult Doctor-Patient Relationship Questionnaire (104)	Experience
P3CEQ	Person-Centred Coordinated Care Experience Questionnaire (66, 79)	Experience
MHCC-P	Medical Home Care Coordination Survey – Patients (80, 93)	Experience
EOHCS-Ongoing	Equity-Oriented Health Care Scale — Ongoing (25)	Experience
OPQ	Out-of-hours Patient Questionnaire (38)	Experience
EPD	The Experiences of the Person with Diabetes Questionnaire (69)	Experience
PEQ-GP	Patient experiences with general practice (58)	Experience
POPE-PC	Problem-Oriented Patient Experience – Primary Care survey (83)	Experience
Not specified	User Reported Measure of Care Co-ordination (42)	Experience
Not specified	Service quality instrument (43)	Experience
Not specified	Factors affecting the family physician selection by patient's questionnaire (60)	Experience
Not specified	Quality of Visit to Family Physician Questionnaire (68)	Experience
MISS-21	Medical Interview Satisfaction Survey (31, 33, 105)	Satisfaction
PESS	Patient Enablement and Satisfaction Survey (45)	Satisfaction
PSQ18	The Patient Satisfaction Questionnaire Short-Form (106)	Satisfaction
PCSSW	Primary Care Satisfaction Survey for Women (40)	Satisfaction
GPNS	General Practice Nurse Satisfaction Scale (56)	Satisfaction
DISQ	Doctors' Interpersonal Skills Questionnaire (73)	Satisfaction
PSI	Patient Satisfaction Index (78)	Satisfaction
QPS	Questionnaire of Patient Satisfaction (89)	Satisfaction
PCSSW	Primary Care Satisfaction Scale (107)	Satisfaction
GPNS	General Practice Nurse Satisfaction Scale (56)	Satisfaction
Not specified	A questionnaire to evaluate satisfaction of the patient with diabetes at the primary care level (69)	Satisfaction

Not specified	“Patients’ Experiences with the care provided by Physicians and other healthcare professionals at Hospital Outpatient Departments” questionnaire (60)	Satisfaction

3.2. Candidacy Framework

We extracted 819 survey items and mapped each one against the features of the Candidacy Framework, including digital candidacy (Supplementary Table S3). Table 3 shows the frequency of items by stage of the framework. Many survey items aligned with more than one feature in the framework (for instance, "*Making it easy for you to tell him or her about your problems"* aligned with permeability and appearances to services). Items most frequently elicited information about permeability of services (n=243) (ability to articulate the need for care). Items related to adjudication by healthcare professionals were the least frequent domain captured by the items (n=50). A limited number of items addressed digital care (n=4).

3.3. Adapted surveys

We identified 28 articles (30%) reporting a survey adapted for specific groups or contexts, with less than half focusing on women (n=6) and older adults (n=5). For instance, Aldohaian et al (29) designed a survey to assess beliefs and behaviours regarding cervical cancer screening among Saudi women. To ensure cultural appropriateness, the authors excluded one key but sensitive question on sexual partners and adapted the validated scale to align with Arabic cultural norms.

With few exceptions, surveys lacked items specifically designed to capture the care needs and experiences of underserved populations (e.g., capturing experiences of support to access services, experiences of discrimination). Addressing similar concerns about inclusivity, Hays et al (57) developed a simplified version of the CAHPS survey after recognising that readability challenges contributed to under-representation of patient care experiences among underserved populations in the USA. This adaptation applied plain language principles, including shortening items or converting passive constructions to active voice to improve accessibility.

Table 3. Candidacy Framework: Frequency of items aligned to the Candidacy Framework.

Domain	Frequency (%)
Identification of candidacy	113
Navigation of services	160
Permeability of services	243
Appearance at services	183
Adjudication by healthcare professionals	50
Offers of/resistance to services	62
Operating and local production	149
Digital candidacy*	4
Not applicable	147

Some survey items fell into more than one candidacy domain. *Digital candidacy is not a domain in the original Candidacy Framework. However, we were interested in this domain due to its relevance in digital care. For this reason, survey items that aligned with digital care were categorised under digital candidacy.

4. Discussion

4.1. Summary

This review included 69 articles reporting 46 distinct validated quantitative surveys designed to evaluate access, care experience, and patient satisfaction with primary care services. The included articles described a mix of newly developed surveys (n = 26), translated versions (n= 15), and adapted surveys (n=28).

Our findings highlight that, despite the global use of patient surveys, these tools are inconsistently adapted to specifically capture the insights of underserved groups and largely failed to elicit information about how patients navigate digital pathways in primary care.

4.2. Strengths and limitations

This scoping review has several strengths. Comprehensive searchers across multiple databases and reference lists of included papers minimised the risk of omitting relevant literature, while independent screening of titles and abstracts by four authors and full texts by two authors minimised the risk of excluding relevant articles. Although examples of applying the Candidacy Framework to evaluate survey findings are emerging (8, 9), they remain limited. Therefore, this review provides a valuable resource for researchers interested in using this framework.

This review also has some limitations. First, searches were limited to full texts available in English, resulting in the exclusion of potentially relevant literature. Second, by excluding surveys focused on children and adolescents, the review could not determine whether validated surveys exist to capture access barriers and experiences of these groups.

4.3. Comparison with existing literature

Our findings have important implications. First, most patient surveys were not designed with underserved groups in mind, meaning that these populations (e.g., people with a learning disability) are routinely excluded from providing feedback in primary care (108). Consequently, findings from under-represented surveys may lack validity and fail to reflect real-world needs (17). This concern is supported by existing evidence showing that exclusion and under-representation of vulnerable groups from national health surveys (109), outpatient clinics (110), and difference in preferences between socially disadvantaged groups and the average patient (111) limits the generalisability and applicability of survey findings. While current surveys provide valuable insights, clinical teams may wish to consider that patient management decisions and changes in primary care services based solely on these data could sometimes misinterpret patient needs, with potential implications for patient safety. To maximise the impact of improvement in general practice care, primary care teams may explore approaches that support inclusivity and equitable patient outcomes (112).

Second, an equity-focused perspective to patient survey design is essential to accurately capture the nuanced experiences of underserved populations and to make them accessible

to all patients (113). With few exceptions, we identified a lack of survey items capturing these experiences (e.g., discrimination). Evidence consistently shows that surveys lacking an inclusive design tend to underestimate the needs of groups such as women, sexual minorities, and people with a disability (17, 114, 115). Our findings therefore challenge the usefulness of current patient surveys in primary care, as they were not designed to capture these perspectives (112). To revert this situation, patient surveys must be intentionally inclusive and items guided by equity-orientated principles to ensure they capture the perspectives and priorities of all patients (114).

Third, consistent with recent evidence (11) , the Candidacy Framework proved to be a valuable tool for the appraisal of survey design. By adopting a patient-centred approach, it captures factors shaping the entire primary care journey and reveals how complex social, institutional, and structural factors intersect to privilege some population groups and disadvantage others in primary care. However, some framework features (e.g., adjudication, offer and resistance) were not fully represented in existing surveys (10). Incorporating items that address all aspects of candidacy in future surveys would generate more comprehensive insights to inform service improvements and enhance patient outcomes. Beyond conceptual utility, the framework can also support policymakers, commissioners, and clinical practitioners in moving beyond simplistic measures of access (e.g., number of appointments) towards recognising its layered complexity in primary care access, enabling the development of strategies and actionable, equity-focus solutions to reduce the primary care divide (9, 10).

Finally, the lack of survey items addressing digital candidacy in contemporary practice is relevant. Emerging evidence indicates that the digital gap is widening across healthcare systems (116), raising the risk that individuals who are digitally illiterate or experiencing digital poverty may be further excluded from the benefits of digital health transformation – an effect knows as the ‘digital inverse care law’ where those most in need of digital care experience the greatest barriers (117). To mitigate this, policymakers, commissioners, and clinical practitioners should prioritise coproducing inclusive feedback mechanisms that remove barriers to participation, ensure all voices are represented, and capture dimensions of digital candidacy.

4.4. Implications for research and practice

Applying health equity principles to address inequalities in care experience and patient satisfaction is essential for designing inclusive and tailored services that account for the intersecting social, cultural, and structural factors that privilege some groups, while disadvantaging others in primary care (118) . Proactive efforts to remove access barriers in primary care can accelerate service improvements, making care more efficient and attuned to the needs of diverse populations (119).

Our findings highlight the need for a renewed, theory-driven, and equity-focused approach to patient survey design. For instance, our research group will develop and validate a health

survey tailored to people with a learning disability, with subsequent adaptation for other under-represented groups. We recommend incorporating digital candidacy into the framework, with future research interrogating mechanisms through which underserved groups may be further disadvantaged in digitalised healthcare systems. Studies should critically appraise healthcare policy inclusivity, the influence of patient voice on service design and quality improvement plans, and the extent to which existing surveys captures the experience of young persons.

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6. Conflict of interest

The authors declare that they have not conflict of interest.

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8. Ethics

Ethical approval is not required since data are from publicly available secondary sources.

9. Data sharing statement

All data are available in the paper and supplementary material. Survey items mapped to the Candidacy Framework are available in our protocol(20) which is published in OSF.

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