

What Exactly Is Being Measured When We Measure Community Engagement? A Scoping Review of Definitions, Frameworks and Instruments

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Abstract

Background: Community engagement is now a near-universal requirement of public health programming and research funding, yet the term is used to denote arrangements ranging from leaflet distribution to community control of budgets. Where a construct is defined loosely, its measurement will be defined loosely too, and claims that engagement "works" become difficult to interpret or compare.

Objective: To chart how community engagement is conceptualised and operationalised in the health literature, to identify the frameworks and instruments available for measuring it, and to locate the gaps between what is claimed and what is measured.

Methods: A scoping review was conducted following the Arksey and O'Malley framework and reported in accordance with PRISMA-ScR. Three structured query sets were run against a web-based literature search interface. Records were screened against eligibility criteria specified by Population, Concept and Context, and included records were charted against a predefined extraction template covering definition, framework, measurement target, instrument and psychometric reporting.

Results: Twenty-seven records were returned; after removal of ten duplicates, seventeen unique records were screened and eleven met the eligibility criteria — three conceptual frameworks or typologies, four measurement instruments and four prior reviews or syntheses. Four distinct framings of engagement recur across the literature: engagement as a delivery mechanism, as a direct intervention, as collective action, and as a means of gaining influence over the health system. Each implies a different measurement target, and the four are frequently conflated within a single study. Instrument development is concentrated in partnership-process measurement, where validated multi-domain tools exist; measurement of decision authority relies almost entirely on unvalidated typology ratings; and measurement of change over time is largely absent. One included record notes that of twenty-eight instruments compiled by a national committee, only four had been validated in national samples.

Conclusions: The measurement problem in community engagement is not primarily psychometric but definitional. Studies should state which of the four framings they adopt before reporting any engagement measure, report the level of engagement achieved rather than merely asserting that engagement occurred, and distinguish measurement of process from measurement of power. A reporting checklist derived from the charted evidence is proposed.

Keywords: Community Engagement, Participation, Measurement, Scoping Review, PRISMA-ScR, Research Methodology.

1. INTRODUCTION

Few propositions in contemporary public health attract less disagreement than the proposition that communities should be engaged. It appears in funding conditions, in programme guidance, in research governance requirements and in the design principles of primary health care. The consensus is broad enough that the term has ceased to carry a stable meaning: it is applied to a programme that distributes

leaflets through local volunteers and to a programme in which a community body holds the budget and hires the staff, and to almost everything between.

This is not merely a semantic complaint. A construct that is loosely defined will be loosely measured, and loose measurement has three consequences that matter for evidence synthesis. First, studies that report "engagement" cannot be pooled, because the exposure is not the same exposure. Second, a programme can satisfy an engagement requirement with its weakest possible interpretation while reporting in language borrowed from the strongest, and no reader can detect the substitution from the published account. Third, when engagement is found not to improve an outcome, it is impossible to distinguish a genuine null result from a study in which the version of engagement delivered was never the version theorised.

The conceptual literature has long recognised the problem. More than half a century ago a typology of citizen participation was proposed that distinguished non-participation, tokenism and genuine citizen power, explicitly to expose arrangements in which the appearance of participation substituted for its substance. Subsequent frameworks in the health field have described levels of engagement, spectra of involvement, and continua running from transactional through transitional to transformational. That these frameworks exist and are widely cited, while the underlying ambiguity persists, suggests that the difficulty lies not in the absence of concepts but in the gap between conceptualisation and measurement.

This review therefore asks a measurement question rather than an effectiveness question. It does not ask whether community engagement improves health outcomes; several reviews have addressed that, and their difficulty in reaching a stable answer is part of what motivates this one. It asks what is actually being measured when engagement is measured, what instruments exist, what properties those instruments have been shown to possess, and which aspects of the construct have no measurement at all.

The review is deliberately setting-neutral. Community engagement is claimed as a principle across health systems of every income level and organisational form, and the definitional problem identified here is a property of the construct rather than of any particular health system, so no geographical restriction was applied and no country-specific inference is drawn.

1.1 Review questions

- How is community engagement defined in health studies that claim to measure it?
- What conceptual frameworks or typologies are used to characterise the level or type of engagement?
- What instruments exist for measuring engagement, what do they measure, and what psychometric evidence supports them?
- Which dimensions of the construct are well served by existing measurement, and which are not?

2. METHODS

The review followed the scoping review framework of Arksey and O'Malley as subsequently refined, comprising identification of the research question, identification of relevant records, selection, charting of data, and collating and summarising results. Reporting follows the PRISMA extension for Scoping Reviews (PRISMA-ScR). A scoping design was chosen in preference to a systematic review because the objective is to map the conceptual and methodological territory rather than to estimate an effect, and because the anticipated heterogeneity of study designs precludes synthesis of outcomes.

No protocol was registered in advance. This departure from best practice is acknowledged in Section 5.

2.1 Eligibility criteria

Eligibility was specified using the Population–Concept–Context framework recommended for scoping reviews, as set out in Table 1.

Table 1. Eligibility criteria (Population–Concept–Context)

Element	Included	Excluded
Population	Communities, community–academic or community–service partnerships, and	Individual patients considered solely as recipients of clinical care

	populations participating in health programmes or health research	
Concept	Definition, conceptualisation, framework, typology or measurement of community engagement, participation or community-engaged research	Reports describing engagement activities without any definitional or measurement content
Context	Any health or public health setting, any health system, any geography, any income level	Settings outside health, including urban planning, environmental governance and technology design
Record type	Primary studies, instrument-development reports, conceptual frameworks, systematic and scoping reviews	News items, commentaries without original content, duplicate versions of the same record
Language	English	—

Note. Records measuring engagement only at the level of the individual patient — for example patient-activation or consumer-engagement scales — were excluded because the construct of interest here is collective rather than individual.

2.2 Search strategy

Three query sets were developed to cover the three faces of the question: conceptualisation, measurement, and the typologies used to describe levels of engagement. Searches were executed through a web-based literature search interface rather than through direct queries against bibliographic databases, which is a material limitation discussed in Section 5. Table 2 records the queries and their yields, so that the search is reproducible in the form in which it was actually conducted.

Table 2. Search strategy and yield

Query set	Terms	Records returned
QS1 — conceptualisation	community engagement; public health interventions; conceptualisation; measurement; scoping review; definitions	9
QS2 — instruments	measuring community engagement; instrument; validated scale; indicators; health research; evaluation; psychometric	8
QS3 — typologies	spectrum; levels of community participation; ladder; framework; typology; consultation; co-production	10
Total returned	—	27
After duplicate removal	—	17

Note. Searches were conducted on a single date. Duplicates arose principally where one article was returned under several host URLs (publisher site, repository, indexing service), and where several records referred to the same foundational typology.

2.3 Selection and charting

Records were screened on title and abstract against the criteria in Table 1, and records passing that screen were assessed in full against the same criteria. Because the review was conducted by a single reviewer, no inter-rater agreement statistic is available; this is recorded as a limitation. Included records were charted against a predefined template capturing: record type; whether an explicit definition of community engagement was offered and its source; the conceptual framework or typology invoked, if any; the aspect of engagement measured; the instrument used or developed; the psychometric evidence reported; and whether engagement was measured at more than one time point.

Charted data were collated narratively and summarised in the figures and tables that follow. Consistent with scoping review methodology, no formal critical appraisal of individual sources was undertaken, and

no attempt was made to weight findings by study quality. Accordingly, the review describes what the literature contains rather than adjudicating what is true.

3. RESULTS

3.1 Selection of records

Figure 1 presents the flow of records through the review. Twenty-seven records were returned across the three query sets. Ten were duplicates, arising where a single article was indexed under multiple host addresses or where several records pointed to the same foundational typology, leaving seventeen unique records for screening. Six were excluded on full assessment: two measured engagement at the level of the individual rather than the community, three lay outside health, and one described engagement activity without definitional or measurement content. Eleven records were included and charted.

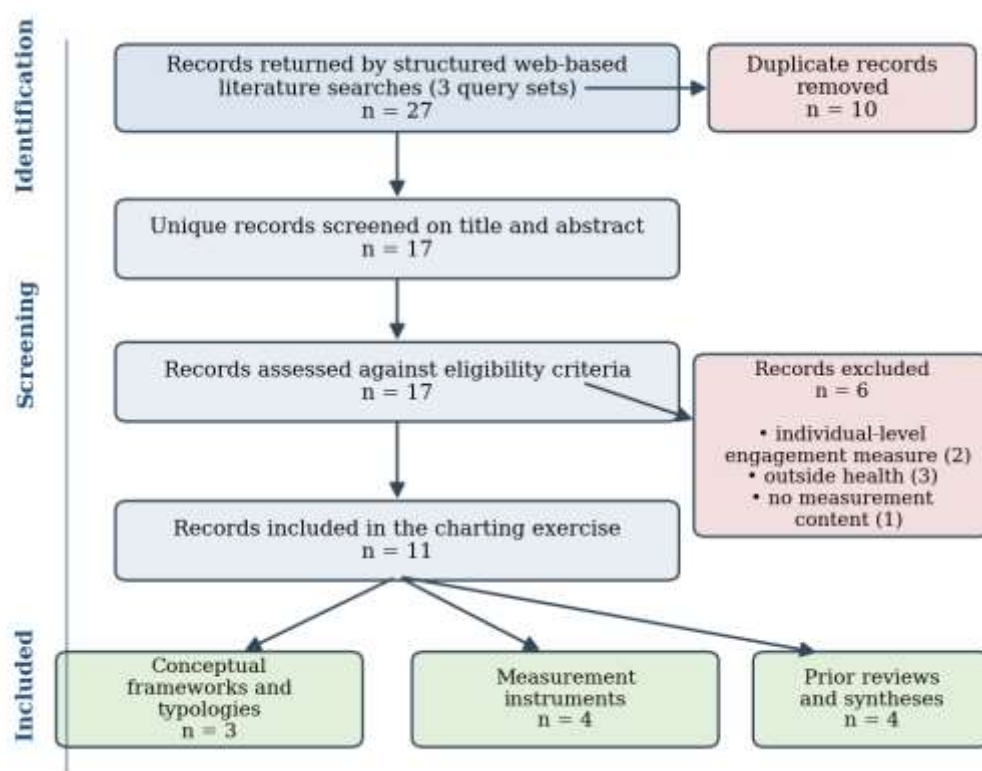


Figure 1. PRISMA-ScR flow diagram of record identification, screening and inclusion.

3.2 Characteristics of included records

The eleven included records divide into three groups: three conceptual frameworks or typologies, four measurement instruments or instrument-development reports, and four prior reviews or syntheses. Table 3 charts them.

Table 3. Charted characteristics of included records

Record type	Focus	What is measured or specified	Psychometric evidence
Typology	Ladder of citizen participation: eight rungs across non-participation, tokenism and citizen power	Position of an arrangement on a power continuum	None — conceptual instrument
Typology	Public participation spectrum: inform, consult,	Intended level of involvement, with a stated promise at each level	None — conceptual instrument

	involve, collaborate, empower		
Framework	Engagement continuum: transactional, transitional, transformational; micro, meso and macro levels	Degree of community influence over decisions	None — conceptual instrument
Instrument	Partnership survey across domains of a participatory research model; long form of 93 items	Partnership practices, processes and outcomes	Validated; factor structure reported
Instrument	Pragmatic 30-item short form derived from the above across eight higher-order constructs	Partnership practices condensed for field use	CFA and SEM reported; TLI > 0.98, SRMR < 0.02
Instrument	Research engagement survey tool developed via Delphi and longitudinal survey rounds	Engagement categories assessed from the stakeholder perspective	Internal consistency and convergent validity examined
Instrument	Translated and adapted partnership survey with a pragmatic short version	Partnership practices in a non-English language setting	Translation, adaptation and validation reported
Review	Systematic review deriving a conceptual framework from 335 included reports	Dimensions along which engagement interventions differ	Not applicable
Review	Realist synthesis of engagement in primary health care	Attributes, contexts and mechanisms of engagement initiatives	Not applicable
Review	Scoping review of engagement in mass drug administration: 32 articles, 24 interventions	Contribution of engagement to participatory intervention delivery	Not applicable
Review	Scoping review of definitions and measures in one disease domain	Definitions in use and measures available for programme-level analysis	Not applicable

Note. Records are characterised by type rather than named in the table; full citations appear in the reference list. CFA = confirmatory factor analysis; SEM = structural equation model; TLI = Tucker–Lewis index; SRMR = standardised root mean square residual.

3.3 How engagement is defined

No single definition recurs across the included records. The most frequently cited formulation, attributable to a global health agency, describes engagement as a process of developing relationships that enable stakeholders to work together to address health-related issues and promote well-being. It is a definition of a process, and it specifies neither a threshold nor a level, so an arrangement of any depth can satisfy it. More analytically useful is a four-part distinction that recurs in the programme-evaluation literature and is reproduced in one of the included reviews: engagement may be framed as a delivery mechanism, as a direct intervention, as collective action, or as a means of achieving greater community influence in the health system. Figure 2 sets these out with the measurement each implies.

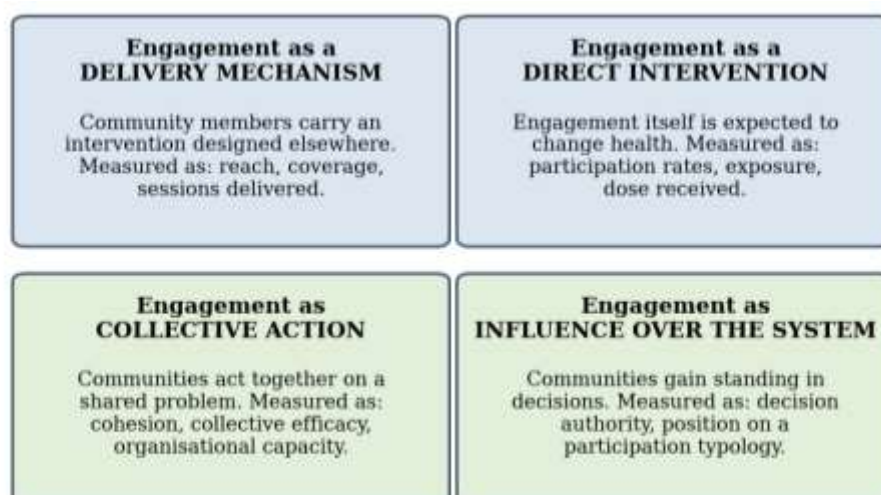


Figure 2. Four framings of community engagement and the measurement target each implies.

The four framings are not points on a single scale; they are different constructs. Engagement as a delivery mechanism is an efficiency proposition, and the appropriate measures are reach and coverage. Engagement as a direct intervention is a health proposition, and the appropriate measures concern exposure and dose. Engagement as collective action is a social proposition, measured through cohesion and collective efficacy. Engagement as influence is a governance proposition, and the only measure that satisfies it concerns who decides.

The difficulty the charted records reveal is that studies routinely mix them. A study will justify engagement in the language of empowerment and influence, implement it as a delivery mechanism, and evaluate it through reach. Each step is defensible in isolation; the sequence is not, because the conclusion drawn at the end is expressed in the vocabulary of the justification rather than of the measurement. One included scoping review reports precisely this pattern, finding that most engagement initiatives in its domain were confined to passive information dissemination, with few prioritising active involvement or decision-making, and identifying a lack of clear definitions and inconsistent objectives as the principal obstacles to evaluating effectiveness.

3.4 Frameworks for levels of engagement

Three families of typology appear in the charted records. Table 4 compares them.

Table 4. Typologies used to characterise level of engagement

Typology	Levels	Organising principle	Position on legitimacy of lower levels
Ladder of citizen participation	Eight rungs grouped as non-participation, tokenism, citizen power	Extent of citizen power in determining the end product	Lower rungs are substitutes for participation, not forms of it
Public participation spectrum	Five: inform, consult, involve, collaborate, empower	Intended involvement in decision-making, each with a promise to the public	Different levels are legitimate depending on goals, time and resources
Engagement continuum	Three: transactional, transitional, transformational; micro, meso, macro	Degree of community control or influence	Progression is desirable but lower levels are described, not condemned

Note. The final column is the substantive difference between the families and the reason the choice of typology is not neutral.

The divergence in that final column is consequential for measurement. Under the first typology, an arrangement in which a community is informed and consulted is a form of non-participation or tokenism, and to report it as engagement is to misreport. Under the second, the same arrangement is a legitimate level, appropriately chosen where the decision is constrained. A study that places its intervention on one typology and interprets it in the language of the other will produce a conclusion that neither supports. Since no included record required authors to state which typology they were using, this substitution is invisible to readers.

3.5 What instruments measure

Instrument development in the charted records is concentrated on partnership process. The most developed line of work produced a long-form partnership survey of 93 items organised across the domains of a participatory research model, subsequently condensed through a six-stage process into a 30-item pragmatic instrument covering eight higher-order constructs, with confirmatory factor analysis and structural equation modelling reported and fit indices in the range conventionally regarded as good. A separate line produced a research engagement survey tool developed through a Delphi process and evaluated across four survey rounds over eighteen months, examining internal consistency and convergent validity against an existing trust scale. A third produced a translated and adapted version of a partnership survey with a pragmatic short form.

These are serious psychometric efforts, and they establish that engagement can be measured rigorously. What they measure, however, is the quality of a partnership as experienced by its members — the fourth framing's process, not its outcome. Figure 3 charts the correspondence between what studies attempt to measure and how.

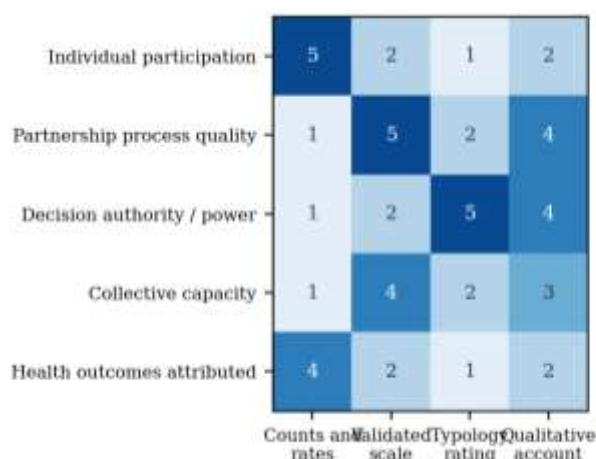


Figure 3. Measurement targets against measurement methods, charted from the included records.

Two features of Figure 3 stand out. Individual participation is measured by counting, which is straightforward and weakly informative. Decision authority — the dimension on which all three typologies in Table 4 turn, and the one that distinguishes engagement from consultation — is measured almost entirely by placing an arrangement on a typology, which is a judgement by the investigator, usually unvalidated, often made by the party whose work is being judged. The dimension that carries the conceptual weight has the weakest measurement.

The scale of the underlying problem is indicated by one included record, which notes that of twenty-eight assessment instruments compiled by a national committee to support consistent measurement of engagement, only four had been validated in national samples, and fewer still covered the full range of

domains in the committee's own conceptual model. Proliferation of instruments is not the same as availability of measurement.

3.6 Gaps

Figure 4 summarises coverage across the measurement domains charted.

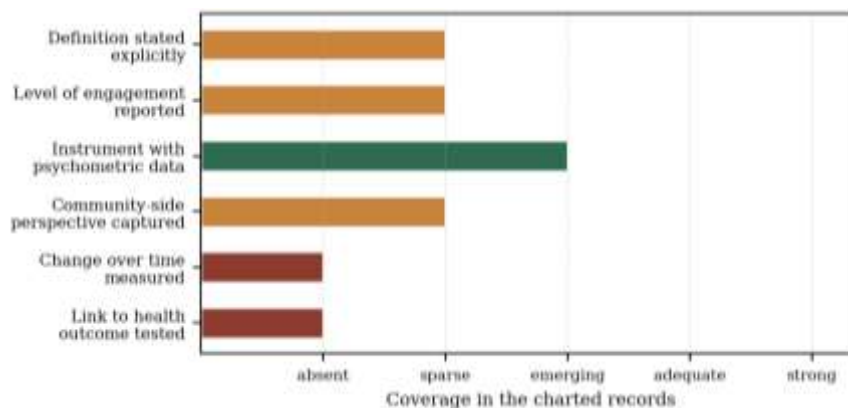


Figure 4. Evidence gap map across measurement domains in the charted records.

Two gaps are of a different order from the others. The first is temporal: almost nothing in the charted evidence measures engagement as a quantity that changes over time. Engagement is reported as a static attribute of a project, which means that a programme cannot demonstrate that it deepened engagement, only that engagement of some description was present. For an evaluation this is close to disqualifying, because the exposure cannot be shown to have varied. The second is perspectival: measurement is predominantly conducted from the side of the institution doing the engaging. Instruments administered to community partners exist, and the research engagement survey tool was explicitly developed to assess engagement from the stakeholder perspective, but they remain the minority, and an assessment of power sharing made exclusively by the party holding the power is a weak instrument whatever its internal consistency.

4. DISCUSSION

The measurement problem in community engagement is, on this evidence, not primarily psychometric. Validated multi-domain instruments with credible factor structures exist. The problem is that the construct they measure is one of four constructs travelling under a single name, and it is not usually the one the claims are about. Better instruments for partnership process will not resolve a difficulty that arises before instrumentation, at the point where a study decides what it means by the word.

This has a practical implication for anyone reading or reviewing an engagement claim. The question to ask is not whether engagement was measured but which of the four framings is in play, and whether the measure reported belongs to that framing. A study framing engagement as influence and reporting attendance has not measured its construct. A study framing engagement as a delivery mechanism and reporting reach has measured its construct precisely, and should not then conclude anything about empowerment.

A second implication concerns typology selection. Because the typologies differ on whether lower levels are legitimate forms of participation or substitutes for it, the typology chosen is a normative commitment and not a descriptive convenience. Studies should state which they adopt and why, and should place their own intervention on it explicitly rather than leaving the level to be inferred from adjectives.

Box 2 sets out a minimum reporting standard that follows from the charted evidence. It is deliberately short, and every item is answerable from information the study team already possesses.

Three research priorities follow. The first is development and validation of a measure of decision authority that does not rely on investigator placement — something closer to a structured audit of decision rights

than to a rating scale. The second is establishing whether existing partnership-process instruments are responsive to change, since an instrument that cannot detect deepening engagement cannot serve an evaluation however well it performs cross-sectionally. The third is systematic comparison of institution-side and community-side assessments of the same arrangement, which would establish whether the perspectival gap identified in Section 3.6 is a material source of bias or a minor one.

Limitations

Four limitations bound this review, and the first two are substantial enough that its findings should be treated as a map of the territory rather than a survey of it.

Search. Searches were executed through a web-based literature search interface rather than through structured queries against bibliographic databases with controlled vocabulary, date limits and Boolean syntax. The consequence is that the twenty-seven records returned represent what that interface surfaced rather than the retrievable literature, that recall is unknown, and that the yield is far smaller than a comparable database search would produce. Grey literature, trial registries and reference-list hand-searching were not used. A replication using structured database searches is the necessary next step and would be expected to expand the included set substantially; the substantive findings reported here — the four framings, the typology divergence, the concentration of instrumentation on partnership process — are conceptual patterns that a larger sample would refine rather than overturn, but that expectation is untested.

Single reviewer. Screening, eligibility assessment and charting were performed by one reviewer without duplicate screening, so no inter-rater agreement can be reported and selection and charting errors cannot be detected by the usual means. Scoping review guidance recommends two independent reviewers at the screening stage.

No registered protocol. The absence of an a priori registered protocol means that eligibility criteria and charting categories, although specified before charting began, cannot be shown to have preceded the review. This creates scope for post hoc adjustment that a reader cannot rule out.

No critical appraisal. Consistent with scoping review methodology, the methodological quality of included records was not appraised, so the summary in Table 3 weights a conceptual essay and a psychometric validation study equally. This is appropriate for mapping and inappropriate for any inference about which findings are more secure.

One further limitation concerns language: only English-language records were eligible, which will have excluded conceptual traditions of participation developed and published in other languages, and those traditions are precisely where some of the strongest theoretical work on community control has been done.

5. CONCLUSION

Community engagement is measured badly not because measurement is technically hard but because the thing being measured has not been specified. Four distinct constructs share the name: engagement as a way of delivering something, as a thing that is itself delivered, as collective action, and as a shift in who decides. Instruments exist and some are psychometrically sound, but they cluster on partnership process, while the dimension that distinguishes engagement from consultation — decision authority — rests on unvalidated placement, usually by the institution being assessed, and almost never at more than one point in time.

The remedy proposed here requires no new instrument. It requires that studies name the framing they are using, name the typology they are placing themselves on, report which decisions the community actually held, and ensure that the construct in the conclusion is the construct in the method. Until that is routine, the accumulating literature on whether community engagement works will continue to answer a question that no two studies are asking in the same terms.

Declarations

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Author contributions:

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
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C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

REFERENCES

1. S. R. Arnstein, 'A ladder of citizen participation', J Am Inst Plann, vol. 35, no. 4, pp. 216-224, 1969. doi.org/10.1080/01944366908977225
2. G. Brunton, J. Thomas, O. Mara-Eves, A. Jamal, F. Oliver, and S. Kavanagh, 'Narratives of community engagement: a systematic review-derived conceptual framework for public health interventions', BMC Public Health, vol. 17, 2017. doi.org/10.1186/s12889-017-4958-4
3. Community engagement initiatives in primary health care to achieve universal health coverage: a realist synthesis of scoping review. PLoS One. 2023;18(5):e0285222. doi.org/10.1371/journal.pone.0285222
4. Wallerstein N, Oetzel JG, Duran B, et al. A short pragmatic tool for evaluating community engagement: Partnering for Health Improvement and Research Equity (PHIRE). Front Public Health. 2025;13:1539864. doi.org/10.3389/fpubh.2025.1539864
5. Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med. 2018;169(7):467-473. doi.org/10.7326/M18-0850
6. H. Arksey and O. Malley, 'Scoping studies: towards a methodological framework', Int J Soc Res Methodol, vol. 8, no. 1, pp. 19-32, 2005. doi.org/10.1080/1364557032000119616
7. D. Levac, H. Colquhoun, and O. Brien, 'Scoping studies: advancing the methodology', Implement Sci, vol. 5, 2010. doi.org/10.1186/1748-5908-5-69
8. M. Peters, C. Marnie, and A. C. Tricco, 'Updated methodological guidance for the conduct of scoping reviews', JBI Evid Synth, vol. 18, no. 10, pp. 2119-2126, 2020. doi.org/10.11124/JBIES-20-00167
9. F. Bowen, A. Newenham-Kahindi, and I. Herremans, 'When suits meet roots: the antecedents and consequences of community engagement strategy', J Bus Ethics, vol. 95, no. 2, pp. 297-318, 2010. doi.org/10.1007/s10551-009-0360-1
10. A. Omara-Eves, G. Brunton, S. Oliver, J. Kavanagh, F. Jamal, and J. Thomas, 'The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis', BMC Public Health, vol. 15, 2015. doi.org/10.1186/s12889-015-1352-y
11. S. Cyril, B. J. Smith, A. Possamai-Inesedy, and A. Renzaho, 'Exploring the role of community engagement in improving the health of disadvantaged populations: a systematic review', Glob Health Action, vol. 8, 2015. doi.org/10.3402/gha.v8.29842