

Psychosocial Determinants of Patient Engagement Across Chronic Disease Care: A Systematic Review of Psychological, Social, and Contextual Mechanisms

Pieter Botha^{1*}, Anel Van Wyk¹, Johan Marais²

¹Department of Health Psychology and Patient Engagement, Faculty of Medicine, Stellenbosch University, Stellenbosch, South Africa.

²Department of Chronic Disease Management and Psychosocial Care, Faculty of Medicine, University of Pretoria, Pretoria, South Africa.

*E-mail ✉ pieter.botha@sun.ac.za

Abstract

Chronic-disease engagement is often treated as an individual attribute although participation depends on psychological capability, relationships, resources, care organization, and digital access. To synthesize psychological, social-relational, and contextual determinants of engagement while distinguishing activation, self-management, adherence, decision participation, and clinical outcomes. A PRISMA-informed review used the documented search record. Aggregate record-return, screening, and eligibility totals were not preserved and were not inferred. Thirty-five substantive evidence reports entered synthesis; four additional references served methodological or discussion functions. Heterogeneous evidence was synthesized without meta-analysis. Engagement-related evidence clustered around capability and appraisal, relational support and permission, and contextual opportunity or constraint. Determinant effects varied with illness demands, life stage, culture, resources, organization, and technology context. Engagement is better interpreted as a context-dependent care state than a fixed patient trait. Multilevel assessment is warranted, while causal claims remain limited by heterogeneous evidence.

Keywords: Patient engagement, Chronic disease, Self-management, Health literacy, Self-efficacy, Shared decision-making, Psychosocial determinants

Introduction

Patient engagement carries more conceptual breadth than many measures permit. Digital studies use heterogeneous usage indicators; patient activation captures knowledge, confidence, and readiness; and health literacy concerns access, understanding, appraisal, and use of information. These constructs contribute to engagement but are not interchangeable [1-3]. Conflating them obscures whether participation is limited by capability, preference, relationships, or practical opportunity.

Engagement is also not synonymous with adherence. Patient-provider communication shapes chronic-illness self-management through relational as well as informational processes [4], while evidence from socioeconomically disadvantaged populations shows that self-management feasibility depends on resources and care context [5]. A patient may understand a recommendation yet lack time, money, continuity, digital access, or decision latitude; another may engage actively while declining the recommended option.

This review therefore examines engagement at the intersection of psychological capability, social-relational conditions, and contextual or healthcare-system opportunity. It distinguishes subjective experience from behavior, participation from adherence, and engagement from downstream outcomes. The proposed synthesis organizes heterogeneous evidence without claiming a universally validated causal model.

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Materials and Methods

Review protocol and reporting framework

The review used PRISMA 2020 principles for transparent identification and selection [6]. Because the search interfaces did not preserve exportable aggregate result sets, counts for records retrieved, unique records after full-universe deduplication, title/abstract screening, and eligibility assessment remain unavailable rather than back-calculated.

Review questions

The review asked which psychological factors, social-relational conditions, and contextual or system conditions shape engagement-related processes; how these determinants interact; and how their relevance varies by illness, population, temporal stage, and care setting. A secondary question examined how operationalizations of activation, self-management, adherence, decision participation, and digital engagement alter interpretation.

Eligibility criteria

Substantive evidence included peer-reviewed 2017–2026 studies of people with chronic conditions or those directly involved in their care. Eligible designs included qualitative, quantitative, longitudinal, interventional, and mixed-method studies, plus evidence syntheses directly informing determinant classification or construct discrimination. Sources used only for reporting, appraisal, synthesis methodology, or discussion were classified separately.

Information sources

Discovery centered on PubMed-indexed literature accessed through web search. Publisher pages and bibliographic sources were used to verify titles, authors, DOI records, and study details; journal-metric sources were used for quartile checks. Search activity was performed on 2 September 2026.

Search strategy

Searches combined chronic-disease terms with engagement, activation, self-management, adherence, health literacy, self-efficacy, illness perceptions, distress, social support, communication, shared decision-making, digital health, socioeconomic conditions, transition care, and family involvement. Searches were narrowed by disease, population, design, year, and journal. Additional

exact-title, DOI, author, PubMed, and quartile queries verified candidates. Thus, 231 denotes query actions rather than unique records.

Study selection

Retrieved records were screened iteratively for topic fit, then checked for date, DOI, journal eligibility, design, and claim relevance. Aggregate numbers screened and assessed for eligibility were not stored and remain unavailable. Final-reference deduplication was exact: all 39 retained references had unique DOI strings. Final coding separated 35 substantive evidence reports from four support-only references. The substantive set contained 15 primary empirical studies and 20 secondary or conceptual evidence sources.

Data extraction

Extraction captured design, population or evidence unit, condition, setting, construct, determinant or intervention, comparator where relevant, operationalization, outcome domain, principal finding, heterogeneity, context modifiers, quality information, limitations, section role, and exhibit relevance. Missing details were not inferred.

Determinant classification framework

Evidence was coded as psychological, social-relational, contextual-healthcare-system, or cross-level. Psychological coding included self-efficacy, health literacy, motivation, autonomy, empowerment, symptoms, and appraisal; social-relational coding included communication, trust, decision participation, family, peers, empathy, and power; contextual coding included socioeconomic resources, organization, continuity, digital infrastructure, accessibility, culture, and language. This is a proposed organizing taxonomy, not a validated scale.

Risk-of-bias / quality appraisal

Appraisal was design-sensitive because the evidence mixed primary and review-level designs. MMAT principles informed evaluation of primary mixed evidence [7]; review sources were assessed against procedures appropriate to their stated design. No common numerical quality score was imposed across non-equivalent methods.

Evidence synthesis

Construct, population, intervention, and outcome heterogeneity precluded defensible quantitative pooling.

Structured synthesis followed SWiM principles [8], organizing findings by determinant domain, direction, design, context, and boundary conditions. Concordance was not treated as causal proof.

The reconstructed selection audit preserves recoverable values while marking unrecorded stages as unavailable. **Figure 1** makes that boundary explicit rather than deriving screening numbers from the reference-list total.

Results and Discussion

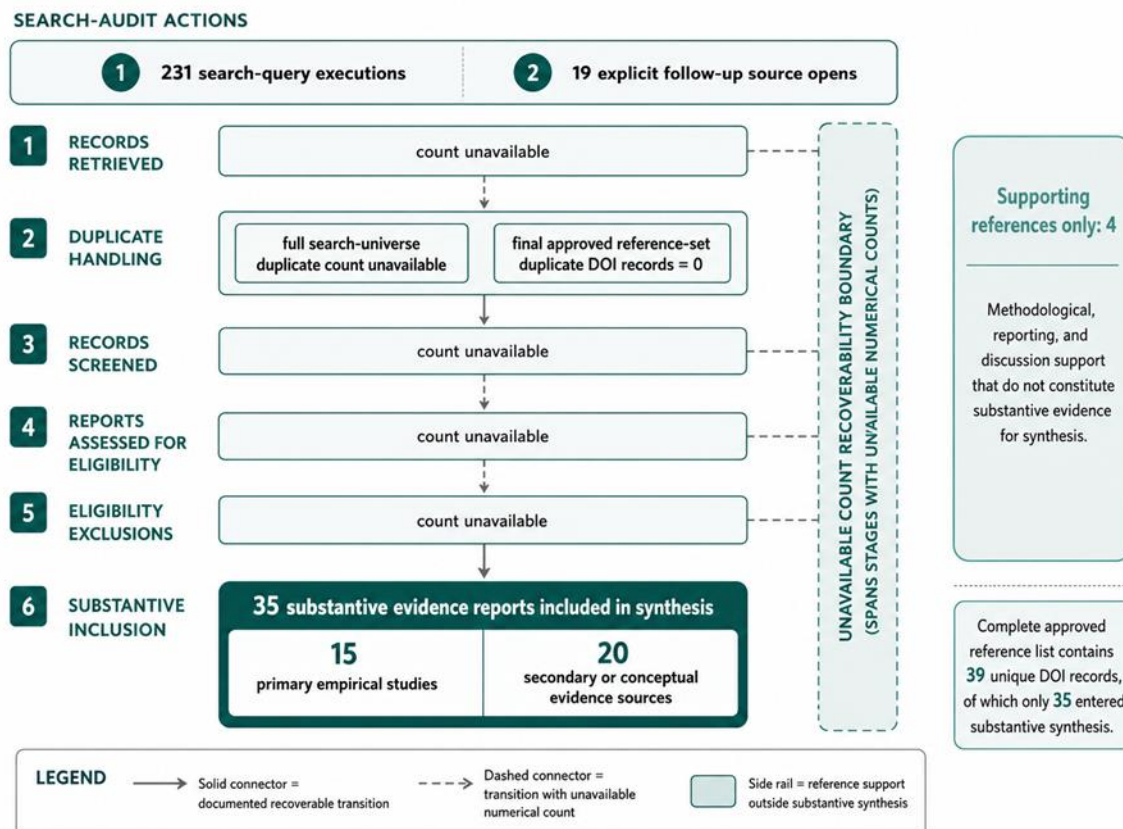


Figure 1. Recoverability Boundary in the Search-to-Synthesis Flow for Chronic-Disease Engagement Evidence

Study selection

Search-result totals were not exported. Records retrieved, records screened, screening exclusions, reports assessed, and eligibility exclusions therefore cannot be stated numerically and are not treated as zero. Recoverable endpoint data show 39 unique retained references, with 35 entering substantive synthesis and four reserved for methods or discussion support. Zero duplicate DOI records were present in the final set; this does not imply zero duplicates in the unrecoverable search universe.

Characteristics of included studies

The substantive evidence base combined qualitative, observational, longitudinal, randomized, and mixed-

method primary studies with systematic, scoping, umbrella, and concept-focused syntheses. Disease contexts included diabetes, chronic obstructive pulmonary disease, heart failure, cardiovascular disease, systemic lupus erythematosus, chronic kidney disease, pediatric chronic illness, and mixed chronic-condition populations. Settings ranged from outpatient and primary care to community programs, remote monitoring, digital care, and family-supported self-management. Heterogeneity made simple determinant counts misleading. Daily-assessment evidence showed that symptom characteristics and perceived causal attributes varied alongside self-care choices, illustrating within-person fluctuation in engagement-related behavior [9].

Across the evidence base, illness state, age, culture, resources, relationships, organization, and technology could change the meaning of apparently similar

participation patterns. **Table 1** therefore emphasizes exception states and interpretive failure modes.

Table 1. When Apparently Similar Engagement States Have Different Psychosocial Meanings

Care-context state	Observed pattern	Failure mode	Key modifier	Invalid inference
Symptom-dominant period	Reduced or passive participation	Symptoms consume attention	Severity and volatility	Stable low motivation
High information demand	Questions or incomplete follow-through	Information is unusable	Literacy and language	Indifference
High confidence	Active planning	Capability is overgeneralized	Treatment burden	Universal resilience
Family-involved care	Shared or delegated management	Support becomes conflict or overreach	Family roles and autonomy	More involvement is always better
Digitally mediated care	Variable technology use	Access, usability, trust, or burden interrupts use	Connectivity and responsiveness	Non-use equals refusal
Resource-constrained care	Selective attendance or task completion	Recommended care exceeds opportunity	Cost, time, transport	Adherence reflects preference alone

Note: Rows represent interpretive engagement states used in this synthesis, not validated patient categories.

Conceptualization and measurement of patient engagement

Engagement is a family of related but non-equivalent phenomena. Activation concerns readiness and confidence; self-management concerns enacted illness-management tasks; adherence concerns correspondence with a regimen; shared decision-making concerns participation in preference-sensitive choices; and digital engagement concerns interaction with technology. mHealth evidence shows that engagement is operationalized inconsistently, often through usage metrics that do not establish meaningful participation [1].

Activation evidence likewise supports a distinct capability construct rather than a complete proxy for engagement [2].

Health literacy shapes whether information becomes usable but does not guarantee agency, relational safety, or practical opportunity [3]. A patient may also engage by questioning, delegating, seeking assistance, or declining after deliberation. The proposed distinction therefore separates information exposure, interpretation, capability appraisal, participation, enacted management, and persistence (**Table 2**).

Table 2. Temporal Transitions Separating Engagement Capability From Enacted Participation

Observable manifestation	Easily confused construct	Possible interruption	Interpretation limit
Position — Information encounter			
Advice, results, options	Information provision	Inaccessible format	Exposure ≠ understanding
Position — Interpretation			
Personally usable meaning	Health literacy	Uncertainty or low relevance	Understanding ≠ agreement
Position — Capability appraisal			
Judgment of manageability	Activation/self-efficacy	Low confidence or high burden	Confidence ≠ opportunity
Position — Deliberative participation			
Questions, preferences, consent or refusal	Shared decision-making	Power imbalance or low trust	Agreement is not required
Position — Enacted management			
Medication, monitoring, visits, delegated care	Adherence/self-management	Cost, time, fragmented services	Nonperformance may reflect constraint
Position — Sustained/revived engagement			

Continuation, adaptation, re-entry	Persistence	Illness change or life events	Engagement is not fixed
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Note: The sequence is proposed for construct discrimination and is not a validated temporal model.

Psychological determinants

Psychological determinants shape whether illness demands appear understandable, controllable, and worth acting on. Daily-assessment evidence suggests that symptom characteristics and causal interpretations can vary with self-care choices [9], but observational association does not prove that appraisal independently causes behavior.

Self-efficacy is a recurrent capability construct. In a multicentre chronic-disease sample, higher self-efficacy was associated with stronger self-management and medication adherence [10]. Cross-sectional design leaves directionality unresolved because successful management may also strengthen confidence.

Health literacy operates through fit between informational demands and usable capability. A randomized COPD trial showed that health-literacy-informed, nurse-supported care can be operationalized as

an intervention rather than treating literacy as a fixed patient deficit [11]. Its relevance nevertheless remains disease- and context-dependent.

Motivational evidence adds autonomy and relatedness. A review of self-determination-theory interventions in cardiovascular self-care found heterogeneous intervention content and outcomes, with autonomy support more consistently represented than any uniform behavioral effect [12]. Motivation therefore should not be equated with compliance.

Empowerment further depends on knowledge and confidence interacting with goals, support, communication, monitoring, and service conditions [13]. Psychological capability is consequently treated here as necessary but insufficient for engagement. **Table 3** shows how relational and system conditions can amplify, relieve, or misrepresent psychological constraints.

Table 3. Psychological Constraints and the Conditions That Modify Their Expression

Proximal pathway	Relational/system modifier	Possible manifestation	Boundary
Constraint/resource — Volatile symptom appraisal			
Shifting urgency and controllability	Uncertain action plans	Episodic self-care	Severity may drive behavior directly
Constraint/resource — Low self-efficacy			
Action seems difficult	High burden or fragmented instructions	Avoidance or dependence	Prior structural failure may lower confidence
Constraint/resource — High self-efficacy			
Greater perceived capability	Clear goals and manageable demands	Planning and persistence	Confidence cannot remove access barriers
Constraint/resource — Limited literacy fit			
Information is hard to apply	Dense language or poor tailoring	Uncertainty or delegation	Communication design may be the problem
Constraint/resource — Autonomy support			
Choice and internalized motivation increase	Respectful preference-sensitive dialogue	Goal setting or negotiated action	Agreement is not required
Constraint/resource — Empowerment-supportive conditions			
Capability becomes usable influence	Responsive support and service flexibility	Sustained or adaptive participation	No single behavior proves empowerment

Social and relational determinants

Engagement is enacted within relationships rather than produced by psychological capability alone. Across shared decision-making, trust, and culturally tailored family-engagement evidence, participation depended on

whether patients were recognized as legitimate contributors and whether interpersonal support matched their social context [14-16]. The evidence does not establish a simple sequence in which greater participation inevitably generates greater trust. Trust can precede

participation, emerge through repeated responsive encounters, or remain low despite apparently participatory communication.

Peer support extends this relational field beyond the clinical dyad. In type 2 diabetes, peer-support models connected formal primary care with experiential knowledge, encouragement, and practical problem solving [17]. Such support may increase the feasibility of self-management without replacing professional care. Its usefulness is likely contingent on role clarity, cultural fit, accessibility, and whether peer relationships facilitate rather than prescribe patient action.

Family relationships present a particularly important boundary condition. Family involvement may provide reminders, emotional support, transportation, interpretation, or delegated management, but qualitative evidence also documents conflict, unwanted monitoring, and second-guessing [18]. Engagement should therefore not be inferred from the amount of family involvement. The more defensible question is whether relational involvement expands or contracts the patient's usable capacity to participate.

Contextual and healthcare-system determinants

Psychological and relational resources operate within material and organizational environments. Health-literacy evidence among middle-aged women illustrates that associations with self-management vary with measurement and population context [19]. Among first-generation immigrants with prediabetes or type 2 diabetes, language, cultural expectations, family arrangements, migration experience, and resource conditions shaped the feasibility and interpretation of self-management practices [20]. These findings caution against locating engagement failure exclusively within individual cognition.

Healthcare professionals also shape the informational environment. General practitioners reported relying largely on informal judgments rather than standardized health-literacy assessment when adapting cardiovascular-prevention consultations [21]. Such pragmatic adaptation may be useful, but it also creates uncertainty because observable fluency, education, confidence, or conversational style may be imperfect proxies for usable health literacy.

Organizational conditions further determine whether engagement support becomes routine practice. Nurses implementing self-management support described professional, workflow, and organizational constraints

that influenced whether theoretically desirable support could be integrated into everyday care [22]. In remote monitoring, patients and nurses described increased illness awareness and collaborative interaction, but these experiences depended on continued professional responsiveness rather than technology alone [23].

Digital engagement makes these multilevel dependencies especially visible. mHealth behavior-change techniques, experiential eHealth education, and older-adult adoption research collectively indicate that technology use depends on intervention design, patient capability, motivation, infrastructure, usability, and clinical involvement [24-26]. Digital-health-literacy interventions may improve relevant skills [27], yet qualitative synthesis also identifies burden, competence demands, trust, relational change, and diversity of experience [28]. Consequently, digital non-use cannot be interpreted automatically as disengagement, just as frequent use cannot be assumed to represent meaningful participation.

Interactions across determinant levels

The evidence is most informative when determinants are considered as interacting conditions rather than independent predictors. Technology-supported shared decision-making illustrates this clearly: outcomes depend not only on the decision aid but also on how patient, clinician, and technological functions are coordinated [29]. Computerized decision aids can improve selected decision-process outcomes, yet effects vary across designs and endpoints [30]. An intervention may therefore increase informational access while leaving relational authority, workflow integration, or practical implementation unchanged.

Cross-level interactions can also be constraining. Family support may compensate for limited individual capacity but may reduce autonomy when it becomes controlling [18]. In COPD, narrative evidence shows that patients actively use professional, embodied, and personal knowledge while simultaneously encountering forms of professional authority and responsabilisation [31]. Engagement is thus neither purely autonomous action nor passive compliance; it can involve negotiation over whose knowledge counts and who carries responsibility. Temporal change adds another dimension. Distinct self-care trajectories in heart failure demonstrate that engagement-related behavior can vary across time alongside symptoms and stress [32]. Organizational constraints may similarly become more consequential

when chronic physical illness is accompanied by common mental-health problems requiring integrated support [33].

These interactions are synthesized in **Figure 2** as a proposed constraint–opportunity landscape. The figure

does not assert a validated causal pathway; it represents how the reviewed evidence suggests that the same psychological resource may translate differently into participation depending on relational and contextual conditions.

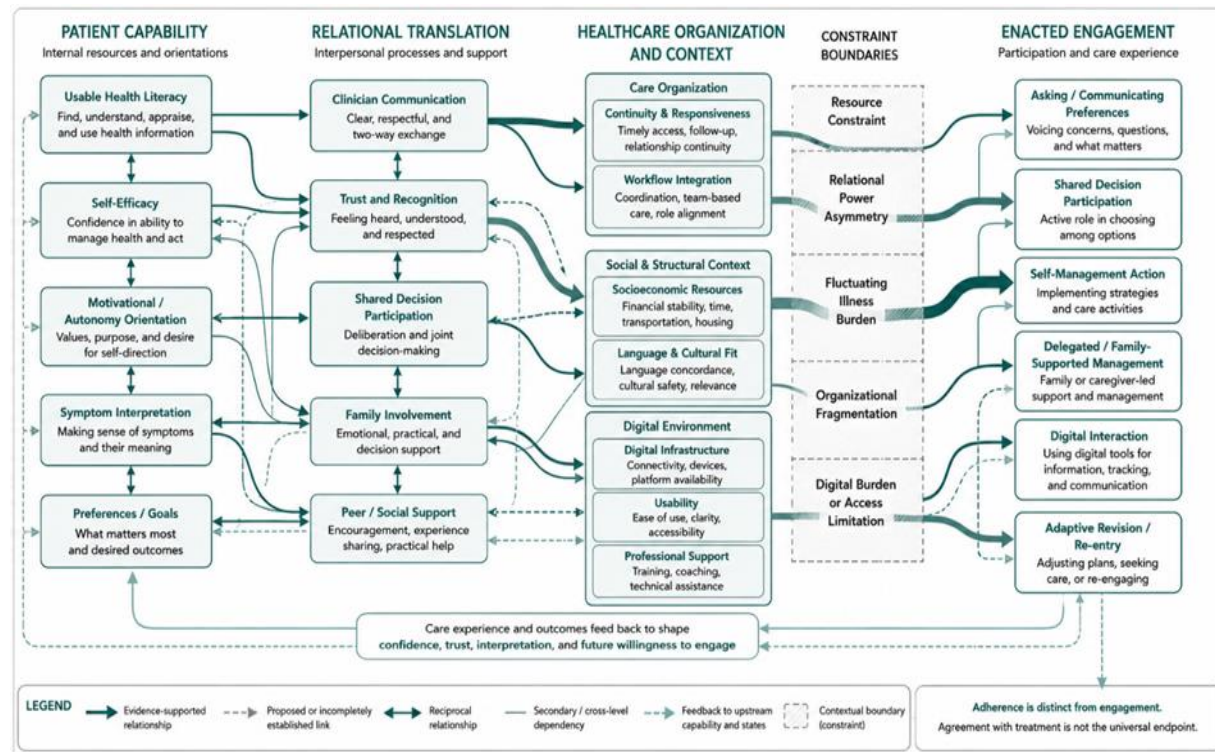


Figure 2. Where Engagement Pathways Narrow: Unequal Translation of Capability Into Participation Across Chronic-Disease Care

Chronic-disease and population differences

The determinants of engagement are not invariant across populations. Pediatric and adolescent self-management includes increasing autonomy, capability development, and negotiation of responsibility, making adult-centered definitions incomplete [34]. Observations from transitional type 1 diabetes care similarly show that young people's involvement depends partly on consultation structure and opportunities to speak for themselves [35].

Disease course also matters. Symptom volatility can alter perceived urgency and self-care choices [9], whereas stable chronic illness may permit longer-term patterns of adaptation. Family involvement in diabetes may be supportive or constraining [18], and chronic respiratory illness may expose tensions around responsibility and professional authority [31]. In heart failure, longitudinal self-care trajectories reinforce the importance of

temporal variation rather than classifying patients permanently as engaged or disengaged [32].

Population differences therefore should not be interpreted as inherent psychological differences between demographic groups. Culture, age, migration, family roles, language, resource distribution, care organization, and disease demands are contextual conditions that can change what engagement requires and what participation looks like.

Associations with engagement and clinical outcomes

Evidence linking psychosocial determinants to engagement-related outcomes is stronger than evidence establishing downstream clinical benefit. Self-efficacy, health literacy, decision support, and digital capability can be associated with or improve selected participation and self-management outcomes, but those outcomes are

not equivalent to disease control, hospitalization, or quality of life.

Patient-facing summary reports illustrate this distinction. Such reports may facilitate values clarification and discussion when incorporated into clinical encounters, but their effectiveness depends on how clinicians and patients use them [36]. Likewise, decision aids can improve aspects of the decision process without demonstrating that every resulting choice improves clinical outcomes.

The review therefore treats engagement as an intermediate care-process state. Improved participation may be intrinsically valuable and may support self-management, but its clinical consequences depend on treatment effectiveness, feasibility, patient priorities, disease trajectory, and broader care conditions.

Evidence gaps

Three gaps recur across the evidence. First, construct discrimination remains weak. Activation, adherence,

self-management, shared decision-making, empowerment, technology use, and engagement are frequently measured as if they were interchangeable. Second, causal ordering is uncertain because much evidence is cross-sectional, qualitative, or embedded in multicomponent interventions. Third, equity-sensitive measurement remains incomplete.

The last gap is particularly visible in digital and relational care. Work on e-empathy with Black patients with chronic kidney disease highlights the importance of respect, cultural responsiveness, and trust within telehealth encounters [37], while digital-health-literacy synthesis identifies sociodemographic variation but limited evidence for explaining why such differences arise [38]. Future research must therefore test whether observed disparities reflect capability, design, discrimination, access, language, trust, structural constraint, or combinations of these conditions.

Table 4 distinguishes several recurring evidence patterns that should not be collapsed into the same inference.

Table 4. Evidence Patterns That Require Different Interpretations before Labeling a Patient “Engaged” or “Disengaged”

Evidence pattern	What is actually observed	Competing explanation	Missing discriminator	Research requirement
Low participation	Few questions or decisions voiced	Preference for delegation, low trust, power asymmetry	Preferred role and relational safety	Measure preference and encounter conditions
Low adherence	Recommended action not completed	Cost, burden, disagreement, access failure	Feasibility and informed preference	Separate constraint from refusal
Low digital use	Sparse log-ins or device interaction	Usability, connectivity, literacy, burden	Access and technology fit	Combine usage with experience measures
High activation score	Confidence/readiness	Limited practical opportunity	Resource and system conditions	Test capability–opportunity interaction
High family involvement	Frequent support activity	Control or conflict	Patient-perceived helpfulness and autonomy	Measure relational quality
Improved decision-process outcome	Better knowledge or reduced conflict	No change in enacted care	Behavioral and clinical follow-through	Longitudinal linkage
Group difference in engagement	Unequal observed participation	Structural or measurement inequity	Mechanism-specific context	Test measurement invariance and contextual mediation

Note: The distinctions are proposed as an interpretation and validation agenda rather than a validated diagnostic taxonomy.

Principal findings

Across chronic-disease care, patient engagement was not adequately explained by a single psychological characteristic. Evidence instead converged on three broad requirements: usable capability, relational

enablement, and contextual opportunity. Psychological resources such as self-efficacy and health literacy may increase readiness for action, but their expression depends on whether patients encounter responsive relationships and feasible care environments.

The review also identified substantial heterogeneity. Relational support could enable or constrain autonomy; digital technology could increase access or introduce new burdens; and the meaning of participation differed across developmental stage, disease trajectory, family structure, and resource context. These findings argue against treating engagement as a stable personal phenotype.

Mechanistic interpretation

A proposed interpretation is that engagement emerges when patients can translate understanding and motivation into consequential participation. This translation may fail at multiple points. Information may not become usable knowledge; confidence may not overcome treatment burden; preferences may not be voiced in an asymmetrical encounter; and a jointly selected plan may remain impossible under financial, organizational, or digital constraints.

Qualitative synthesis of chronic illness further suggests that self-management is intertwined with identity and the reconstruction of a workable sense of self [39]. Engagement may therefore involve adaptation of goals and roles rather than progressively increasing compliance. Feedback is also plausible: successful participation may strengthen confidence and trust, whereas repeated failure or dismissal may reduce subsequent engagement. These reciprocal mechanisms remain hypotheses unless directly tested longitudinally.

Implications for chronic disease care

Clinical efforts to improve engagement should begin by identifying the limiting condition rather than assuming a generic motivational deficit. Communication support is appropriate when information is unusable; coaching may be helpful when confidence is low; relational repair may be required where trust is fragile; and organizational or social intervention may be necessary when practical opportunity is constrained.

The same logic applies to digital care. Providing an application, portal, or remote-monitoring platform does not ensure meaningful engagement. Usability, digital literacy, professional responsiveness, language, affordability, accessibility, and patient preference should be considered together. Engagement support should therefore be adaptable rather than standardized around a single idealized patient behavior.

Strengths and limitations

A strength of this review is its explicit separation of psychological, relational, social, organizational, and digital conditions while retaining their interactions. It also distinguishes engagement from adherence and clinical outcome and preserves negative, mixed, and context-dependent findings.

The principal methodological limitation is incomplete recoverability of the intermediate search-selection counts. The search interfaces did not preserve aggregate returned-record, screening, or eligibility totals. Unrecoverable values were therefore left unavailable rather than fabricated. This limitation prevents complete numerical PRISMA reconciliation and should be addressed in a prospective replication using exportable database searches and a screening platform.

The substantive literature is also heterogeneous in construct definition, measurement, disease context, and design. Cross-sectional associations cannot establish directionality, qualitative findings support interpretation rather than effect estimation, and multicomponent interventions rarely isolate individual mechanisms.

Future research

Future studies should test engagement as a dynamic multilevel state rather than a single score. Longitudinal designs are needed to determine whether changes in self-efficacy, trust, symptoms, social support, or resource conditions precede changes in participation or instead follow them. Measurement studies should test whether engagement instruments discriminate activation, adherence, shared decision participation, self-management, and digital interaction across populations. Comparative research should examine how identical psychological capabilities yield different outcomes under differing resource, organizational, cultural, and digital conditions. Equity-focused studies should test measurement invariance and directly measure structural constraints rather than interpreting demographic differences as patient characteristics. Intervention research should isolate whether benefits arise through information accessibility, autonomy support, relationship quality, workflow redesign, peer or family support, or improved practical access.

Finally, the proposed constraint–opportunity architecture should be evaluated prospectively. Its value will depend on whether cross-level conditions improve explanation or prediction beyond single-domain models and whether identifying the active constraint leads to more appropriate, patient-defined engagement support.

Conclusion

Patient engagement across chronic-disease care is best understood as a context-dependent form of participation rather than a fixed patient attribute or synonym for adherence. Psychological capability matters, but its translation into action depends on relationships, resources, healthcare organization, digital conditions, illness demands, and patient preferences. The reviewed evidence supports maintaining these levels analytically distinct while examining their interaction. The proposed constraint–opportunity interpretation provides a bounded framework for future validation, not a claim of universal causal architecture.

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References

1. Eaton C, Vallejo N, McDonald X, Wu J, Rodríguez R, Muthusamy N, et al. User engagement with mHealth interventions to promote treatment adherence and self-management in people with chronic health conditions: Systematic review. *J Med Internet Res*. 2024;26:e50508. doi:10.2196/50508
2. Cuevas H, Heitkemper E, Huang YC, Jang DE, García AA, Zuñiga JA. A systematic review and meta-analysis of patient activation in people living with chronic conditions. *Patient Educ Couns*. 2021;104(9):2200-12. doi:10.1016/j.pec.2021.02.016
3. Cabezas MF, Nazar G, Ranchor AV, Annema C. The effect of health literacy interventions on self-management in chronic diseases: A systematic review. *Ann Behav Med*. 2025;59(1):kaaf073. doi:10.1093/abm/kaaf073
4. Iroegbu C, Tuot DS, Lewis L, Matura LA. The influence of patient-provider communication on self-management among patients with chronic illness: A systematic mixed studies review. *J Adv Nurs*. 2025;81(4):1678-99. doi:10.1111/jan.16492
5. Van Hecke A, Heinen M, Fernández-Ortega P, Graue M, Hendriks JML, Høy B, et al. Systematic literature review on effectiveness of self-management support interventions in patients with chronic conditions and low socio-economic status. *J Adv Nurs*. 2017;73(4):775-93. doi:10.1111/jan.13159
6. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*. 2021;372:n71. doi:10.1136/bmj.n71
7. Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, Cargo M, et al. Improving the content validity of the mixed methods appraisal tool: A modified e-Delphi study. *J Clin Epidemiol*. 2019;111:49-59.e1. doi:10.1016/j.jclinepi.2019.03.008
8. Campbell M, McKenzie JE, Sowden A, Katikireddi SV, Brennan SE, Ellis S, et al. Synthesis without meta-analysis (SWiM) in systematic reviews: Reporting guideline. *BMJ*. 2020;368:l6890. doi:10.1136/bmj.l6890
9. Riegel B, Page SD, Aryal S, Lee CS, Belfiglio A, Freedland KE, et al. Symptom characteristics, perceived causal attributions, and contextual factors influencing self-care behaviors: An ecological daily assessment study of adults with chronic illness. *Patient Educ Couns*. 2024;123:108227. doi:10.1016/j.pec.2024.108227
10. Chen J, Tian Y, Yin M, Lin W, Tuersun Y, Li L, et al. Relationship between self-efficacy and adherence to self-management and medication among patients with chronic diseases in China: A multicentre cross-sectional study. *J Psychosom Res*. 2023;164:111105. doi:10.1016/j.jpsychores.2022.111105
11. Borge CR, Larsen MH, Osborne RH, Aas E, Kolle IT, Reinertsen R, et al. Impacts of a health literacy-informed intervention in people with chronic obstructive pulmonary disease (COPD) on hospitalization, health literacy, self-management, quality of life, and health costs: A randomized controlled trial. *Patient Educ Couns*. 2024;123:108220. doi:10.1016/j.pec.2024.108220
12. Saeedian Y, Agarwal A, Jansons P, Fuller-Tyszkiewicz M, Maddison R. Self-determination theory interventions in self-care of cardiovascular disease: A systematic review. *Patient Educ Couns*. 2025;137:108794. doi:10.1016/j.pec.2025.108794

13. Peters LHL, Debie VHJ, Vervloet M, van Schayck OCP, Muris JWM, Gidding-Slok AHM. Promoting patient empowerment in chronic care: A scoping review of key facilitating factors. *Patient Educ Couns.* 2026;152:109802. doi:10.1016/j.pec.2026.109802
14. Strokes N, Lloyd C, Girardin AL, Sánchez Santana C, Mangus CW, Mitchell KE, et al. Can shared decision-making interventions increase trust/trustworthiness in the physician-patient encounter? A scoping review. *Patient Educ Couns.* 2025;135:108705. doi:10.1016/j.pec.2025.108705
15. Yoshimi R, Yajima N, Hidekawa C, Sakurai N, Oguro N, Shidahara K, et al. Effect of shared decision-making on trust in physicians in the management of systemic lupus erythematosus: The Trust Measurement for Physicians and Patients With Systemic Lupus Erythematosus prospective cohort study. *Arthritis Care Res (Hoboken).* 2024;76(12):1597-605. doi:10.1002/acr.25409
16. Deverts DJ, Zupa MF, Kieffer EC, Gonzalez S, Guajardo C, Valbuena F, et al. Patient and family engagement in culturally-tailored diabetes self-management education in a Hispanic community. *Patient Educ Couns.* 2025;134:108669. doi:10.1016/j.pec.2025.108669
17. Lu S, Leduc N, Moullec G. Type 2 diabetes peer support interventions as a complement to primary care settings in high-income nations: A scoping review. *Patient Educ Couns.* 2022;105(11):3267-78. doi:10.1016/j.pec.2022.08.010
18. Bennich BB, Munch L, Overgaard D, Konradsen H, Knop FK, Røder M, et al. Experience of family function, family involvement, and self-management in adult patients with type 2 diabetes: A thematic analysis. *J Adv Nurs.* 2020;76(2):621-31. doi:10.1111/jan.14256
19. Lee H, La IS. Association between health literacy and self-management among middle-aged women: A systematic review. *Patient Educ Couns.* 2024;123:108188. doi:10.1016/j.pec.2024.108188
20. Zhang M, Coppell K, Lo J, Whitehead L. Cultural influences, experiences and interventions targeting self-management behaviours for prediabetes or type 2 diabetes in first-generation immigrants: A scoping review. *J Adv Nurs.* 2025;81(6):2929-45. doi:10.1111/jan.16621
21. McKinn S, Chapman N, Sharman JE, Nash R, Nelson MR, Sutton L, et al. How do general practitioners manage patient health literacy differences in cardiovascular disease prevention consultations? An interview study. *Patient Educ Couns.* 2024;125:108299. doi:10.1016/j.pec.2024.108299
22. Fredens M, Nielsen CP, Grønkjær M, Nielsen BK, Nissen NK, Benthien KS, et al. Nurses' perspectives on challenges and facilitators when implementing a self-management support intervention as an everyday healthcare practice: A qualitative study. *J Adv Nurs.* 2024;80(6):2475-86. doi:10.1111/jan.15988
23. Wathne H, Storm M, Morken IM, Lunde Husebø AM. Nurse-assisted remote patient monitoring for self-management support to patients with long-term illness: A qualitative multimethod study. *J Adv Nurs.* 2025;81(9):5996-6010. doi:10.1111/jan.16736
24. Eaton CK, McWilliams E, Yablon D, Kesim I, Ge R, Mirus K, et al. Cross-cutting mHealth behavior change techniques to support treatment adherence and self-management of complex medical conditions: Systematic review. *JMIR Mhealth Uhealth.* 2024;12:e49024. doi:10.2196/49024
25. Cheng YS, Lin CP, Chen LYA, Hwang WR, Lin YC, Chen YC. Short-term effects of an eHealth care experiential learning program among patients with type 2 diabetes: Randomized controlled trial. *J Med Internet Res.* 2024;26:e53509. doi:10.2196/53509
26. Hepburn J, Williams L, McCann L. Barriers to and facilitators of digital health technology adoption among older adults with chronic diseases: Updated systematic review. *JMIR Aging.* 2025;8:e80000. doi:10.2196/80000
27. Verweel L, Newman A, Michaelchuk W, Packham T, Goldstein R, Brooks D. The effect of digital interventions on related health literacy and skills for individuals living with chronic diseases: A systematic review and meta-analysis. *Int J Med Inform.* 2023;177:105114. doi:10.1016/j.ijmedinf.2023.105114
28. Taylor ML, Thomas EE, Vitangcol K, Marx W, Campbell KL, Caffery LJ, et al. Digital health experiences reported in chronic disease management: An umbrella review of qualitative studies. *J Telemed Telecare.* 2022;28(10):705-17. doi:10.1177/1357633X221119620
29. Vaseur RME, te Braake E, Beinema T, Oude Nijeweme-d'Hollosy W, Tabak M. Technology-

- supported shared decision-making in chronic conditions: A systematic review of randomized controlled trials. *Patient Educ Couns.* 2024;124:108267. doi:10.1016/j.pec.2024.108267
30. Wu CJ, Yeh TP, Chu G, Ho YF. Effectiveness of computerised decision aids for patients with chronic diseases in shared decision-making: A systematic review and meta-analysis. *J Clin Nurs.* 2024;33(7):2732-54. doi:10.1111/jocn.17095
 31. Delaney S, Huntley-Moore S, Cronin P. Exercising power in the self-management of COPD: A narrative inquiry. Patient and user perspectives. *Patient Educ Couns.* 2024;118:107990. doi:10.1016/j.pec.2023.107990
 32. Conley S, Jeon S, Andrews LK, Breazeale S, Hwang Y, O'Connell M, et al. Trajectory of self-care in people with stable heart failure and insomnia after two self-care interventions. *Patient Educ Couns.* 2022;105(12):3487-93. doi:10.1016/j.pec.2022.09.001
 33. Beaudin J, Chouinard MC, Hudon E, Hudon C. Factors and strategies influencing integrated self-management support for people with chronic diseases and common mental disorders: A qualitative study of Canadian primary care nurses' experience. *J Adv Nurs.* 2025;81(12):8754-69. doi:10.1111/jan.16892
 34. Catarino M, Macedo L, Santos J, Charepe Z, Festas C. Self-management in children and adolescents with chronic illness: An evolutionary analysis of the concept. *J Adv Nurs.* 2025;81(8):4519-41. doi:10.1111/jan.16754
 35. Peeters MAC, de Haan HG, Bal RA, van Staa A, Sattoe JNT. Active involvement of young people with T1DM during outpatient hospital consultations: Opportunities and challenges in transitional care services. *Patient Educ Couns.* 2022;105(6):1510-7. doi:10.1016/j.pec.2021.09.036
 36. Cole AC, Liu CC, Bissram J, Vizer L, Sippo D, Yu F, et al. Presenting summary reports to patients with chronic health conditions to support values-based discussions and decision-making: A literature review. *Patient Educ Couns.* 2025;139:109256. doi:10.1016/j.pec.2025.109256
 37. Glenn A, Smith PJ, Wallington SF. A nurse-led approach to testing and adapting a telehealth guide for e-empathy in goals of care conversations for Black patients with chronic kidney disease. *Patient Educ Couns.* 2025;131:108593. doi:10.1016/j.pec.2024.108593
 38. Zaghloul H, Fanous K, Ahmed L, Arabi M, Varghese S, Omar S, et al. Digital health literacy in patients with common chronic diseases: Systematic review and meta-analysis. *J Med Internet Res.* 2025;27:e56231. doi:10.2196/56231
 39. Hajdarevic S, Norberg A, Lundman B, Hörnsten Å. Becoming whole again-caring for the self in chronic illness-a narrative review of qualitative empirical studies. *J Clin Nurs.* 2025;34(3):754-71. doi:10.1111/jocn.17332