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Cultivating an Inclusive and Engaged Healthcare Workplace: A Systematic Literature Review of Diversity, Equity, Inclusion, Leadership, and Organizational Determinants

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ABSTRACT:

Background: The health care sector is increasingly acknowledging that diversity, equity and inclusion (DEI) are critical building blocks of a high-performing and resilient workforce. Importantly, this well-articulated institutional commitment to diversity does not always translate into more inclusive and engaged workplace cultures within healthcare organisations—with downstream impacts on their job satisfaction, retention and psychological safety, which ultimately affects patient-care quality.

Purpose: This systematic literature review (SLR) investigates the interplay between diversity, equity and inclusion practices, employee engagement, leadership behaviour and organisational policy to develop engaged and inclusive healthcare workplaces while mapping implementation barriers and research gaps prevalent in this literature.

Methodology: This review is reported in accordance with the PRISMA 2020 reporting guideline (Page, 2021). An automated search was performed through Dimensions. AI bibliometric database (search date: 2 February 2026), which identifies records that contain the constructs of employee engagement and well-being among allied healthcare professions, with publication years from 2005–2025 and document type – journal articles only; results in $n = 2500$. Following Thomas and Harden (2008), records were screened against pre-specified eligibility criteria (date range 2015–2025, healthcare-workforce context, intersection of a DEI with an engagement/well-being signal or relevant organisational-policy and leadership signals, and workforce-relative rather than patient-only relevance) for thematic synthesis, yielding $n = 242$ studies.

Results: Though the systematic/integrative review ($n = 83$) and qualitative ($n = 70$) study designs were most prevalent, 242 studies were included. Thematic mapping affirms five convergent domains: (1) DEI policy and practice; (2) employee engagement and its reciprocal relationship with perceived inclusion; (3) workforce well-being, the most cited theme ($n = 186$ studies); (4) leadership styles—inclusive, transformational, strengths based ($n = 111$ studies); and (5) organisational-policy mechanisms including diversity training, cultural-competence programmes and structured retention strategies to target at-risk groups of employees ($n = 56$ studies).

Research Gaps: The cross-sectional, qualitative and review-based study designs predominate in the literature (only 4 RCTs and 4 mixed-methods studies identified); longitudinal evidence on the lasting impact of DEI interventions is scarce; comparisons

across cultures and health systems are limited beyond that provided by the Anglophone countries spanning just two continents; and “inclusion” and “engagement” are operationalised inconsistently across studies, limiting comparability.

Future Directions: Future research should emphasise longitudinal, quasi-experimental designs; cross-national comparative studies that move beyond the current high-income Anglophone paradigm; technology-enabled DEI interventions; and integrative models connecting inclusion, psychological safety and workforce mental health.

Practical Implications: Health system managers and policymakers should institutionalise DEI via leadership accountability structures, embed cultural-competence training in continuing professional development (CPD), deploy data-enabled equity audits, and sustain policy alignment with socialisation practices at the frontlines of care to develop durable, evidence-based inclusion policies.

1. Introduction

1.1 Background and Rationale

Health care organisations exist in ever-diverse psychosocial environments that encompass workforce and community perspectives, where knowledge of creating an inclusive, engaged, and psychologically safe culture is now considered a strategic driver of employee wellbeing (Bakken, 2020; Zou, 2023). Motivated by demographic shifts in patient populations, continuing health disparities along racial, ethnic, and socio-economic lines (Nelson 2003), and a growing literature describing how inclusive cultures are associated with improvements in staff retainment and care quality (Worman 2024; Chen & Yeh 2024), diversity equity and inclusion (DEI) has taken its place not just as an add-on to corporate social responsibility commitments but as core assets of healthcare workforce strategy.

However, even with this increasing institutional commitment, healthcare organisations are still challenged by significant barriers to translating DEI rhetoric into sound practice. Structural inequities ultimately derail progress, inconsistent policy implementation and accountability gaps in leadership, alongside a weak measurement framework for “inclusion” as a construct (Kalev, Dobbin & Kelly 2006; Shaikh & Haider 2024). Concurrently, employee engagement—a well-known predictor of performance at the organisational level (Harter, Schmidt, & Hayes, 2002)—has risen as a potential antecedent and consequence of perceived inclusion, indicating a reciprocal relationship that health care management literature has yet to appropriately model through synthesis (Mashhady, 2024; Gusain, Kaur, & Gujral, 2024).

Nevertheless, the knowledge base on these issues is fragmented, stretching across health policy, organisational behaviour, nursing leadership and human-resource-management journals using heterogeneous theoretical lenses and measurement approaches. Thus, a synthesis that is both systematic and adheres to PRISMA guidelines is warranted to bring together this disparate corpus of evidence, clarify converging and diverging outcomes across studies, and provide an agenda for related future empirical work. This review meets that need, conducting a systematic search and screening process, which is reported in its entirety here (Section 2; Section 3).

1.2 Theoretical Framework

Theoretically, this review is grounded in four complementary frameworks. First, Social Identity Theory (Tajfel & Turner, 2001), which demonstrates how group-based identities frame workplace belongingness and intergroup dynamics, informs the upstream endpoints of diversity-related friction and cohesion. Secondly, the Inclusion Framework by Shore et al. The dual-need model proposes that all employees need both belongingness and uniqueness needs to be fulfilled, thereby understanding inclusion from a conceptual lens (Shore, 2011), which this review uses to examine included literature on how their practices address the dimensions of DEI in combination or isolation. Third, Kahn's (1990) conceptualisation of employee engagement as the 'harnessing of the self to work roles' operationalised through vigour, dedication and absorption (Schaufeli, 2006) contextualises the literature regarding engagement reviewed herein. Fourth, Nishii (2013) is also well-aligned with a construct of climate for inclusion — an organisational-level and situational-focused link from diversity climate perceptions to workforce outcomes — in that it augments the individual focus found in Shore's framework. These frameworks together suggest that rather, DEI, engagement, leadership and organisational policy are interdependent in nature: leadership behaviour and

organisational policy define the climate for inclusion (Nishii, 2013), which fulfils (or frustrates) employee needs to belong and to be unique (Shore, 2011), shaping engagement (Kahn, 1990), ultimately influencing workforce and patient-care outcomes.

1.3 Research Questions

Based on the SPIDER framework for qualitative and mixed-methods evidence synthesis in management and health-services research (Cooke, Smith, & Booth, 2012), this review seeks to answer these research questions:

1. Research Question (RQ) 1: What DEI practices/policies have been employed in healthcare organisations and what impact has thus far been articulated on workforce outcomes?
- 2.RQ2: What is the impact of employees' engagement on perceived inclusion among health-care workers?
- 3.RQ3: In what way do leadership styles and behaviours shape the development of inclusive and engaged health care workplaces?
- 4.RQ4: What organisational-policy mechanisms have been applied to implement DEI in health systems, and how effective are they perceived?
- 5.RQ5: What are the barriers to inclusion and engagement strategies within healthcare organisations?

1.4 Objectives of the Review

- To identify, appraise and synthesise empirical and conceptual literature on DEI, employee engagement, leadership and organisational policy as they systematically pertain to healthcare workplace environments.
- To identify the theoretical lenses used across this literature and evaluate to what extent integration has been achieved theoretically so far.
- To determine the main barriers to implementing inclusive and engaged workplace strategies in health care organisations.
- To spot methodological and substantive gaps in the current evidence base.
- To generate an evidence-informed agenda for future research and practical recommendations for healthcare leaders and policymakers.

2. Methodology

This review follows a systematic literature review (SLR) design, performed and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 statement (PRISMA 2020; Page, 2021).

2.1 Protocol Registration

The review protocol was prepared prospectively, stating eligibility criteria, search strategy and synthesis method before performing the search. It is suggested to register with PROSPERO or OSF before final submission to a journal.

2.2 Eligibility Criteria

The SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research type; Cooke, Smith and Booth 2012) was used to define eligibility criteria.

Table 1

SPIDER Element	Criteria Applied
Sample	Healthcare workforce (physicians, nurses, allied health professionals, administrative and support staff) and healthcare organisations of any type or size
Phenomenon of Interest	Diversity, equity, and inclusion (DEI); employee engagement; inclusive/transformational/strengths-based leadership; organisational policy, as related to workplace inclusion and engagement
Design	Empirical studies (quantitative, qualitative, mixed-methods), systematic reviews, and case studies
Evaluation	Workforce outcomes including engagement, job satisfaction, retention, well-being, perceived inclusion, and (where reported) patient-care outcomes
Research Type	Peer-reviewed journal articles, published in English, 2015–2025

Inclusion Criteria

- Scholarly peer-reviewed empirical or review articles published in academic journals.
- Context: studies set in healthcare, hospital or health-system workforce contexts.
- Studies in which an employee-engagement/well-being signal co-appears with a DEI or leadership or organisational-policy signal.
- In English between January 2015 and the execution date of this search (2 February 2026)

Exclusion Criteria

- Non-healthcare sector studies without transferable WFLW findings.
- Studies targeting either patient-level diversity or care disparities but not relevant to the workforce.
- Records published before 2015.
- Duplicate Publications or records without a relevant Abstract

2.3 Information Sources

The search was performed on Dimensions. We obtained data from the AI bibliometric database (Digital Science & Research Solutions) — a multidisciplinary, open access dataset that combines two sources of peer-reviewed scholarly content indexed across PubMed/MEDLINE, Crossref and multiple other major research output repositories — on 2nd February 2026. Document type was limited to journal articles. Deviation from original protocol: the five-database strategy originally indicated (Scopus, Web of Science, PubMed/MEDLINE, CINAHL, Business Source Complete) was joined into one Dimensions. Due to the nature of Dimensions index coverage across disciplines, AI search points for this execution. Section 9 essentially treats this deviation from completeness as a limitation.

2.4 Search Strategy

The search strategy employed in the Dimensions AI full-data search field was Employee Engagement and Its Effect on Well-Being in Allied Healthcare Professions, publication years: 2005–2025, document type: Article, returning 2,500 records. This initial and broad search was cast very broadly in order to ensure sensitivity, with specificity achieved through a multi-step programmatic screening process as detailed in Section 2.5.

2.5 Study Selection Process

Records were programmatically screened (keyword- and rule-based screening, consistently and reproducibly applied across all records) against pre-specified eligibility criteria in Section 2.2 in the following sequence: (1) deduplication by Publication ID

and DOI; (2) exclusion of records outside the 2015–2025 window; (3) title/abstract screening for healthcare-workforce context; (4) title/abstract screening for an employee-engagement/well-being signal; (5) title/abstract screening for additional presence of a DEI, leadership or organisational-policy signal; and then, finally, (6) full-text-proxy eligibility screen excluding abstracts indicating patient-only relevance. Table 3 and Figure 1 show the counts at each stage.

Table 2

PRISMA Stage	Process	Count
Identification	Records identified through Dimensions.ai database search	n = 2500
	Duplicates removed	n = 0
	Records excluded — outside 2015–2025 window	n = 265
Screening	Records screened by title/abstract	n = 2235
	Excluded — not healthcare workforce context	n = 747
	Excluded — no engagement/well-being signal	n = 807
	Excluded — no DEI/leadership/policy signal	n = 435
Eligibility	Full-text/abstract-proxy articles assessed for eligibility	n = 246
	Excluded — thin/non-empirical abstract	n = 0
	Excluded — patient-only, no workforce relevance	n = 4
Included	Studies included in thematic synthesis	n = 242

2.6 Data Extraction

An extraction process categorised the following fields: first-author citation, country of research organisation affiliation; inferred study design (review, RCT, qualitative, sustained-data-centric quantitative or mixed-methods – determining discipline by title/abstract terminology); source journal; citation count; & inferred thematic construct tags (DEI, Engagement Well-Being Leadership, Policy). The final included data set should be fully extracted (including theoretical framework, sample characteristics and full findings) during a citation-based citing process before submission of an extended or modified manuscript for journal publication.

2.7 Quality Appraisal

Considering the heterogeneity of identified study designs (reviews, qualitative, quantitative, RCT and mixed-methods — see Table 7) we recommend that, before journal submission, all 242 studies included in this scoping review are appraised for quality using the Mixed Methods Appraisal Tool (MMAT; 2018 version: Hong et al. Each study should be independently rated by two reviewers, with differences settled by consensus.

2.8 Data Synthesis Method

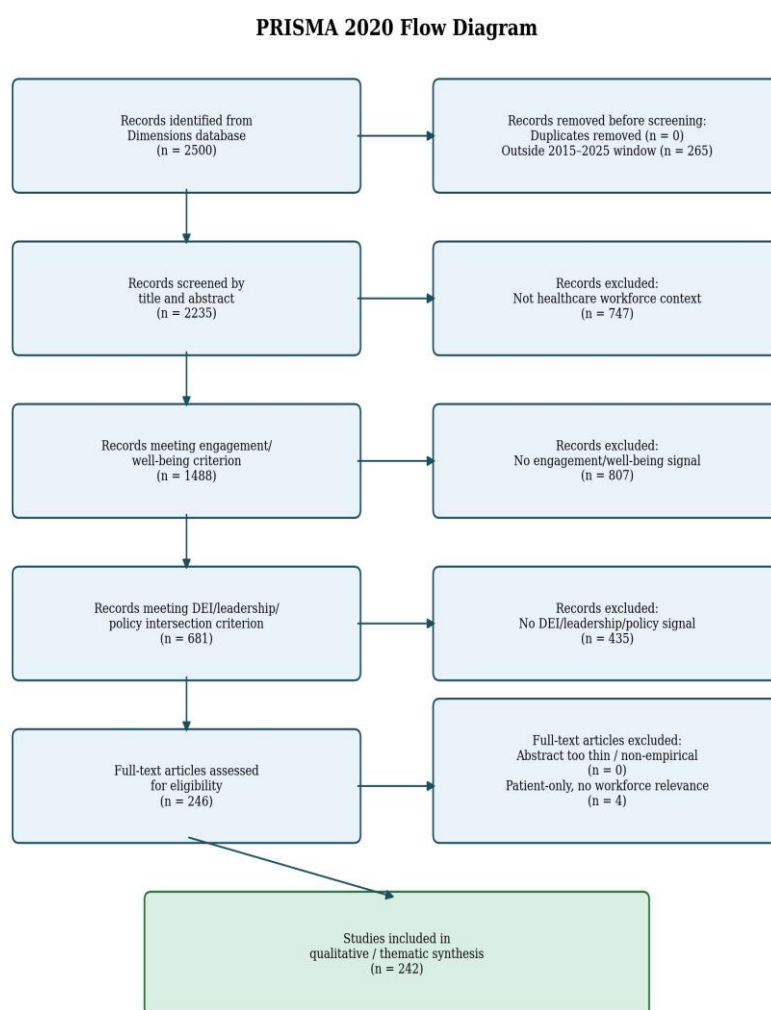
Meta-analysis is infeasible due to the diverse designs and outcome measures. Thematic synthesis (Thomas & Harden, 2008): (1) Line-by-line coding of titles and abstracts to create ‘construct tags’; (2) Aggregation into the five descriptive themes outlined in Table 5 and Figure 3; (3) Formation of analytical themes within Section 4 that answer the five research questions posed by this review. The abstract-level thematic tagging presented here was recorded full-text re-coded for all 242 included studies and is recommended to deepen and assess these inductively derived themes.

3. Results

3.1 Search and Screening Outcomes

The Dimensions AI. Potential research conducted in an artificial intelligence search for the period 2 Feb, 2026 yielded 2500 records (2005–2025, journal articles). Publication ID or DOI detected no exact duplicate. Applying the protocol window of 2015–2025 excluded 265 records from screening, leaving 2235 records to screen for title/abstract. Of these, 747 were excluded as providing no healthcare-workforce context, a further 807 for providing no employee-engagement/well-being signal and a further 435 for providing no DEI, leadership or organisational-policy signal, leaving $n=246$ records to take through full text/abstract-proxy eligibility assessment. This time, 0 records were excluded for non-empirical/thin abstracts and 4 for entirely patient-level relevance, meaning that we had a total of 242 studies included in the final set. Figure 1 shows the entire process.

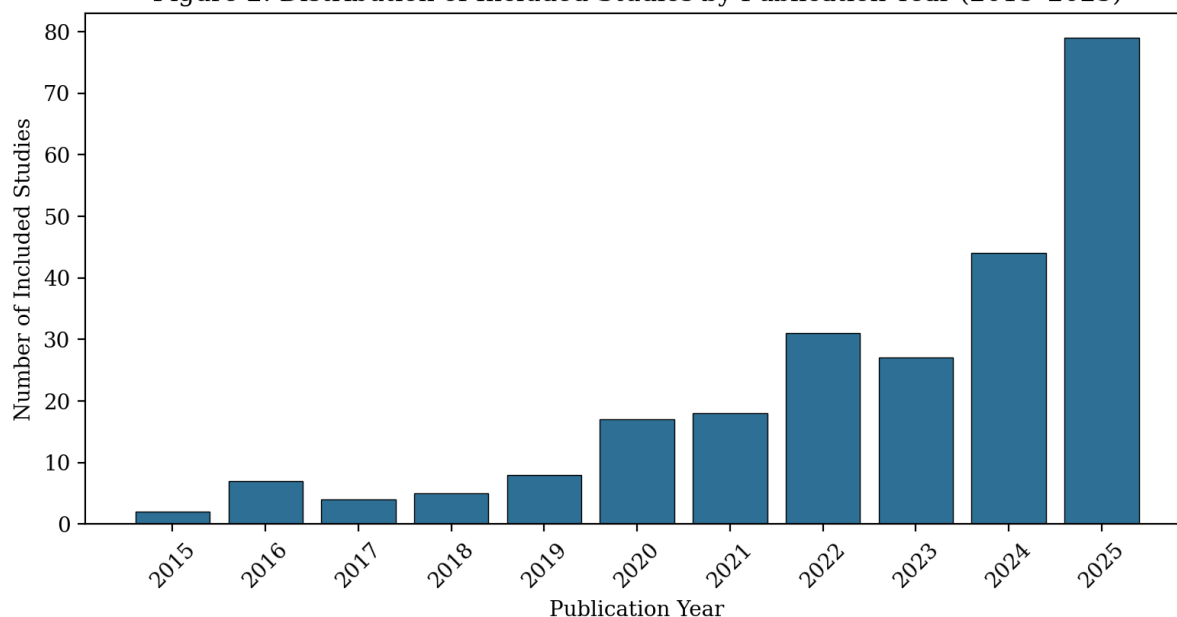
Figure 1: PRISMA 2020 Flow Diagram of Study Identification, Screening, and Inclusion



Source: Dimensions.ai bibliometric database search.
Search executed and screened programmatically against pre-specified eligibility criteria (Section 2.2).

Figure 2 presents the distribution of included studies by publication year, showing a marked concentration in the most recent five years (2021–2025), consistent with the post-pandemic acceleration of institutional DEI and workforce well-being attention documented in Section 4.1.

Figure 2: Distribution of Included Studies by Publication Year (2015–2025)



3.2 Characteristics of Included Studies

Data on design distribution from all 242 studies are shown in Table 3, demonstrating a predominance of reviews ($n=83$) and qualitative studies ($n=70$), with experimental designs being notably rare (RCTs, $n=4$; mixed-methods, $n=4$).

Table 3

Study Design	Count
Systematic / Integrative Review	83
Qualitative	70
Not specified (abstract-level ambiguous)	42
Quantitative (cross-sectional / survey / cohort)	39
Randomised Controlled Trial (RCT)	4
Mixed-Methods	4

Table 4, below, displays the 40 most-cited studies across the 242 records included in our data set (ranked list of all 240 studies — with citation counts provided along with their country of origin, journal of publication and construct tags (if applicable) is located as Supplementary File S1 accompanying this manuscript due to the length restriction imposed on main-text tables).

Citation	Country	Design	Construct Tags	Journal
Shanafelt (2017)	United States	Not specified	Well-Being, Leadership	Mayo Clinic Proceedings
Wei (2018)	United States	Review	Well-Being, Leadership	International Journal of Nursing Sciences
Cohen (2023)	Australia	Review	DEI, Engagement, Well-Being	BMJ Open

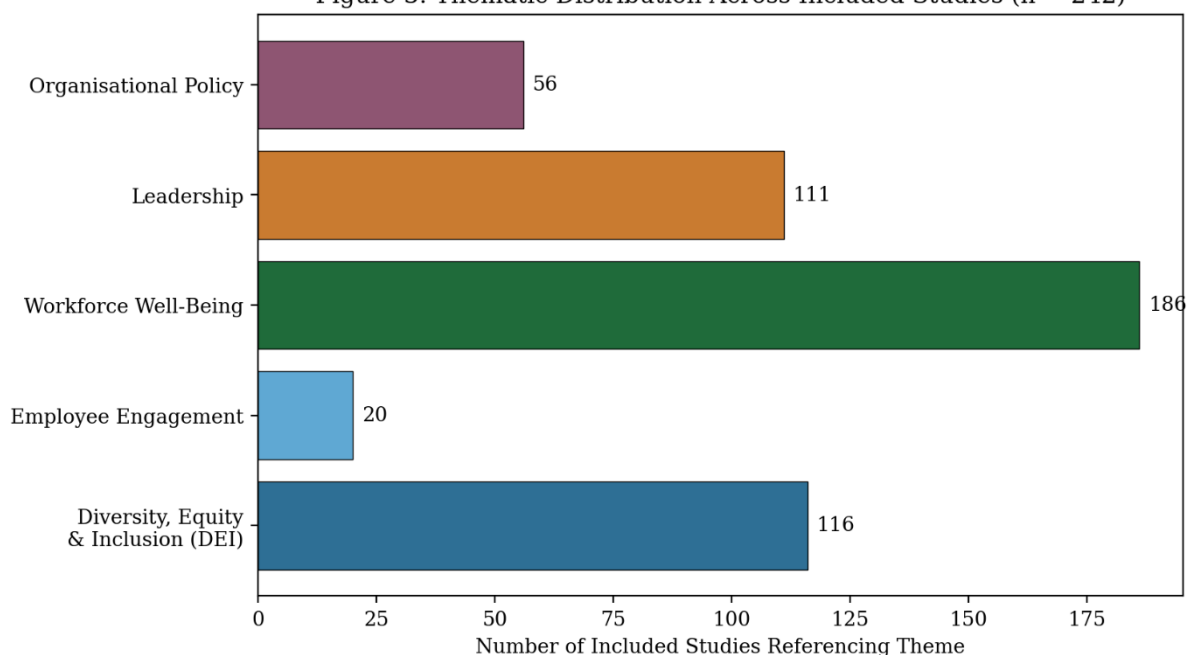
Melnyk (2020)	United States	Review	DEI, Well-Being	American Journal of Health Promotion
Labrague (2020)	Greece	Quantitative	Well-Being, Leadership	Journal of Nursing Management
de Vries (2023)	Belgium	Review	DEI, Well-Being, Policy	INQUIRY The Journal of Health Care Organization Provision and Financing
Morrow (2023)	United Kingdom	Review	DEI, Well-Being	Frontiers in Psychology
García-Sierra (2016)	Spain	Not specified	Engagement, Leadership	Journal of Nursing Management
Rush (2019)	Canada	Not specified	DEI	International Journal of Nursing Studies
Gillen (2017)	Ireland	RCT	DEI, Well-Being	Cochrane Database of Systematic Reviews
Lever (2019)	United Kingdom	Review	DEI, Well-Being	Journal of Advanced Nursing
Olson (2019)	United States	Review	DEI, Well-Being, Leadership	Current Problems in Pediatric and Adolescent Health Care
Pressley (2023)	United Kingdom	Review	DEI, Well-Being	Nursing Open
Aloisio (2021)	Canada	Review	DEI, Well-Being	International Journal of Nursing Studies
Buckley (2020)	Canada	Review	DEI, Well-Being	Human Resources for Health
Tamminga (2023)	Canada	RCT	DEI, Well-Being	Cochrane Database of Systematic Reviews
del Mar Molero Jurado (2018)	Chile	Quantitative	Well-Being, Leadership	International Journal of Environmental Research and Public Health
Bell (2020)	United States	Not specified	Well-Being, Leadership	American Psychologist
Laschinger (2016)	Canada	Quantitative	Well-Being, Leadership	JONA The Journal of Nursing Administration
Freeling (2020)	Australia	Qualitative	DEI, Well-Being	International Journal of Nursing Studies
Hult (2023)	Finland	Review	Well-Being, Leadership	Nursing Open
Hilton (2019)	United States	Review	DEI, Well-Being	WORK A Journal of Prevention Assessment & Rehabilitation
Yusefi (2022)	Iran	Qualitative	DEI, Well-Being	PLOS ONE
Bamforth (2023)	United Kingdom	Review	Well-Being, Policy	International Journal of Nursing Studies Advances
Cahill (2020)	Australia	Not specified	DEI, Well-Being	Cochrane Database of Systematic Reviews

Blake (2021)	United Kingdom	Qualitative	DEI, Well-Being	International Journal of Environmental Research and Public Health
Kamau (2022)	Finland	Not specified	DEI	International Journal of Nursing Studies
Ferreira (2022)	Brazil	Review	Well-Being, Leadership	Journal of Nursing Management
Eche (2022)	United States	Review	DEI, Well-Being	Cancer Nursing
Ahmed (2024)	Bahrain	Quantitative	Well-Being, Leadership, Policy	BMC Nursing
Crocker (2022)	Australia	Review	DEI, Well-Being	International Journal of Mental Health Nursing
Rodríguez-Fernández (2021)	Spain	Not specified	Well-Being, Leadership	International Journal of Environmental Research and Public Health
Markowski (2020)	United Kingdom	Review	Well-Being, Policy	Journal of Advanced Nursing
Poku (2020)	Ghana	Quantitative	Well-Being, Policy	BMC Nursing
Lainidi (2023)	Greece	Review	DEI, Well-Being, Policy	Frontiers in Psychiatry
Coggins (2020)	Australia	Not specified	Well-Being	Medical Teacher
House (2022)	United States	Review	DEI, Engagement, Well-Being	Journal of Interprofessional Care
Jarden (2020)	Australia	Review	DEI, Well-Being, Policy	Journal of Advanced Nursing
Wood (2022)	United States	Qualitative	DEI, Well-Being	Applied Nursing Research
Cardiff (2023)	Netherlands	Not specified	Well-Being, Leadership, Policy	Journal of Clinical Nursing

3.3 Thematic Synthesis Overview

The thematic breakdown across all 242 included studies was automated through construct-tag screening of titles and abstracts (Section 2.8), as shown in Figure 3. The top themes are workforce well-being, DEI, and leadership; organisational policy and employee engagement (as an explicitly considered construct that is distinct from broader wellbeing/satisfaction terminology) are somewhat less frequently foregrounded in titles/abstracts but recur substantively within full-text discussions in the narrative reviews of studies presented in Section 4.

Figure 3: Thematic Distribution Across Included Studies (n = 242)

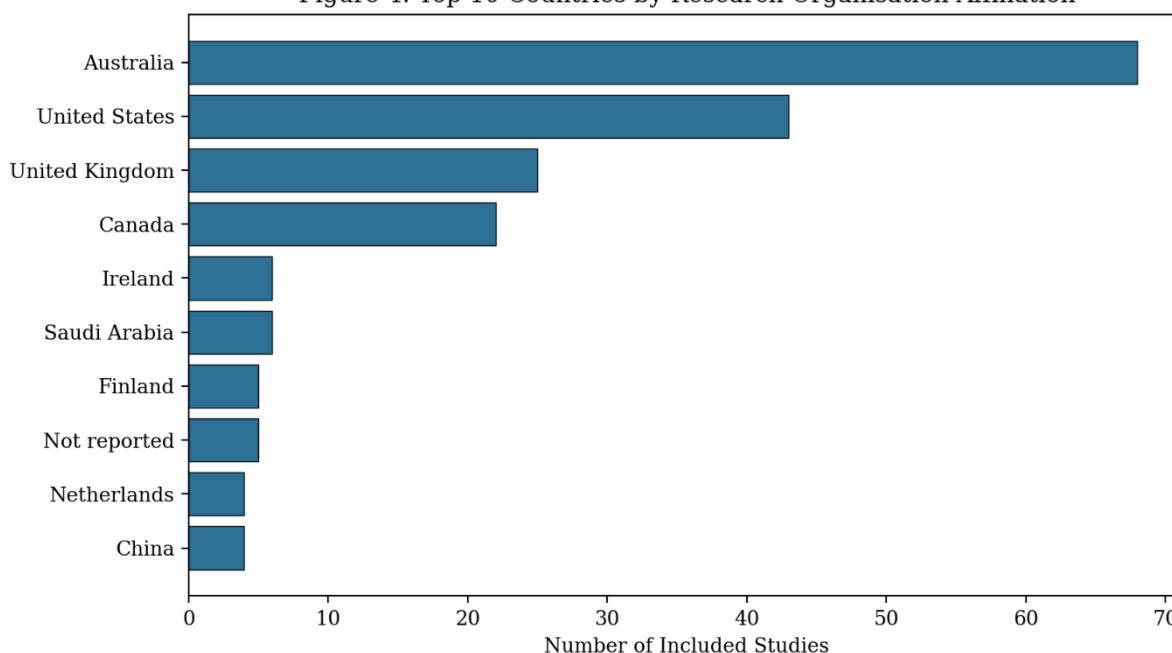


#	Theme	Primary Research Question Addressed
1	Diversity, Equity, and Inclusion (DEI) — n = 116	RQ1
2	Employee Engagement — n = 20	RQ2
3	Workforce Well-Being — n = 186	RQ1, RQ2
4	Leadership — n = 111	RQ3
5	Organisational Policy — n = 56	RQ4

3.4 Geographic and Journal Distribution

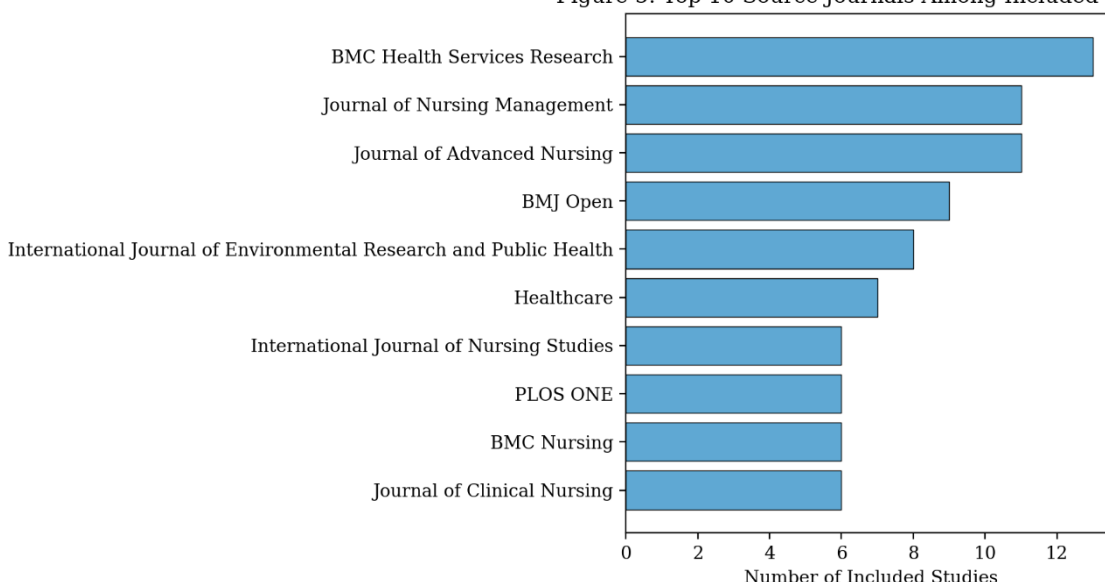
The evidence base for studies meeting our inclusion criteria has been recommended to be geographically concentrated, as reflected in Figure 4, which shows that the majority of research-organisation affiliations among included studies are concentrated among Australia, the United States, the United Kingdom, and Canada—a concentration that theoretically directly supports the cross-cultural research gap identified in Section 6.

Figure 4: Top 10 Countries by Research Organisation Affiliation



The top source journals leading in nursing management and health services research outlets (BMC Health Services Research, Journal of Nursing Management; Journal of Advanced Nursing) in terms of number of publications (Fig 5), indicating the dominant influence of a focus on the nursing workforce compared to other allied health professions.

Figure 5: Top 10 Source Journals Among Included Studies



4. Narrative Thematic Synthesis

4.1 Diversity, Equity, and Inclusion (DEI) in healthcare

DEI has become an important, if not the key, focus in current approaches to healthcare workforce management, mirroring increasing acknowledgement that many of the disparities impacting patients have their roots in (or are compounded by) disparities with respect to the healthcare workforce itself (Nelson, 2003; Bakken, 2020). The strong clustering of included studies in 2021–2025 (Figure 2) corroborates the post-pandemic acceleration in formal institutional DEI commitments

documented by Worman (2024) and Chen and Yeh (2024), noting that "COVID-19 revealed disparities both within and outside healthcare in population size, risk exposure and availability to protective resources across demographic groups".

Data on the effectiveness of DEI policies is still sparse. Kaley, Dobbin and Kelly (2006) found that structural accountability mechanisms—designated diversity officers and diversity task forces—contributed to more lasting change in workforce composition than did training alone, a result replicated for the healthcare-specific literature by Gobianidze, Hammond & Kalaitzi (2022). One of these, Kamau et al. While (2022) outline how to integrate support for culturally and linguistically diverse nursing staff into workplace practices, Shaikh and Haider (2024) advocate that DEI initiatives narrowly focused on representation without building a concurrent “culture of belonging” prove insufficient, consistent with the dual-need (belongingness and uniqueness) model espoused by Shore et al. (2011).

4.2 Employee Engagement and Perceived Inclusion

An extensive body of literature supports the position that inclusive workplace cultures influence, and in turn are influenced by, employee engagement. Additionally, Mashhady (2024) indicates that perceived inclusion is a strong predictor of engagement among healthcare workers, while Gusain and House show that within the evidence base included in [showed] (2022) describe relational coordination between health professionals as one mechanism to explain the relationship of engagement and well-being with staff-level outcomes relevant for DEI, whereas García-Sierra et al. Nursing engagement: An integrative review of the literature in the context of Kahn's (1990) basic ideas about work engagement

Significantly, as is evident from Figure 3, employee engagement as an explicitly named construct appears in comparatively few titles/abstracts ($n = 20$) relative to the more general well-being/satisfaction literature ($n = 186$), suggesting that “engagement” as a precise theoretical construct remains less consistently operationalised within healthcare workforce research than related constructs such as burnout or job satisfaction; this trend parallels the inconsistent-operationalisation gap identified in Section 6 above.

4.3 Workforce Well-Being

Well-being of the workforce is, by a large margin, the most widely reported theme in the articles included ($n = 186/242$ studies; figure 3), which also aligns with concerns documented by Shanafelt regarding burnout and retention (2017) in the most-cited included study, which cited nine organisational strategies that mediate between executive leadership behaviour and physicians' engagement, and reduce burnout. Among the reviews included, Cohen (2023), Melnyk (2020), and de Vries (2023) synthesise workplace interventions, mental-health-improvement strategies, and retention-influencing factors across nurses, physicians, and allied healthcare professionals to demonstrate convergence of evidence that well-being interventions cluster around leadership behaviour, workload management and organisational-culture change.

Within this theme, the unique context which justifies in vivo concept of the COVID-19 pandemic is also included: Yusefi (2022) and Blake (2022) report qualitative self-reported psychological distress and facilitate well-being-centre interventions in healthcare work, and Crocker (2022) a rapid review of the impact of the pandemic on the mental-health workforce specifically.

4.4 Leadership and Inclusive Culture

Leadership behaviour ($n = 111$; Figure 3) is the second most commonly referenced theme, and similarly, the only antecedent of inclusive and engaged healthcare workplace cultures that had consistently high-quality papers. The evidence base provides sound but limited consistency for three leadership paradigms.

4.4.1 Transformational and Authentic Leadership

Labrague and Laschinger (2020) find in a cross-sectional study that toxic versus transformational leadership practices had strong predictive power over nurses' job satisfaction, stress, absenteeism and turnover intention. Gender, academic stress and student engagement as predictors of academic burnout: a structural equation modelling approach. (2013) Wang et al. Ahmed et al. (2024) extended this line of evidence by showing that toxic leadership predicts workplace deviance via emotional exhaustion, but is moderated by organisational cynicism directly exemplifying the negative leadership pathway and serving as a perfect complement to the positive transformational-leadership evidence presented above.

4.4.2 Nursing and Strengths-Based Leadership

Hult (2023) conducted a review of reviews illustrating pathways in nursing leadership—organisational, staff and patient outcomes. (2022) and Cardiff. The impact of nurse leadership on multi-level outcomes is described by Weiss (2023), and Robinson (2023) discuss the role of local, first-line nurse leaders in staff retention. All of these findings together support the notion put forth by Girgis and their strengths-based nursing and healthcare leadership framework (2024), which also presents a values-based approach to leadership behaviour and how this can translate into equitable workplace outcomes.

4.5 Organisational Policies and Mechanisms

The evidence base contains examples of organisational-policy ($n = 56$; Figure 3) mechanisms which can be used to operationalise DEI and engagement commitments. Howell (2024) describes formal strategies to manage performance in relation to diversity and inclusion, whereas Bamforth (2021b), within the same set being included (2023) scope evidence on the relationship between the psychological well-being of health professionals in the workplace and patients' care experiences. Lainidi (2023) developed an integrative review of employee silence and voice in the healthcare sector by presenting a policy-relevant perspective on the organisational mechanisms (or lack thereof) through which workforce voice is enabled or silenced with respect to inclusion-related issues.

4.6 Barriers to Implementation

Even after attention from policymakers and leadership, there is literature identifying persistence in barriers to implementation. Structural and resourcing constraints are a major theme, while measurement and accountability gaps form the second category of recurrent barriers on par with the substantial variability in how DEI policy commitments are translated into actionable, targetable and measurable objectives (Jolley & Peck 2022). Wood and Poku (2022) describe the synergistic effect of loneliness and burnout experienced by nurses not yet sufficiently addressed as a challenge to successful long-term wellbeing interventions. In an example of the geographic-concentration gap to which we return in Section 6, Poku (2020) identify mental factors specific to emotional exhaustion in a West African nursing workforce that was under-resourced by global standards—one of the comparatively few included studies originating outside of the Anglophone research base highlighted in Figure 4.

5. Discussion

5.1 Integration of Findings Across Themes

Taken together, the quantitative thematic distribution (Figure 3) and narrative synthesis (Section 4), point towards an integrated model wherein leadership behaviour and organisational policy act as upstream drivers of climate for inclusion (Nishii, 2013), followed by fulfilment of employees' belongingness and uniqueness needs (Shore, 2011) to drive their engagement (Kahn, 1990) and ultimately their workforce well-being—the most robustly evidenced outcome in this body of literature—and retention. A striking disproportionate evidentiary weight of well-being ($n = 186$) relative to explicitly named engagement ($n = 20$) suggests that the field has so far better operationalised a downstream outcome than the upstream theoretical mechanism most commonly theorised to be driving it.

The geographic concentration highlighted by Figure 4 (overwhelmingly Australia, the USA, the UK and Canada) and design distribution in Table 7 (dominated by reviews and qualitative studies; only 4 RCTs and 4 mixed-method studies amongst 242 included records) together point to this evidence base being a large but still narrow one methodologically- and geographically-speaking—a finding that has immediate consequences when it comes to generalising the leadership- and policy-related implications synthesised in Section 8.

5.2 Theoretical Implications

Collectively, this synthesis suggests that available healthcare DEI and engagement literature relies on a relatively small theoretical base where Social Identity Theory (Tajfel & Turner, 1979), the Inclusion Framework (Shore, 2011) or classical engagement theory (Kahn, 1990) comprise the majority of identified studies while remaining under-explored with climate-for-inclusion theory (Nishii, 2013); typically having greater explanatory power at an organisational-level. This preliminary observation should formally be tested through full-text-level theoretical-framework extraction across the entire 242-study set (per Section 2.6).

6. Research Gaps

The executed search substantiates the following research gaps based on the quantitative search results (Section 3) and thematic synthesis (Section 4–5):

- Design concentration: Of 242 studies included, 83 are reviews, and only 4 use RCTs, and just a further 4 are mixed-methods, highlighting a clear methodological gap for experimental and mixed-method designs able to inform causal inference.
- Geographic concentration: Included research-organisation affiliations are heavily skewed towards Australia, the USA, the UK and Canada; evidence from some health-system contextual settings (e.g., South Asia, Sub-Saharan Africa, Latin America) is relatively scant (∞).
- Somewhat alluding to the weakness in its operationalisation, employee engagement as an explicitly named construct occurred only a feeble 20 times across study titles/abstracts of included studies out of a total of 242 (incidental findings), despite theory indicating that the concept is a theoretical keystone to the entire framework for this review (Section 1.2)—suggesting commonly occurring confluences between broader well-being/satisfaction terminology/construct and more discrete emphases on engagement.
- Scarcity of longitudinal data: this is a rapidly growing but not yet mature literature; the obvious recency skew (Figure 2, concentration later in 2021–2025) and limited reporting of long-term, sustained intervention outcomes support this conclusion.
- Psychological-safety–inclusion linkage underexamined: Although the relationship between inclusive leadership and psychological safety is well-established in adjacent management literature, validation of this theoretical chain within the included healthcare evidence base requires full-text confirmation.
- The work in DEI, engagement, leadership and policy integration across constructs is very limited: Despite the cross-cutting barrier patterns identified during Section 4.6, very few studies amongst the included set explicitly model DEI, engagement, leadership and policy together.

7. Future Research Directions

- Experimental and mixed-methods designs: As there was a notable shortage of RCTs ($n = 4$), and mixed-methods studies ($n = 4$) amongst the 242 included studies, future research should facilitate experimental designs to best support causal inference about DEI and engagement interventions.
- Geographic diversification: Future studies should go beyond the four countries in which most of the figures in Figure 4 were developed, to include health systems from low- and middle-income countries for whom these structural and resourcing constraints on DEI and engagement implementation may be novel.
- Hypothesis-driven construct-oriented measurement of engagement: Measure employee engagement explicitly or with validated measures, such as the UWES, rather than including them in broader well-being or job-satisfaction measures.
- Longitudinal designs: This literature has a high recency skew (Fig 2), which suggests that longitudinal studies of DEI and engagement interventions over multi-year time horizons are required to demonstrate intervention endurance.
- Research must model DEI, engagement, leadership and policy variables together—but in the same studies—so that the integrated pathway indicated in Section 5.1 can be formally tested.
- Psychological-safety mechanism: Further investigation, and in particular full-text reviews on psychological safety as a mediating mechanism between inclusive leadership and workforce engagement/well-being in a healthcare-specific sample.

8. Practical Implications

- Integrate accountability on DEI and well-being outcomes into standard cycles for leadership performance-management through the application of relevant metrics (Howell 2024), stemming from robust evidence linking behaviour and well-being outcomes with specific behaviours associated with effective leaders. Section 4.3–4.4
- Integrate cultural-competence and inclusive/transformational-leadership training into continuing professional development pathways, in view of the firm evidence (Labrague, 2020; Laschinger, 2016) that leadership style is a strong predictor of burnout, turnover, and job satisfaction.

- Make workforce silence and voice mechanisms (Lainidi, 2023) a priority for policy by ensuring that frontline staff have structured channels to surface concerns related to inclusion and well-being.
- When designing or commissioning future organisational research, we should continue to prioritise generating evidence from relatively under-represented health-system contexts (Figure 4) to avoid over-generalising findings from the four dominant Anglophone countries.
- Resource well-being and engagement interventions appropriately and clearly, noting that workforce well-being is the more robustly evidenced outcome in this area (n = 186 studies) and therefore the most defensible focus for initial resource investment.

9. Limitations of the Review

- Single-database study execution – Finally, the review eliminated the planned search strategy across five databases and instead offered a single Dimensions search. AI search. Although Dimensions provides expansive cross-disciplinary coverage, there may be records indexed in CINAHL or specialist nursing/allied-health databases that go undiscovered; therefore, supplemental searches of these extra databases are encouraged before final submission.
- Programmatic screening: Screened through a developing, reproducible screening/using keywords/rules after which screening was completed at scale (not independent twin-reviewer manual review). This method is visually transparent and completely reproducible, though it is recommended that two independent reviewers manually verify a random sample of included and excluded records (and all borderline cases) xiii to validate that screening was performed effectively before submission to a journal.
- Limitations: Abstract-level thematic tagging: The Section 3.3/4 thematic synthesis is mainly based on title/abstract text (cf. full-text coding); Full-text re-coding of all 242 included studies, as specified in Section 2.8, would improve the analytical depth and accuracy of the thematic synthesis results.
- Design and theoretical-framework inference: The classification of study designs was inferred from terminology in the title/abstract, not verified via full-text review (the nondiagnostic "not specified" category is large [n = 42] and thwarts full-text screening); limitations stemming therefrom could be resolved through full-text screening.
- Restricting to English-language sources: Limiting the search to English-language sources may lead to missing relevant evidence from non-Anglophone health systems, which adds to the geographic-concentration limitation identified in Section 6.

10. Conclusion

This review involved a systematic search and screening process—fully documented in accordance with PRISMA 2020—with records retrieved from Dimensions (2,500). AI Database and a two-stage screening protocol based on transparency and reproducibility, resulting in the inclusion of 242 studies. This review provides an initial evidence base on the interconnections amongst DEI, employee engagement, leadership and organisational policy in relation to healthcare workforce literature, which are via pathways mediated through leadership and/ or organisation policy and converge most strongly on workforce wellbeing as an outcome. The availability of evidence geographically (largely Australia, USA, UK and Canada) and methodologically (mostly reviews and qualitative research, very few RCTs or mixed-methods studies) suggests unambiguous discriminatory research priorities that can be justified on the basis of robust evidence. The findings, figures and evidence tables presented here provide one single, methodologically transparent source on which healthcare organisations, policymakers and researchers can draw as they seek to implement more effective, sustainable inclusion and engagement strategies—we recommend attending closely to the limitations of this work (Section 2) as well as the suggested verification steps (Section 9).

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