Walden University

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Enhancing Registered Nurse Retention and Job Satisfaction through Comprehensive Career Development Initiatives in Non-Profit Urban Hospitals

by

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Abstract

This integrative review was conducted to examine how comprehensive career development initiatives influence registered nurse retention and job satisfaction in non-profit urban hospitals, which are affected by limited advancement opportunities, inadequate mentorship, and unsupportive work environments. Guided by the Johns Hopkins Evidence-Based Practice model and the Authentic Nurse Leadership framework, this review synthesizes peer-reviewed literature from 2019 to 2024 to identify evidence-based, leadership-driven strategies for improving nurse retention. Four key themes emerged: (a) career development and advancement through structured learning pathways, mentorship, and leadership training; (b) empowerment and decision-making via participative management and clinical autonomy; (c) supportive work environments that prioritize safe staffing, inclusive leadership, and diversity; and (d) professional recognition and organizational commitment through tailored retention efforts and values alignment. Findings underscore that authentic leadership fosters trust, psychological safety, and engagement, elements essential to retaining nurses in financially constrained environments. Career development strategies, when supported by transparent and ethical leadership, significantly reduce burnout and professional stagnation. Broader implications for social change include care continuity, economic mobility for historically marginalized nurses, and health equity for underserved communities. These strategies address key domains of the social determinants of health, including economic stability, access to education, and quality of healthcare. Ultimately, investing in structured, leadership-supported career development not only strengthens nurse satisfaction and retention but also contributes to more equitable and sustainable healthcare systems.

Part 1: Practice-Based Problem

Problem of Interest

The issue of high registered nurse (RN) turnover in urban non-profit hospitals is not isolated to individual facilities but represents a systemic healthcare sector challenge. Nationally, turnover rates for RNs span 8.8% to 37%, with the highest rates in acute and underserved urban settings (Haddad et al., 2023). This widespread issue significantly disrupts care delivery and demands industry-level solutions that consider systemic workforce retention strategies. RN turnover leads to increased recruitment and training costs and disrupts the continuity of patient care, thereby impacting the quality of healthcare delivery. The practice problem is driven by factors such as burnout, lack of job satisfaction, limited career development opportunities, and insufficient workplace support (Bae, 2023). As a result, healthcare administrators face significant challenges in creating sustainable strategies to retain nurses. Comprehensive career development initiatives were identified as a potential solution to enhance nurse retention and job satisfaction. The results of several studies suggested that opportunities for professional growth, such as continuing professional development (CPD) and leadership training, positively impact retention rates (Kearns, 2021; Mlambo et al., 2021). Furthermore, supportive leadership that embodies authentic leadership styles plays a pivotal role in mitigating turnover (Jun et al., 2023). In the context of non-profit urban hospitals, where financial and operational constraints often limit the availability of competitive salaries, career development, and supportive work environments become even more critical to retaining qualified nurses (Peng et al., 2023).

This review, therefore, contains an exploration of the role of comprehensive career development initiatives in enhancing RN retention in non-profit urban hospitals. Such initiatives include mentorship programs, CPD opportunities, leadership development, and role-specific training that aligns with the professional aspirations of nurses. By addressing the underlying factors contributing to turnover, this review can contribute to the body of knowledge on nurse retention and provide actionable strategies for healthcare administrators to improve job satisfaction and reduce turnover.

Healthcare Administration Problem

High nurse turnover in urban non-profit hospitals creates significant challenges for healthcare administrators, who often work with limited budgets and cannot always match the salaries offered by for-profit facilities. This financial constraint makes it even more important to focus on non-financial incentives to keep nurses engaged and committed. This challenge directly intersects with key domains outlined by the American College of Healthcare Executives (ACHE), particularly the Healthcare Environment, Leadership, and Professionalism domains. Nurse retention impacts strategic workforce planning, a key concern in the ACHE "Healthcare Environment" domain. Addressing it through leadership-driven career development initiatives reflects competencies in "Leadership" and "Communication and Relationship Management," where healthcare executives are expected to engage and empower clinical teams to improve outcomes (ACHE, 2023). Furthermore, the emphasis on creating ethical, inclusive, and supportive work environments to retain nursing staff aligns with ACHE's "Professionalism" domain, which prioritizes integrity, respect, and lifelong learning.

Background

Nurse turnover in healthcare organizations, especially in non-profit urban hospitals, increasingly disrupts operations and jeopardizes patient care quality. The high turnover rate among RNs, ranges between 12% and 25% in various healthcare settings, which significantly increases operational costs due to the need for frequent hiring, onboarding, and training (Bae, 2023). Moreover, this turnover disrupts patient care, leading to lower quality outcomes, reduced patient satisfaction, and a strained workforce. Burnout, inadequate support systems, and the absence of tailored career development plans are key contributors to this issue (Eriksson et al., 2024).

Non-profit hospitals are particularly vulnerable to high turnover rates because they often operate with limited financial resources, making it challenging to offer competitive salaries compared to their for-profit counterparts. As a result, administrators in these hospitals must focus on non-financial retention strategies, such as fostering a supportive work environment, providing opportunities for professional growth, and ensuring work-life balance. The ANL framework and other studies highlight job satisfaction, managerial support, and absenteeism as critical factors influencing nurses' decisions to stay or leave (Smokrović et al., 2024).

The absence of comprehensive career development programs significantly hinders retention efforts. Many nurses leave their positions due to perceived stagnation in their careers, lack of mentorship, and minimal opportunities for upward mobility within their organizations (Kurtović et al., 2024). This issue is compounded by an unsupportive work culture where nurses feel undervalued and overworked. The absence of personalized career development initiatives, coupled with a lack of wellness programs, further

contributes to increased turnover, especially among newly licensed registered nurses (Peng et al., 2023).

Operational Problem

The issue of high RN turnover in non-profit urban hospitals represents a significant operational challenge that undermines workforce stability and quality patient care. Numerous empirical studies confirm that this problem is both persistent and growing in urgency. According to Haddad et al. (2023), the convergence of an aging nursing workforce, increasing patient demand, and widespread burnout have intensified turnover rates. These systemic pressures threaten the operational continuity of non-profit hospitals, which already contend with limited budgets and reduced access to talent pools compared to for-profit competitors.

Nurse turnover is not merely a human resources issue—it has tangible operational consequences. High turnover results in elevated recruitment and onboarding costs, estimated to range between $28,000 and $51,000 per nurse, depending on the unit and specialization (ANA, 2023). Beyond direct financial costs, turnover also leads to disruption in patient care delivery, reduced staff morale, and increased burnout among remaining nurses who must manage heightened workloads (de Vries et al., 2023). The cumulative effect of these outcomes contributes to a negative feedback loop: As burnout drives resignations, fewer staff remain to manage increasing patient volumes, further accelerating burnout and turnover.

A key driver of this turnover is the lack of structured career development pathways. In financially constrained, non-profit hospital settings, many nurses report limited access to CPD, inadequate mentorship, and unclear opportunities for upward

mobility (Kurtović et al., 2024; Mlambo et al., 2021). Without meaningful investment in CPD, nurses often feel professionally stagnant. This sense of stagnation is a leading predictor of resignation, particularly among early-career nurses and mid-career professionals seeking growth (Shiri et al., 2023).

In addition, staffing shortages—especially in critical care and emergency departments—exacerbate stress and erode care quality. Peng et al. (2023) found that inadequate nurse staffing is directly correlated with poorer patient outcomes, especially in intensive care settings. These shortages force nurses to operate under unsustainable conditions, which compromises clinical performance and increases the likelihood of adverse events. In turn, nurses experiencing moral distress from delivering suboptimal care are more likely to leave their roles (Shiri et al., 2023).

Leadership support, or the lack thereof, also plays a critical role in the operational burden of turnover. Eriksson et al. (2024) reported that nurses who feel undervalued or unsupported by management are significantly more likely to consider leaving. A workplace culture that lacks relational transparency, shared decision-making, or recognition for nurses' contributions leads to disengagement and emotional exhaustion. In contrast, authentic leadership—grounded in ethical practice and openness—has been shown to reduce turnover intentions by fostering psychological safety and trust (Alilyyani, 2022; Assi et al., 2024).

Compounding these challenges is the limited availability of institutional mechanisms—such as structured mentorship, shared governance models, or leadership training—that enable nurses to feel empowered and supported. In many non-profit urban hospitals, budget constraints mean these career development programs are deprioritized,

even though they are critical for long-term workforce sustainability (Zurynski et al., 2023). The result is an environment where experienced nurses feel they have reached a plateau, and newer nurses lack guidance, increasing the likelihood of departure across all experience levels.

Recent literature highlights that career development initiatives do not need to be cost-prohibitive. Simple investments—such as peer mentorship programs, tuition reimbursement partnerships with local universities, and flexible learning opportunities—can significantly improve retention. These programs help nurses visualize a future within their current organization, improving engagement and reducing the appeal of external job opportunities.

Moreover, generational diversity within the nursing workforce requires nuanced strategies. Younger nurses often prioritize autonomy and mentorship, while more experienced nurses value recognition, flexibility, and leadership opportunities (Lantz & Fagefors, 2025). When these needs are not met through career development or workplace support, dissatisfaction quickly translates into turnover.

The operational toll of this turnover is substantial. When nurses leave, hospitals are forced to rely on contract staff or travel nurses, both of which increase labor costs and reduce team cohesion. The ongoing need to recruit and train new staff disrupts continuity of care and creates inefficiencies that negatively affect patient satisfaction scores, accreditation standards, and overall organizational performance (Kelly et al., 2021). The operational problem in non-profit urban hospitals is deeply rooted in systemic underinvestment in career development, staffing support, and authentic leadership. The combination of financial limitations, rising patient acuity, and professional dissatisfaction

is creating an untenable environment for nurse retention. Without targeted, evidence-based interventions—particularly those that are low-cost but high-impact—this issue will continue to threaten the sustainability and effectiveness of non-profit healthcare systems.

Ideal State of Operations

The ideal state of operations in non-profit urban hospitals could involve the implementation of comprehensive career development programs, resulting in higher RN retention rates and improved job satisfaction. Studies reveal that hospitals with robust CPD programs, mentorship opportunities, and supportive leadership retain their nursing staff more effectively (Kearns, 2021; Kurtović et al., 2024). In this ideal state, non-profit hospitals would maintain a nurse retention rate of 90%, which is considered the industry standard for optimal performance (American Nurses Association, 2024). Such a retention rate would reduce the financial burden associated with high turnover, improve patient care continuity, and contribute to a more stable healthcare workforce.

In this ideal operational state, nurse managers would play a pivotal role in fostering a positive work environment through authentic leadership. Giordano-Mulligan and Eckardt (2019) argued that authentic nurse leadership, characterized by transparency, integrity, and relational integrality, is crucial for creating a culture of trust and psychological safety. Nurses, who perceive their leaders as supportive and authentic, are more likely to remain with the organization, even in times of stress. Ultimately, achieving the ideal state of operations requires a holistic approach that integrates leadership development, career advancement, and a supportive work environment.

Professional Practice Gap Statement

The gap in non-profit urban hospitals lies between the current high turnover rates of RNs and the desired retention rate of 90%, which is considered an industry standard (American Nurses Association, 2024). Currently, this high turnover is driven by a lack of comprehensive career development programs, elevated levels of burnout, and an unsupportive work environment, which together undermine nurse retention efforts. This gap negatively impacts the quality of patient care and increases operational costs due to constant recruitment and training requirements (Haddad et al., 2023; Smokrović et al., 2024). A bridge for this gap requires a strategic focus on creating structured career development pathways, fostering mentorship programs, and supporting CPD and leadership development initiatives, all of which can enhance nurse job satisfaction and contribute to higher retention rates.

Summary of Evidence

The review synthesizes evidence on the causes and consequences of nurse turnover in urban non-profit hospitals, focusing on the role of leadership, mentorship, and professional development as key retention strategies. These issues intersect with broader healthcare administration concerns related to staff satisfaction, team cohesion, and operational sustainability. Nurse turnover presents a critical challenge in healthcare organizations, particularly within non-profit urban hospitals. Turnover rates among newly licensed RNs range from 12% to 25%, driven by factors such as emotional exhaustion, job dissatisfaction, and poor health conditions (Bae, 2023). Nationally, turnover rates span 8.8% to 37.0%, varying by location and specialty, with experienced nurses also leaving due to burnout, inadequate career development opportunities, and work-life

imbalance (Haddad et al., 2023; Eriksson et al., 2024). High turnover exacerbates staffing shortages, increasing stress on remaining staff and compromising care quality.

A lack of CPD, mentorship, and leadership engagement emerge as a significant gap contributing to this issue. Evidence highlights CPD as a pivotal factor in enhancing job satisfaction and retention. Kearns (2021) and Mlambo et al. (2021) demonstrated that effective CPD fosters professional growth, reducing perceptions of career stagnation. However, non-profit hospitals often face challenges in providing robust CPD programs due to financial and structural constraints. Moreover, inadequate nurse staffing, particularly in critical care units, further escalates burnout and turnover (Peng et al., 2023).

Leadership quality plays an equally critical role in nurse retention. Studies show that authentic leadership fosters trust, psychological safety, and engagement, reducing burnout and turnover intentions (Alilyyani & Gray, 2024; Assi et al., 2024). Initiatives such as mentorship programs, flexible schedules, and structured career pathways can also mitigate these issues by addressing professional stagnation and creating a supportive work environment (ANA, 2023; Duru & Hammoud, 2021). Despite these insights, non-profit urban hospitals often fail to implement comprehensive career development strategies effectively.

This focused healthcare administration problem underscores the need for strategic interventions. Comprehensive career development initiatives integrating CPD, leadership training, mentorship, and workload management are essential to mitigating burnout, promoting professional growth, and improving retention rates among RNs.

Purpose of the Integrative Review

The purpose of this integrative review was to evaluate how structured career development initiatives improve registered nurse retention and job satisfaction in non-profit urban hospitals. This review aims to provide healthcare administrators with evidence-based strategies aligned with leadership and workforce management principles in healthcare administration. This review aimed to address the healthcare administration problem of high nurse turnover by identifying evidence-based strategies that improve career development opportunities and foster supportive work environments. The ANL framework served as the guiding model for this review, emphasizing the importance of authentic leadership in creating environments that prioritize trust, collaboration, and professional growth. By synthesizing existing literature through the lens of this framework, this review examined the impact of career development initiatives on nurse retention, healthcare delivery, and operational outcomes.

Integrative Review Question

The primary review question is "What evidence-based career development strategies can healthcare administrators implement to reduce RN turnover and enhance job satisfaction in non-profit urban hospitals facing financial and operational constraints?"

The key elements of the healthcare administrative problem being studied include several interconnected factors that contribute to high RN turnover in non-profit urban hospitals. First, high turnover rates among RNs are primarily driven by burnout, the lack of adequate career development opportunities, and unsupportive work environments. These conditions not only diminish job satisfaction but also compromise the continuity

and quality of patient care. Second, there is a critical need for the implementation of comprehensive career development initiatives. These should include structured mentorship programs, CPD, and targeted leadership development opportunities, all of which can provide nurses with clear pathways for professional growth and advancement. Third, the impact of such strategies on reducing turnover and enhancing job satisfaction is significant, as they create a more supportive and fulfilling work environment. Improved nurse retention resulting from these strategies ultimately contributes to better healthcare delivery outcomes. This review question was developed to identify and evaluate potential solutions by focusing on actionable, evidence-based strategies that healthcare administrators can implement to bridge the gap in nurse retention efforts within financially constrained, non-profit urban hospital settings.

Theoretical and/or Conceptual Framework

The ANL framework, as developed by Giordano-Mulligan and Eckardt (2019), serves as the foundation for this integrative review. The ANL framework is grounded in the principles of authentic leadership, which emphasizes the importance of transparency, ethical behavior, self-awareness, and relational integrity. These characteristics are critical for fostering trust, engagement, and psychological safety within nursing teams, all of which are essential for reducing turnover and improving job satisfaction among registered nurses (Giordano-Mulligan & Eckardt, 2019).

Authentic leadership is particularly relevant in non-profit urban hospital settings where financial constraints often limit the availability of competitive salaries and other extrinsic rewards. In these environments, leadership plays a pivotal role in shaping the work culture and influencing nurse retention. The ANL framework proposes that nurse

leaders who demonstrate authenticity, by being transparent and engaging in shared decision-making, can create a more supportive and empowering workplace. This approach, in turn, enhances job satisfaction and reduces the likelihood of burnout and turnover (Assi et al., 2024).

Key constructs of the ANL framework include moral and ethical perspectives, self-awareness, and relational transparency. Leaders who exhibit these traits are more likely to build trust with their teams, facilitate open communication, and involve staff in decisions that affect their work environment. This leadership approach directly addresses some of the main factors contributing to nurse turnover, such as feelings of undervaluation and lack of support from management (Eriksson et al., 2024).

In alignment with the practice-based problem of enhancing registered nurse retention through career development initiatives, the ANL framework provides a theoretical lens through which to examine the role of leadership in influencing retention. Leadership authenticity fosters an environment where nurses feel supported and valued, which encourages them to remain with the organization. By integrating the principles of ANL into leadership development programs, non-profit urban hospitals can better support their nursing staff, improve job satisfaction, and ultimately reduce turnover. This alignment between authentic leadership and the retention-focused strategies explored in the integrative review will offer insights into how non-profit hospitals can address the turnover crisis effectively.

Part 2: Literature Review, Quality Appraisal, and Analysis

Literature Search Strategy

The literature review strategy for this integrative review was designed to investigate the interrelated effects of career development and leadership on nurse retention in non-profit urban hospitals. A growing body of evidence confirms that successful career development initiatives—such as mentorship, CPD, and structured advancement pathways—are largely dependent on the quality of nurse leadership (Lee et al., 2023; Nguyen & Ta, 2023). Therefore, this review focused on capturing studies that examine both components simultaneously, understanding that they are mutually reinforcing.

Search terms were expanded to reflect this dual focus. Keywords included *nurse retention strategies*, *career development in nursing*, *continuing professional development for nurses*, *authentic leadership*, *transformational leadership*, *shared governance*, *leadership impact on nurse satisfaction*, *mentorship in nursing*, *nurse leadership engagement*, and *supportive nursing environments*. Boolean operators (e.g., "career development" AND "leadership" OR "nurse retention" AND "mentorship") were used to refine search results.

The search was conducted using peer-reviewed databases such as PubMed, CINAHL Plus, ProQuest, Scopus, PsycINFO, and Google Scholar, with filters applied for studies published between 2019 and 2024. Studies selected for inclusion focused on RNs in hospital-based settings, with emphasis on non-profit or urban healthcare environments. Articles addressing theoretical frameworks such as ANL, transformational leadership, and CPD were prioritized to align with the study's guiding framework.

The inclusion criteria focused on studies involving RNs in non-profit hospitals that addressed retention, career development, leadership strategies, and theoretical frameworks such as CPD and authentic leadership. Excluded studies included those on healthcare professionals other than nurses, articles unrelated to retention or job satisfaction, and those outside the healthcare sector. Technical studies without actionable evidence or outcomes were also excluded. This rigorous process ensured that only relevant and high-quality studies were included in the review. See Appendix B: Review Question Search Log for more search results information.

Several peer-reviewed studies enhance the leadership-career development connection. Hashemi et al. (2025) found that nurse leaders who demonstrate empowerment behaviors—such as encouraging autonomy and learning—improve nurses' perception of career growth. This connection is further supported by AbdELhay et al. (2025), who found that transformational leadership significantly predicts nurse retention only when organizations actively support professional development.

The concept of psychological safety, essential to career growth, also emerged. Remtulla et al. (2021) conducted a qualitative study in under-resourced hospitals, revealing that psychologically safe environments created by supportive leaders enable nurses to pursue professional development without fear of failure, an environment closely aligned with the ANL framework. Similarly, Wong and Laschinger (2024) found that authentic leadership enhances professional development climates for new graduate nurses, increasing their intent to stay.

A meta-analytic review by Goens and Giannotti (2024) further substantiated the value of linking leadership and development. Their analysis concluded that leadership

development programs significantly boost nurse satisfaction and retention, particularly when coupled with mentorship and CPD access. Their findings provide empirical support for leadership training as an essential component of systemic retention strategy in resource-constrained hospitals.

The complexity of leadership's role was captured in Nurmeksela et al. (2021) study, which showed that nurse managers can function as both supporters and gatekeepers of career development. Their influence—intentional or not—shapes access to leadership tracks, specialty certifications, and promotion pathways, making it critical that hospitals invest in equipping nurse managers with leadership tools grounded in relational transparency and self-awareness.

In addition to these new contributions, previously reviewed sources like Kearns (2021) and Mlambo et al. (2021) highlighted CPD's role in enhancing job satisfaction, while Eriksson et al. (2024) and Assi et al. (2024) demonstrated that authentic leadership supports psychological safety and career engagement. Together, the evidence points to a compelling conclusion: career development strategies cannot succeed in isolation—they require leadership engagement, ethical modeling, and strategic alignment with the values and goals of the nursing workforce.

This integrated review approach ensures that the literature not only explains the symptoms of turnover but also highlights actionable, leadership-driven interventions. The included studies offer insight into how transformational and authentic leadership styles create organizational climates where professional development is both possible and prioritized, particularly in non-profit hospitals facing budgetary and staffing constraints.

Quality Appraisal

This integrative review critically appraised 22 peer-reviewed studies published between 2019 and 2024, using the DHA Appraisal Results Log. The studies addressed nurse retention, job satisfaction, mentorship, CPD, leadership, and organizational support, particularly within non-profit urban hospital settings. The final appraisal included a variety of study types: 10 Level III (quasi-experimental and systematic reviews), nine Level V (expert opinion and conceptual papers), and three Level IV (non-experimental/qualitative studies). There were no Level I or II studies.

The studies were primarily situated in healthcare service organizations (HSOs), including non-profit hospitals, long-term care facilities, and public health institutions. The population under study consisted exclusively of RNs, encompassing newly licensed, mid-career, returning, and experienced nurses. All included studies were published in English and addressed workforce retention strategies applicable to financially constrained or urban healthcare environments.

Common themes identified across these studies include the effectiveness of structured CPD, mentorship programs, leadership engagement, and supportive work cultures. Many findings emphasize the importance of authentic or transformational leadership in fostering psychological safety, professional growth, and organizational commitment. Studies consistently show that burnout, stagnant career progression, and lack of empowerment are key contributors to nurse turnover.

Conversely, environments that provide access to leadership development, shared decision-making, and recognition yield higher retention rates and job satisfaction. This diverse evidence base strengthens the credibility of the review’s thematic findings and

supports the use of low-cost, leadership-driven career development initiatives to enhance nurse retention in non-profit hospital settings. For more details on the quality appraisal results, see Appendix C: Critical Appraisal Results Log.

Thematic Analysis of Literature

Thematic analysis of the literature identified several recurring themes central to addressing nurse retention and job satisfaction. Professional development emerged as a critical theme, with structured CPD programs, mentorship initiatives, and clear career pathways significantly enhancing retention and job satisfaction. These programs supported skill development, career advancement, and opportunities for leadership roles, directly addressing factors contributing to turnover. The analysis also emphasized the importance of supportive work environments, highlighting leadership styles such as transformational and authentic leadership, which foster inclusivity, trust, and psychological safety. These leadership approaches were particularly effective in mitigating burnout and promoting engagement among nursing staff.

Another key theme was the role of work-life balance in retaining nurses. Flexible work schedules, recognition of prior experience, and tailored retention strategies were especially valued by nurses returning to the workforce after career breaks. Limitations in the reviewed studies included inconsistent metrics, small sample sizes, and a lack of longitudinal data, which limited the generalizability of findings. Additionally, contextual variations, such as differences in regional or institutional settings, posed challenges in applying findings universally. Despite these limitations, the thematic analysis underscored the critical role of professional development, leadership quality, and organizational support in enhancing nurse retention.

Part 3: Presentation of Results

The thematic analysis conducted for this integrative review identified four major themes, each comprising several subthemes that illuminate the factors influencing registered nurse (RN) retention and job satisfaction in non-profit urban hospitals (see Table 1). These themes are grounded in the ANL framework and align with its key constructs: self-awareness, relational transparency, internalized moral perspective, and balanced processing. A full summary of themes, subthemes, and their corresponding sources can be found in Appendix D: DHA Thematic Analysis Results, while the interrelationships among themes are visually depicted in Appendix E: Thematic Map.

Table 1

Themes and Subthemes and Associated ANL Constructs

Theme	Subthemes	ANL Framework Construct
1. Leadership Support and Development	- Mentorship programs - Leadership training - Shared governance models	Relational Transparency, Balanced Processing
2. Professional Growth Opportunities	- Career advancement pathways - Continuing education support	Self-awareness, Internalized Moral Perspective
3. Supportive Work Environment and Organizational Culture	- Nurse-manager relationships - Team collaboration - Recognition and rewards - Diversity and inclusion	Relational Transparency, Internalized Moral Perspective
4. Empowerment and Autonomy	- Participative decision-making - Role clarity - Nurse autonomy	Self-awareness, Balanced Processing

Theme 1: Leadership Support and Development

Leadership emerged as a cornerstone of retention strategy. Nurse leaders significantly influence team morale, job satisfaction, and long-term career engagement. Multiple studies emphasized that authentic leadership—characterized by transparency,

ethical behavior, and relational trust—is associated with lower turnover intentions (Alilyyani, 2022; Assi et al., 2024). Mentorship and shared governance models were identified as subthemes that directly support leadership development and succession planning. Effective mentorship fosters a sense of belonging and professional identity, especially for early-career nurses, while shared governance empowers nurses by including their voices in decision-making processes (Jun et al., 2023).

Furthermore, leadership engagement in CPD activities signals organizational commitment to professional growth, which in turn strengthens retention (Kurtović et al., 2024). Hospitals lacking formal leadership training pipelines often experience a disconnect between frontline staff and administrative priorities, exacerbating disengagement and attrition (Giordano-Mulligan et al., 2023). This theme underscores the need for intentional leadership cultivation, particularly in non-profit hospitals where financial incentives may be limited.

Theme 2: Professional Growth Opportunities

The absence of structured career progression remains a major contributor to nurse turnover. Professional growth opportunities—such as CPD, role specialization, academic partnerships, and leadership tracks—were frequently cited in the literature as essential to retaining RNs (Mlambo et al., 2021; Shiri et al., 2023). Nurses who perceive a clear path to advancement are more likely to commit to long-term employment with their current organizations (Nashwan, 2023).

Subthemes included tuition support, tailored CPD offerings for specific clinical units, and role preparation for advanced practice nursing or leadership roles. Notably, Kurtović et al. (2024) found that nurses in departments with higher access to CPD and

professional development exhibited significantly lower intent to leave. These findings are reinforced by de Vries et al. (2023), who noted that professional stagnation is a predictive factor for turnover across both novice and experienced nurses.

This theme aligns closely with the ANL construct of self-awareness, where leaders recognize and respond to individual nurses' career aspirations. In non-profit hospitals, embedding flexible and affordable development pathways can yield high returns on retention by meeting these intrinsic motivators.

Theme 3: Supportive Work Environment and Organizational Culture

A supportive work environment—characterized by psychological safety, mutual respect, diversity, and collaboration—was consistently highlighted as vital to nurse retention. This theme included sub-themes such as positive nurse-manager relationships, team cohesion, safety from violence or harassment, and equity in staffing assignments (Eriksson et al., 2024; Flaubert et al., 2021).

Nurses experiencing high workload, incivility, or discriminatory practices are more likely to report burnout and intention to leave (de Vries et al., 2023; Haddad et al., 2023). Conversely, supportive work environments promote resilience and trust, particularly when nurse leaders practice ethical and inclusive leadership. The presence of formal recognition programs and diversity initiatives was also linked to increased job satisfaction (Al Zamel et al., 2020). This theme is underpinned by the ANL constructs of relational transparency and internalized moral perspective. Leaders who demonstrate integrity and prioritize equitable treatment foster workplace cultures that support long-term nurse retention.

Theme 4: Empowerment and Autonomy

Empowerment, particularly through role clarity, clinical autonomy, and participative decision-making, is another foundational element for retention. Nurses who feel empowered in their roles exhibit stronger organizational commitment and lower burnout levels (Giordano-Mulligan & Eckardt, 2019; Khan et al., 2020). Subthemes identified in the literature include role delineation, shared policy-making, and support for independent clinical judgment.

Nurses in settings where they lack voice or influence over practice decisions often express frustration, disengagement, and higher turnover intentions (Raso et al., 2021). In contrast, empowered work environments—particularly those led by self-aware and emotionally intelligent nurse managers—demonstrate higher levels of team resilience, morale, and retention. The ANL framework's focus on balanced processing reinforces the importance of leaders integrating staff perspectives into organizational planning. This not only affirms nurses' expertise but also builds shared ownership of care outcomes.

While each theme offers distinct strategies for improving nurse retention, the literature makes clear that these themes are interdependent. Leadership drives empowerment, which in turn enhances professional development engagement. Supportive environments amplify the impact of CPD and mentorship programs. When implemented collectively, these themes form a holistic retention framework that addresses structural, relational, and developmental barriers to nurse satisfaction and longevity in the workforce. For example, a hospital that offers CPD but lacks leadership transparency may not fully benefit from the investment if nurses do not feel supported or recognized. Similarly, mentorship without clear career pathways can result in disillusionment.

Therefore, thematic integration is critical for successful operational change in non-profit urban hospitals.

Interpretation of the Findings

The findings confirm, extend, and challenge previous knowledge on nurse retention by integrating leadership, career development, and workplace environment factors into a comprehensive framework. These results contribute to the understanding of how evidence-based strategies can improve nurse retention and job satisfaction.

Alignment with Existing Literature

Career development and advancement align with studies indicating that structured mentorship programs and CPD opportunities reduce turnover intentions (Kearns, 2021; Mlambo et al., 2021). Transparent career frameworks foster commitment by providing nurses with a clear trajectory for professional growth. Research suggests that organizations implementing structured mentorship programs see a decline in nurse turnover rates by up to 25% (Bae, 2023).

Leadership and organizational support are essential in cultivating a supportive work environment. Transformational leadership, which emphasizes empowerment and shared decision-making, fosters a culture of engagement and psychological safety (Giordano-Mulligan & Eckardt, 2019). Organizations with strong leadership development initiatives report improved job satisfaction among nursing staff, leading to higher retention rates (Peng et al., 2023).

Workplace environment and staffing conditions directly impact nurse well-being and retention. Addressing inadequate staffing ratios and promoting interprofessional collaboration create inclusive workspaces that support retention efforts. Studies indicate

that high nurse-patient ratios negatively affect job satisfaction and increase burnout, reinforcing the need for adequate staffing policies (Eriksson et al., 2024).

Retention and job satisfaction strategies, such as recognition programs and work-life balance policies, have been shown to mitigate stress and promote engagement (Bae, 2023). Generational retention strategies ensure that diverse career stages are considered, with flexible scheduling and career development opportunities significantly reducing turnover (Giordano-Mulligan & Eckardt, 2019).

Professional recognition and work-life balance play a crucial role in maintaining long-term commitment among nurses. Career planning support and stigma reduction campaigns facilitate workforce reintegration, while acknowledgment of nurses' contributions increases loyalty and job satisfaction. Hospital leaders that implement comprehensive work-life balance policies report a 15% increase in retention rates compared to those without such policies (Kearns, 2021).

Theoretical and Conceptual Framework Integration

The integration of the ANL framework with the findings of this integrative review was both deliberate and well-aligned. The ANL framework emphasized leadership traits such as internalized moral perspective, relational transparency, and self-awareness—each of which played a pivotal role in influencing nurse retention and job satisfaction. This theoretical model provided a lens through which the data were interpreted, illustrating that leadership behaviors were not merely organizational ideals but functional strategies that directly impacted workforce outcomes.

Moral and ethical perspectives, as outlined in the ANL framework, served as foundational qualities that enhanced trust between leaders and staff. The findings

demonstrated that when nurse leaders acted with integrity and ethical consistency, they fostered a culture of respect and reliability. This culture promoted strong relational bonds, organizational loyalty, and ultimately reduced nurse turnover. Nurses were more likely to remain in organizations where leadership behaviors reflected professional and ethical standards, particularly in non-profit settings where financial incentives were limited.

Relational transparency, another core ANL construct, also emerged as a significant factor in the findings. Leaders who engaged in open, honest communication promoted psychological safety and inclusivity within their teams. The review revealed that mentorship programs and shared governance models were most effective when implemented under transparent leadership. Nurses who felt heard, respected, and included in decision-making processes were more engaged, empowered, and committed to their organizations.

Self-awareness, the third major ANL trait, was closely linked to the success of career development initiatives. Leaders who were aware of their impact on staff well-being were more likely to support personalized professional growth. The findings showed that when nurse leaders aligned CPD opportunities and leadership development programs with individual career goals, job satisfaction improved and burnout was mitigated. Self-aware leaders also identified early signs of staff disengagement, allowing them to intervene before turnover occurred.

The constructs of the ANL framework aligned seamlessly with the outcomes of this review. The framework not only provided conceptual clarity but also offered a practical guide for leadership-driven interventions that supported nurse retention. Strategies such as mentorship, structured career pathways, and recognition programs

were most effective when rooted in authenticity. These findings confirmed that authentic leadership was essential for building a resilient and satisfied nursing workforce in non-profit hospital settings.

Implications for Practice and Policy

Hospital leaders must implement structured career development initiatives, including mentorship and CPD programs, to enhance nurse retention. Leadership training programs that align with the ANL framework should be established to cultivate supportive nurse leaders. Addressing staffing shortages, promoting work-life balance, and recognizing nursing contributions are necessary workplace policy adjustments that can mitigate turnover. Organizations should track retention trends and evaluate the effectiveness of implemented strategies to refine career development and job satisfaction initiatives continuously.

Part 4: Recommendation for Professional Practice and Implications for Social Change

Recommendations for Professional Practice

This review points to several practical steps healthcare administrators in non-profit urban hospitals can take to support nurse retention and job satisfaction. These recommendations are rooted in four key themes—career development, empowerment, supportive work environments, and professional recognition—and reflect the insights and evidence found across the studies reviewed. To start, hospitals must invest in structured career development pathways. Nurses consistently stay longer in organizations that provide clear opportunities for professional growth. As Mlambo et al. (2021) and Kearns (2021) showed, CPD, leadership training, and mentorship opportunities give nurses the tools and encouragement to build their careers, which in turn boosts retention. Kurtović et al. (2024) echoed this, emphasizing how learning opportunities tied to individual goals and clinical specialties improve engagement. Practical actions could include establishing mentorship programs, building partnerships with academic institutions, or offering flexible CPD programs supported by leadership.

Empowering nurses through shared decision-making is another essential strategy. When nurses are invited to contribute their voices and perspectives—through governance councils, team huddles, or policy feedback channels—they feel a stronger connection to their workplace. Jun et al. (2023) and Giordano-Mulligan and Eckardt (2019) found that when nurse leaders genuinely involve staff in shaping decisions, it increases psychological safety and commitment. Empowerment is not just about giving nurses a seat at the table—it is about creating an environment where their input is respected and acted upon.

Equally important is ensuring a healthy and supportive work environment. A strong theme across the literature is that nurses are more likely to stay when they feel safe, valued, and well-supported. Flaubert et al. (2021) highlighted how unsafe staffing levels and poor interpersonal dynamics can lead to burnout and resignation. Meanwhile, Alilyyani (2022) and Assi et al. (2024) found that supportive, authentic leaders play a pivotal role in fostering environments where nurses thrive. Hospitals should take steps to address workload balance, implement wellness initiatives, and ensure leaders are equipped to support their teams effectively and transparently.

Finally, recognition of the contributions of nurses cannot be overlooked. Bae (2023) and Haddad et al. (2023) stressed that feeling valued—through formal recognition programs, thoughtful feedback, or career reintegration support—can make all the difference. Whether it is acknowledging years of service or celebrating leadership potential, meaningful recognition reinforces a nurse's sense of purpose and belonging. Retention strategies should also consider generational needs, offering flexible schedules or different career incentives that reflect the realities of nurses at different life and career stages. Together, these recommendations speak to more than just fixing a staffing issue—they offer a pathway to building resilient, respectful, and fulfilling workplaces. They also reflect the core principles of the ANL framework, where ethical leadership, relational trust, and transparency help shape healthy, high-performing teams.

Implications for Social Change

Beyond hospitals, these findings have implications for communities and systems. Non-profit hospitals often serve marginalized, high-need populations. When nurse turnover is high, it disrupts care, deepens health disparities, and weakens community trust

in healthcare systems. Strengthening nurse retention is not just a workforce issue, it is a public health priority.

These strategies directly support key areas of the social determinants of health. For example, providing CPD and advancement opportunities contributes to economic stability and educational access for nurses, many of whom come from diverse and historically underrepresented backgrounds. When nurses feel supported to grow professionally, they are better positioned to support themselves, their families, and their patients. Creating psychologically safe workplaces—where nurses are respected, empowered, and protected—also advances the social and community context that shapes health outcomes. When the nursing workforce is strong, supported, and stable, the care patients receive is more consistent, compassionate, and effective (Assi et al., 2024; Eriksson et al., 2024). Investing in nurse retention creates ripple effects, improving care delivery, enhancing community well-being, and advancing health equity.

These findings also intersect directly with the framework of social determinants of health (SDOH), particularly in the domains of economic stability, access to and quality of education, and access to and quality of healthcare. By promoting CPD and career advancement, non-profit hospitals help nurses, many of whom come from economically and racially diverse backgrounds, gain financial security and upward mobility. Additionally, strong nurse retention improves access to consistent, high-quality care for vulnerable populations, contributing to improved health outcomes and reduced disparities. Psychologically safe and inclusive work environments also reinforce social and community support, another key SDOH factor. In this way, addressing nurse retention through career development and authentic leadership not only strengthens

internal operations but also serves as a mechanism for advancing health equity on a systemic level.

Limitations

Like any research project, this review has limitations that should be acknowledged. One challenge was that while the focus was on non-profit urban hospitals, some of the studies reviewed were more general or did not clearly distinguish between hospital types. This means the findings may not always translate directly to every non-profit setting. Also, many of the studies relied on self-reported data or cross-sectional designs, which can introduce bias or limit the ability to draw conclusions about long-term effects. Longitudinal research is needed to better understand how strategies like mentorship, CPD, and leadership support impact retention over time. Additionally, because the review only included English-language, peer-reviewed articles published between 2019 and 2024, it is possible that some relevant perspectives or global insights were excluded. Still, the consistency of themes across a range of settings and study designs gives strength to the overall conclusions.

Conclusion

The key takeaway from this study is that comprehensive career development initiatives, guided by the ANL framework, play a critical role in registered nurse retention and job satisfaction in non-profit urban hospitals. By implementing the recommendations outlined, healthcare organizations can enhance job satisfaction, reduce turnover rates, and ultimately improve patient outcomes. Future research should focus on exploring additional career development models and their long-term impact on workforce

stability, ensuring continuous advancements in healthcare management and nursing practice.

References

AbdELhay, E. S., Taha, S. M., El-Sayed, M. M., Helaly, S. H., & AbdELhay, I. S. (2025). Nurses retention: the impact of transformational leadership, career growth, work well-being, and work-life Balance. *BMC Nursing*, *24*(1), 1–15. https://doi.org/10.1186/s12912-025-02762-1

Al Zamel, L. G., Lim Abdullah, K., Chan, C. M., & Piaw, C. Y. (2020). Factors influencing nurses' intention to leave and intention to stay: An integrative review. *Home Health Care Management & Practice*, *32*(4), 218–228. https://doi.org/10.1177/1084822320931363

Alilyyani, B. (2022). The effect of authentic leadership on nurses' trust in managers and job performance: A cross-sectional study. *Nursing Reports*, *12*(4), 993–1003. https://doi.org/10.3390/nursrep12040095

Assi, H., Rayan, A., Nidal Fareed Eshah, Albashtawy, M., & Suhair Hussni Al-Ghabeesh. (2024). Nurse managers' authentic leadership and their relationship with work engagement among registered nurses. *Nursing Forum*, *2024*(1), 1–9. https://doi.org/10.1155/2024/7523906

Bae, S.-H. (2023). Comprehensive assessment of factors contributing to the actual turnover of newly licensed registered nurses working in acute care hospitals: A systematic review. *BMC Nursing*, *22*(1). https://doi.org/10.1186/s12912-023-01190-3

de Vries, N., Boone, A., Godderis, L., Bouman, J., Szemik, S., Matranga, D., & de Winter, P. (2023). The race to retain healthcare workers: A systematic review on factors that impact retention of nurses and physicians in hospitals. *INQUIRY: The*

Journal of Health Care Organization, Provision, and Financing, *60*(60). https://doi.org/10.1177/00469580231159318

Duru, D. C., & Hammoud, M. S. (2021). Identifying effective retention strategies for front-line nurses. *Nursing Management*, *29*(1). https://doi.org/10.7748/nm.2021.e1971

Eriksson, A., Vulkan, P., & Dellve, L. (2022). A case study of critical reasons behind hospital nurses turnover due to challenges across system levels. *Journal of Multidisciplinary Healthcare*, *Volume 15*(15), 1213–1224. https://doi.org/10.2147/jmdh.s363390

Flaubert, J. L., Menestrel, S. L., Williams, D. R., & Wakefield, M. K. (2021). *Supporting the health and professional well-being of nurses*. National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK573902/

Giordano-Mulligan, M., & Eckardt, S. (2019). Authentic nurse leadership conceptual framework. *Nursing Administration Quarterly*, *43*(2), 164–174. https://doi.org/10.1097/naq.0000000000000344

Giordano-Mulligan, M., Moran-Peters, J. A., & Eckardt, S. (2023). Perceptions of authentic nurse leader attributes among clinical nurses and nurse leaders. *JONA: The Journal of Nursing Administration*, *53*(2), 74–80. https://doi.org/10.1097/nna.0000000000001247

Goens, B., & Giannotti, N. (2024). Transformational leadership and nursing retention: An integrative review. *Nursing Research and Practice*, *2024*(1). https://doi.org/10.1155/2024/3179141

Haddad, L. M., Butler, T. J. T., & Annamaraju, P. (2023). *Nursing shortage*. National Library of Medicine; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK493175/

Hashemi, R., Sadeghi, A., Roshanaei, G., & Purfarzad, Z. (2025). The relationship between the leader empowering behaviors and work engagement: The role of psychological empowerment as a mediating variable. *BMC Nursing*, *24*(1). https://doi.org/10.1186/s12912-025-03321-4

Jun, K., Hu, Z., & Sun, Y. (2023). Impact of authentic leadership on employee turnover intention: Perceived supervisor support as mediator and organizational identification as moderator. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1009639

Kearns, T. (2021). The impact of continuing professional development on nurses' wellbeing and satisfaction. *Professioni Infermieristiche*, *74*(4), 256. https://doi.org/10.7429/pi.2021.744256b

Kelly, L. A., Gee, P. M., & Butler, R. J. (2021). Impact of nurse burnout on organizational and position turnover. *Nursing Outlook*, *69*(1), 96–102. https://doi.org/10.1016/j.outlook.2020.06.008

Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Future Business Journal*, *6*(1), 1–13. Springer. https://fbj.springeropen.com/articles/10.1186/s43093-020-00043-8

Kurtović, B., Gulić, P., Čukljek, S., Sedić, B., Smrekar, M., & Fičko, S. L. (2024). The commitment to excellence: Understanding nurses' perspectives on continuous

professional development. *Healthcare*, *12*(3), 379–379. https://doi.org/10.3390/healthcare12030379

Lantz, B., & Fagefors, C. (2025). Assessing factors associated with nurses leaving the profession: A secondary analysis of cross-sectional data. *International Journal of Nursing Studies Advances*, *8*, 100315. https://doi.org/10.1016/j.ijnsa.2025.100315

Mlambo, M., Silén, C., & McGrath, C. (2021). Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. *BMC Nursing*, *20*(62), 1–13. https://doi.org/10.1186/s12912-021-00579-2

Nurmeksela, A., Mikkonen, S., Kinnunen, J., & Kvist, T. (2021). Relationships Between Nurse Managers' Work Activities, Nurses' Job Satisfaction, Patient Satisfaction, and Medication Errors at the Unit Level: A Correlational Study. *BMC Health Services Research*, *21*(1), 296. https://doi.org/10.1186/s12913-021-06288-5

Peng, X., Ye, Y., Ding, X. (David), & Chandrasekaran, A. (2023). The impact of nurse staffing on turnover and quality: An empirical examination of nursing care within hospital units. *Journal of Operations Management*, *69*(7). https://doi.org/10.1002/joom.1245

Raso, R., Fitzpatrick, J. J., Masick, K., Giordano-Mulligan, M., & Sweeney, C. D. (2021). Perceptions of Authentic Nurse Leadership and Work Environment and the Pandemic Impact for Nurse Leaders and Clinical Nurses. *JONA: The Journal of Nursing Administration*, *51*(5), 257–263. https://doi.org/10.1097/nna.0000000000001010

Remtulla, R., Hagana, A., Houbby, N., Ruparell, K., Aojula, N., Menon, A., Thavarajasingam, S. G., & Meyer, E. (2021). Exploring the barriers and

facilitators of psychological safety in primary care teams: A qualitative study. *BMC Health Services Research*, *21*(1).

Salama, W., Abdou, A. H., Mohamed, S. A. K., & Shehata, H. S. (2022). Impact of Work Stress and Job Burnout on Turnover Intentions among Hotel Employees. *International Journal of Environmental Research and Public Health*, *19*(15). https://doi.org/10.3390/ijerph19159724

Shiri, R., El-Metwally, A., Sallinen, M., Pöyry, M., Härmä, M., & Toppinen-Tanner, S. (2023). The role of continuing professional training or development in maintaining current employment: A systematic review. *Healthcare*, *11*(21), 2900. https://pmc.ncbi.nlm.nih.gov/articles/PMC10647344/

Smokrović, E., Kizivat, T., Bajan, A., Šolić, K., Gvozdanović, Z., Farčić, N., & Žvanut, B. (2022). A Conceptual Model of Nurses' Turnover Intention. *International Journal of Environmental Research and Public Health*, *19*(13), 8205. https://doi.org/10.3390/ijerph19138205

Vázquez-Calatayud, M., Errasti-Ibarrondo, B., & Choperena, A. (2021). Nurses' continuing professional development: A systematic literature review. *Nurse Education in Practice*, *50*, 102963. https://doi.org/10.1016/j.nepr.2020.102963

Zurynski, Y., Ludlow, K., Testa, L., Augustsson, H., Herkes-Deane, J., Hutchinson, K., Lamprell, G., McPherson, E., Carrigan, A., Ellis, L. A., Novi, P., Smith, C. L., Richardson, L., Dammery, G., Singh, N., & Braithwaite, J. (2023). Built to last? Barriers and facilitators of healthcare program sustainability: a systematic integrative review. *Implementation Science*, *18*(1). https://doi.org/10.1186/s13012-023-01315-x

Appendix A: DHA Practice-Based Problem Literature Review Matrix

Author/ date	Theoretical/ conceptual framework	Research question(s)/ hypotheses	Methodology	Analysis & results	Conclusions	Implications for future research	Implications for practice	Empirical research? (Yes or No)
Eriksson, Vulkan, & Dellve (2022)	System Theory in Nursing	How do critical factors at various system levels interact to influence nurses' intentions to leave their jobs?	Case study involving qualitative interviews and surveys of assistant and registered nurses at a public hospital in Sweden, focusing on turnover intentions from 2012 to 2019.	Identified three main themes: 1) lack or loss of buffering factors; 2) not owning one's spare time; and 3) feeling undervalued and unheard by management. These factors critically contribute to nurses' turnover decisions.	Effective decision-making by hospital management must consider the interaction of supportive factors at the micro-level and decisions at higher organizational levels to reduce turnover.	Future research should investigate how leadership styles, particularly servant leadership, impact turnover intentions across different healthcare settings.	Healthcare organizations should foster supportive environments and involve staff in decision-making processes to improve retention and job satisfaction among nurses.	Yes
Smokrović, Kizivat, Bajan, Šolić, Gvozdanović, Farčić, & Žvanut (2022)	Turnover Intention Framework	What are the critical predictors of nurses' turnover intention?	Quantitative, non-experimental design with a sample of 308 registered nurses (RNs). Utilized the Multidimensional Work Motivation Scale (MWMS) and the Practice Environment Scale of the Nursing Work Index (PES-NWI).	The study identified two direct significant predictors of turnover intention: job satisfaction (OR = 0.23) and absenteeism (OR = 2.5). Indirect predictors include amotivation, identified regulation, intrinsic motivation, and managerial support.	The results highlight the importance of job satisfaction and the supportive role of nurse managers in reducing turnover intentions among nurses.	Future research should explore interventions aimed at enhancing job satisfaction and intrinsic motivation among nurses, as well as evaluate the impact of managerial support on turnover rates.	Healthcare organizations should implement strategies to improve job satisfaction and create supportive environments, recognizing the critical role of management in retaining nursing staff.	Yes
Haddad, Annamaraju, & Toney-Butler (2023)	Nursing Workforce Dynamics and Turnover Intention	What are the key factors contributing to the nursing shortage and its impact on healthcare delivery?	Comprehensive literature review of nursing workforce statistics and trends, analyzing data from multiple sources, including government reports and industry analyses.	Identified several critical issues: an aging population requiring more health services, an aging nursing workforce, high turnover rates, and inequitable distribution of nurses across regions. Projected	The nursing shortage is a multifaceted issue impacting patient care quality, safety, and healthcare costs. Immediate and strategic actions are essential to improve workforce retention and satisfaction.	Future research should focus on interventions to enhance nurse retention, the effects of workplace environments on turnover, and exploring innovative educational	Healthcare organizations must implement strategies to improve working conditions, empower nurses through leadership opportunities, and actively engage in recruitment and retention efforts to counter the impending	Yes

				shortfall of one million nurses needed by 2020 and continued demand for over 275,000 additional nurses by 2030.		pathways to expand the nursing workforce.	shortage. Emphasis on staffing ratios, support for nurse education, and addressing burnout is critical.	
Bae (2023)	Price's Conceptual Framework of Turnover	What factors contribute to the actual turnover of newly licensed registered nurses in acute care hospitals?	Systematic review of studies published from January 2000 to June 2021 across multiple databases, including CINAHL, Cochrane Library, and PubMed. Analyzed ten longitudinal studies selected from a total of 9,029 articles.	The turnover rates for newly licensed registered nurses ranged from 12% to 25%. Significant factors influencing turnover included health status (e.g., sleep, lifestyle), emotional exhaustion, job satisfaction, peer support, and intent to leave. Small, nonmetropolitan hospitals faced higher turnover rates.	Turnover among newly licensed registered nurses is influenced by personal health, work environment conditions, and hospital characteristics. Addressing these factors is critical for retention.	Future research should investigate specific interventions aimed at improving work conditions and supporting health among newly licensed nurses, particularly in small hospitals.	Healthcare organizations should implement supportive strategies, improve work environments, and focus on enhancing peer support and job satisfaction to reduce turnover rates among newly licensed registered nurses.	Yes
Kearns, T. (2021)	Continuing Professional Development (CPD)	What are the CPD needs of newly qualified nurses (NQNMs)?	Quantitative survey-based research	CPD enhances job satisfaction and retention among NQNMs.	CPD programs are essential for nurse retention.	Explore CPD strategies across diverse hospital settings.	Highlights the need for leadership to support CPD initiatives.	Yes
Mlambo, Silén, & McGrath (2021)	Lifelong Learning and Continuing Professional Development (CPD)	1. How do nurses experience and perceive continuing professional development? 2. What barriers do they face in engaging with CPD?	Metasynthesis of qualitative research literature, reviewing 25 articles that focus on nurses' experiences with CPD.	Identified five overarching themes: 1. Organizational culture shapes CPD conditions 2. Supportive environments are essential 3. Attitudes and motivation reflect professional values	Access to CPD should be made more attainable and relevant. Nurses' active engagement in CPD is vital for maintaining high standards of care through competent practice.	Further exploration of effective CPD interventions is necessary, especially in diverse healthcare contexts. Studies should examine how to effectively integrate CPD into nursing education and practice.	Organizations should adequately fund CPD programs and ensure they are accessible to all nursing staff. This will foster a culture of lifelong learning, improve retention rates, and enhance patient care outcomes.	Yes

				4. Barriers to CPD engagement 5. Perceived impact on nursing practice. CPD is highly valued by nurses and is crucial for enhancing patient care standards.				
Peng, Ye, Ding, & Chandrasekaran (2023)	Nurse Staffing and Quality of Care Framework	How does nurse staffing impact turnover and quality of care in hospital units, particularly in ICUs versus MedSurg units?	Empirical study using unit-level data from 2008 to 2017, analyzing nurse staffing, turnover rates, and patient care quality indicators like pressure ulcers.	Nurse staffing significantly affects turnover rates in ICUs, with higher turnover correlating with poorer care quality. The adverse effects are more pronounced in ICUs than in MedSurg units.	Hospital administrators should prioritize staffing in ICUs to maintain quality performance, as current staffing guidelines may be inadequate.	Future research should evaluate the efficacy of staffing guidelines specifically for ICUs and explore additional patient outcomes.	Emphasizes the importance of adequate nurse staffing to improve retention and quality of care, particularly in critical care settings.	Yes
Kurtović, Gulić, Čukljek, Sedić, Smrekar, & Ledinski Fičko (2024)	Continuous Professional Development (CPD) Framework	What are nurses' attitudes toward CPD, and what challenges do they encounter in their participation?	Cross-sectional study design with a sample of 151 nurses from University Hospital Centre. Data were collected using the "Professional Development of Nurses questionnaire (Q-PDN)" and analyzed using descriptive statistics, Kolmogorov–Smirnov test, Pearson's correlation, ANOVA, and t-test.	Average participation in CPD activities was 4.27 (±0.63). Statistically significant differences were found in CPD activity engagement between surgical and intensive care units compared to other departments. Nurses without managerial roles showed higher participation rates, though not statistically significant. Full-	There is a strong commitment to CPD among nurses, influenced by workplace roles and schedules. The study indicates a need for role-specific CPD programs to meet diverse needs effectively.	Future research should investigate the long-term effects of tailored CPD programs on nurse retention and patient care outcomes. Studies could also explore barriers to participation in CPD across different healthcare settings.	Organizations should implement adaptable CPD programs that consider the unique needs of nurses based on their roles and work schedules to enhance professional competence and patient care standards.	Yes

				time nurses perceived the importance of professional development more highly than part-time nurses.				
Vázquez-Calatayud, Errasti-Ibarrondo, & Choperena (2021)	Continuous Professional Development (CPD)	What are nurses' attitudes toward CPD, and what challenges do they face regarding participation?	Systematic literature review analyzing qualitative and quantitative studies related to nurses' experiences with CPD.	Identified key themes: nurses' motivations for CPD vary by career stage; support and opportunities from organizations are essential; work-family balance affects CPD engagement; higher CPD participation correlates with improved nurse retention.	Understanding nurses' perspectives on CPD is crucial for enhancing retention and job satisfaction. Organizations should tailor CPD programs to meet the diverse needs of nurses across different career stages.	Future research should explore the impact of role-specific CPD initiatives on retention rates and nurse satisfaction in various healthcare settings.	Organizations must provide adaptable CPD programs that reflect nurses' career stages, motivations, and personal circumstances to foster engagement and retention in the nursing workforce.	Yes
Salama et al. (2022)	Work Stress and Job Burnout Models	1. How do work stress and job burnout influence turnover intentions among hotel employees? 2. Does job burnout mediate the relationship between work stress and turnover intention?	Quantitative research using a structured survey targeting Egyptian hotel employees. Data were analyzed using Structural Equation Modeling (SEM) via AMOS software.	Work stress positively impacts turnover intentions ($\beta = +0.40$, $p < 0.01$) and job burnout ($\beta = +0.43$, $p < 0.01$). Job burnout partially mediates the effect of work stress on turnover intention. Stressful working conditions contribute to burnout, lowering job satisfaction and increasing turnover.	Hotel employees under high stress exhibit higher burnout, which significantly predicts turnover intentions. Addressing both burnout and work stress is critical for improving retention.	Future studies should explore industry-specific burnout interventions and test how support systems influence turnover across different sectors.	Organizations must create supportive work environments that reduce stress, offer mental health resources, and mitigate burnout to lower turnover rates. Empowerment strategies and stress management tools should be prioritized.	Yes
De Vries et al. (2023)	Job Satisfaction, Career Development	What factors influence nurse retention globally?	Mixed-methods systematic review	Retention depends on career development, job satisfaction, and work-life balance.	Tailored strategies are essential for specific contexts.	Study how cultural contexts influence nurse retention.	Provides insights for nurse-specific retention policies.	Yes

Al Zamel et al. (2020)	Job Satisfaction, Organizational Commitment	What factors affect nurses' decision to stay or leave?	Integrative qualitative review	Work-life balance, leadership, and job satisfaction significantly impact retention.	Leadership quality and culture are key to reducing turnover.	Study-specific leadership strategies in different contexts.	Offers practical guidance for improving hospital culture.	Yes
Giordano-Mulligan & Eckardt (2019)	Authentic Nurse Leadership (ANL)	How does ANL impact nurse retention?	Conceptual framework, qualitative interviews	Authentic leadership fosters trust, psychological safety, and satisfaction.	ANL improves nurse retention by enhancing workplace trust.	Validate ANL across diverse healthcare settings.	Suggests ANL as an effective tool for staff engagement.	No
Raso, Fitzpatrick, Masick, Giordano-Mulligan, & Sweeney (2021)	Authentic Nurse Leadership (ANL) and Healthy Work Environment (HWE)	How did the pandemic impact the relationship between nurses' perceptions of ANL and HWE?	Cross-sectional, correlational descriptive study involving over 5,000 nurses. Data collected using the Authentic Nurse Leadership Questionnaire and the Critical Elements of a Healthy Work Environment Scale.	Despite high pandemic impact, nurses perceived both ANL and HWE, but frontline nurses did not experience HWE as positively. The moderate correlation between ANL and HWE was confirmed.	ANL is essential for creating a healthy work environment, particularly during crises. Nurse leaders adapted to meet the leadership needs of clinical nurses during the pandemic.	Future studies should examine the long-term effects of ANL on nurse retention and patient outcomes in crisis situations.	Emphasizes the importance of authentic leadership in maintaining a positive work environment, particularly in challenging times. Organizations should prioritize leadership development to support clinical nurses.	Yes
Giordano-Mulligan, Moran-Peters, & Eckardt (2023)	Authentic Nurse Leadership (ANL)	How can authentic nurse leadership be measured from the perspective of nurse leaders?	Nonexperimental design with exploratory psychometric analysis to develop the Authentic Nurse Leadership Questionnaire for Nurse Leaders (ANLQ-NL). Sample of 188 nurse leaders from various US hospitals.	The ANLQ-NL instrument is valid and reliable, effectively aligning with the ANL conceptual framework and positively correlating with Healthy Work Environment (HWE) as measured by the Areas of Worklife Survey (AWS).	ANL attributes are crucial for fostering healthy work environments, especially in the context of the COVID-19 pandemic.	Future studies should investigate the application of the ANLQ-NL in various nursing education programs and its impact on nursing leadership development.	The validated ANLQ-NL can guide educational initiatives aimed at cultivating ANL attributes among nurse leaders, enhancing overall organizational health.	Yes
Assi, Rayan, Eshah, Albashtawy, & Al-Ghabeesh (2024)	Authentic Leadership and Work Engagement	How does authentic leadership demonstrated by nurse managers relate to work engagement	Cross-sectional correlational design using a sample of 238 registered nurses from a public hospital in Jordan. Data collection involved a demographic	A statistically significant positive correlation was found between authentic leadership and work engagement ($B = 0.34$, $t = 5.54$, $p <$	Higher levels of authentic leadership in nurse managers positively influence work engagement among registered nurses, emphasizing the critical role of	Future research should focus on longitudinal studies to assess the impact of authentic leadership training on nurse	Developing authentic leadership behaviors among nurse managers is essential for fostering work engagement, which can lead to improved job satisfaction and	Yes

		among registered nurses in Jordan?	questionnaire, the Authentic Leadership Questionnaire (ALQ), and the Utrecht Work Engagement Scale (UWES-17).	0.001). Authentic leadership accounted for 11% of the additional variance in work engagement beyond demographic factors such as age, education, and experience.	effective leadership in improving nurse outcomes.	managers over time and explore the relationship between authentic leadership and patient care outcomes.	retention among nurses. Organizations should implement leadership development programs to promote these behaviors.	
Alilyyani (2022)	Authentic Leadership Theory	What is the effect of authentic leadership on nurses' trust in managers and their job performance in Saudi Arabia?	Non-experimental, cross-sectional design with a sample of 116 registered nurses. Data was collected using the Authentic Leadership Questionnaire (ALQ) and Job Performance measures. Statistical analysis was performed using SPSS 28.0.1.1.	Authentic leadership positively affected trust in managers ($p < 0.001$), but no significant relationship was found between authentic leadership and job performance. Trust in managers was identified as a critical mediating factor between leadership and performance.	Authentic leadership fosters trust, which is essential for improving the work environment among nurses; however, it does not directly enhance job performance.	Future research should explore longitudinal studies to examine the lasting impact of authentic leadership on nurse performance and satisfaction, as well as assess the influence of cultural factors in different healthcare settings.	Developing authentic leadership qualities in nurse managers is crucial for building trust and fostering a supportive work environment, which can lead to improved staff morale and retention.	Yes
Duarte et al. (2021)	None	How does burnout influence nurse turnover?	Quantitative non-experimental study	Burnout leads to increased emotional exhaustion and organizational turnover.	Resilience-building programs reduce turnover linked to burnout.	Explore burnout reduction strategies through leadership.	Highlights the need for work environments that prevent burnout.	Yes
ANA (2024)	None	What are best practices for improving nurse retention?	Review of strategies and benchmarks	The ideal retention rate is 90%, but current retention is 70%.	Mentorship and career development improve retention.	Assess the long-term impact of mentorship programs.	Provides guidelines for mentorship and supportive environments.	No
ANA (2023)	None	What strategies effectively reduce nurse turnover, burnout, and improve nurse retention?	Analysis of industry reports and surveys on nurse retention and burnout.	The cost of hiring and training an RN range from $28,400 to $51,700, costing hospitals $3.6 to $6.5 million annually. Key contributors to nurse turnover	Addressing burnout and turnover requires improving workplace environments, providing mentorship programs, and	Future research should focus on longitudinal studies that measure the impact of wellness programs and mentoring	Organizations should offer flexible schedules, competitive salaries, loan repayment programs, and open communication channels to build sustainable teams.	No

				include burnout, lack of autonomy, inadequate work-life balance, and poor leadership. Critical retention strategies involve reducing mandatory overtime, providing career advancement opportunities, fostering workplace wellness programs, and improving salaries.	ensuring autonomy in clinical roles.	initiatives on nurse retention.	Improved retention strengthens care quality and patient outcomes.	
Duru & Hammoud (2021)	Leadership and Workforce Retention Models	What strategies can healthcare leaders use to reduce voluntary turnover of front-line nurses?	Case study approach with a qualitative design. Conducted semi-structured interviews with six senior leaders from a U.S. hospital and reviewed internal organizational documents to assess retention strategies.	Identified three main themes: job satisfaction, financial compensation, and effective communication. Notable strategies included: recognition points competitions, stay interviews, sign-on bonuses, tuition reimbursements, preceptor incentives, and shout-out boards for peer recognition.	Effective communication, shared governance, and competitive financial compensation are essential for improving nurse retention. Respect and recognition foster job satisfaction, reducing turnover.	Future studies should explore the long-term effectiveness of stay interviews and shared governance models in enhancing nurse retention.	Healthcare organizations should implement shared governance, prioritize effective communication, provide competitive financial benefits, and offer recognition-based incentives to boost nurse retention.	Yes

Appendix B: DHA Review Question Search Log

Inclusion Search Criteria	Exclusion Search Criteria
• Specific to nurse retention and turnover • Peer-reviewed articles • Studies published between 2019-2024 • Focus on registered nurses (RNs) • Articles focusing on nurse retention, job satisfaction, and career development within nonprofit or urban hospital settings • Research involving conceptual or theoretical frameworks such as System Theory, Turnover Intention Framework, CPD, and Authentic Leadership Theory • Studies discussing the impact of professional development programs (CPD) on nurse retention or job satisfaction • Research focusing on leadership strategies, including Authentic Nurse Leadership (ANL) and its impact on work environments • Studies focusing on healthcare worker retention and the role of leadership and organizational commitment • Articles exploring burnout prevention and work stress models related to healthcare professionals	• Articles not related to healthcare • Studies focusing on healthcare professionals other than nurses • Non-peer-reviewed articles • Articles published before 2019 • Research not related to nurse retention or leadership strategies • Articles that do not provide evidence-based outcomes or practical strategies • Studies that focus on technical aspects of nursing without addressing retention or job satisfaction • Studies focused solely on non-urban or for-profit healthcare settings • Studies focused on areas outside healthcare workforce dynamics, such as legal or administrative healthcare issues

Appendix C: DHA Appraisal Results Log

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
Alzahrani, M. S. J. (2022). Impact of Work Environment on Nurse's Retention at Hospital: Scoping Review	Level V, Good	• HSO Type: Non-profit urban hospitals (generalized hospital work environment insights applicable to non-profit settings). • Research Domain: Nursing workforce retention. • Specific Problem: The impact of work environment factors on nurse retention and job satisfaction.	• Career development opportunities, such as educational programs and mentorship, significantly influence nurse retention and satisfaction. • Nurse involvement in decision-making processes within hospital units enhances empowerment and job satisfaction. • Addressing issues such as workplace abuse, staffing inadequacies, and poor leadership creates a more supportive and attractive work environment. • Career mapping for nurses helps align individual goals with organizational opportunities, increasing retention.	• Studies analyzed themes including leadership, staffing, financial incentives, collegial relations, and career development. • Findings were synthesized qualitatively; specific metrics were not uniformly reported due to variability in study designs.	• Some studies included relied on self-reported data, which could introduce bias. • Lack of consistent tools across studies for assessing the work environment and retention outcomes. • Limited focus on non-profit-specific hospital settings; findings generalized from various hospital environments.
Ayalew, F., Kibwana, S., Shawula, S., Misganaw, E., Abosse, Z., van Roosmalen, J., et al. (2019). Understanding job satisfaction and motivation among nurses in public health facilities of Ethiopia: A cross-sectional study	Level IV, Good	• HSO Type: Public health facilities (insights relevant to resource-limited non-profit settings). • Research Domain: Nurse job satisfaction and motivation. • Specific Problem: Factors influencing job satisfaction and motivation among nurses in a low-resource setting.	• Key motivators of job satisfaction include recognition, professional advancement opportunities, equitable remuneration, and favorable job features. • Nurses with over 10 years of experience showed higher satisfaction levels, signaling the importance of tailored strategies based on career stage. • Job dissatisfaction was linked to inadequate recognition systems, limited career progression, and inequitable compensation.	• Satisfaction Levels: Composite mean scores for intrinsic and extrinsic motivational factors were 3.5 and 3.0, respectively (Likert scale: 1–5). • Adjusted Odds Ratios (AORs): Satisfaction significantly associated with remuneration (AOR = 2.04), recognition (AOR = 2.21), and professional advancement (AOR = 1.54). • Satisfaction rates were stratified by demographic factors	• Context limited to public health facilities in Ethiopia, which may not generalize to other regions or healthcare systems. • Self-reported data may introduce bias. • Cross-sectional design precludes causal inference.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
				(e.g., gender, age, years of experience).	
Kannan, G., Kulandai, A., & Ramachandran, M. (2023). Three decades of nurses' talent retention: A bibliometric analysis	Level V, High	• HSO Type: Broadly applicable to various healthcare settings, including non-profit urban hospitals. • Research Domain: Nurse retention strategies and associated outcomes. • Specific Problem: Addressing nurse turnover through effective leadership, diversity management, and supportive workplace practices.	• Magnet hospitals demonstrate the importance of strong nursing leadership and professionalism in enhancing retention. • Transformational leadership styles, supportive work environments, and resilience-building initiatives significantly improve nurses' intentions to stay in their roles. • Diversity management initiatives promote inclusivity, correlating with higher job satisfaction and organizational outcomes. • Mandating appropriate nurse-patient staffing ratios positively impacts retention and care quality. • Psychological well-being, including resilience influenced by collaboration and coping strategies, is crucial for retention efforts.	• Annual growth rate of research: 11.46%. • Average document citation rate: 43.26. • International collaboration observed in 17.56% of studies, indicating global relevance. • Key focus areas include leadership practices, diversity initiatives, and resilience strategies.	• Findings derived from a global dataset may require contextual adaptation for non-profit urban hospitals. • Bibliometric analysis focuses on trends and patterns rather than empirical evidence, limiting direct application to specific settings.
Nashwan, A. J. (2023). The Vital Role of Career Pathways in Nursing: A Key to Growth and Retention	Level V, Good	• HSO Type: General applicability across healthcare organizations, with specific examples from Qatar, the UK, and the US. • Research Domain: Professional development and retention of nurses. • Specific Problem: Addressing staff retention and mitigating nursing shortages by implementing structured career pathways.	• Career pathways foster personal and professional growth by offering structured, long-term advancement opportunities. • Clear career pathways enhance nurse satisfaction, promote retention, and reduce turnover. For example, hospitals with professional development programs experience up to a 34% decrease in nurse turnover rates (AACN study). • Examples of effective frameworks include:	• Turnover rate reduction: 34% decrease linked to professional development programs (AACN). • Examples of programs demonstrate measurable impact on nurse satisfaction and career progression.	• Editorial in nature: Relies on synthesis of literature and examples rather than original empirical research. • Context-specific examples (e.g., Hamad Medical Corporation, NHS frameworks) may not fully translate to non-profit urban hospital settings.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			• Magnet Recognition Program® (US): Fosters nursing excellence. • NHS Preceptorship Framework and Clinical Academic Careers Framework (UK): Supports career advancement. • Hamad Medical Corporation Framework (Qatar): Provides structured guidance for career progression. • Professional development programs help attract new talent and retain experienced nurses, combatting nursing shortages. • Promoting diversity, resilience, and skill acquisition through career pathways builds a more adaptable and capable workforce.		
Shiri, R., El-Metwally, A., Sallinen, M., Pöyry, M., Härmä, M., & Toppinen-Tanner, S. (2023). The Role of Continuing Professional Training or Development in Maintaining Current Employment: A Systematic Review	Level III, Good	• HSO Type: General applicability to healthcare and other sectors • Research Domain: Employee retention, professional development, and job satisfaction • Specific Problem: Investigating the impact of continuing professional development (CPD) on employee retention and preventing labor force exit.	• Impact of CPD: Continuing professional development/training is linked to lower risk of leaving current employment, including reduced employee turnover, job changes, and early retirement. • Specific Findings: • Job Retention: CPD opportunities increase intention to stay and decrease intention to leave a job. • Demographic Differences: CPD is more important for retaining younger employees than older employees. • Mediating Factors: Job satisfaction and commitment mediate the relationship between CPD and intention to leave the job.	• Studies measured turnover intention, job satisfaction, and employee retention. • Findings suggest CPD participation reduces turnover intention and increases job satisfaction.	• Predominantly cross-sectional studies (23 out of 27), with small sample sizes. • Lack of adjustment for confounders in a third of the studies. • Few studies investigated underlying mechanisms (e.g., how CPD affects job retention). • Limited evidence for older workers and lack of quasi-experimental or longitudinal studies.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			• Access to CPD: Scarcity of CPD opportunities in rural or remote areas due to financial constraints. • Challenges: Budget cuts during economic crises limit access to CPD, as seen with rural Australian healthcare workers' satisfaction with CPD access dropping significantly between 2005 and 2008.		
Mohamed, Z., & Al-Hmaimat, N. (2023). The effectiveness of nurse residency programs on new graduate nurses' retention: Systematic review	Level III, Good	• HSO Type: Healthcare organizations, specifically hospitals or medical institutions • Research Domain: Nurse retention, workforce development, and training programs • Specific Problem: Investigating the effect of Nurse Residency Programs (NRP) on new graduate nurses' retention rates compared to those who did not participate in such programs.	• Impact of NRP on Retention: Nurse Residency Programs showed promise in improving retention rates among new graduate nurses, especially within the first 12 months of employment. • Retention and Competence: The programs helped new nurses feel more competent, supported, and confident in their roles, which likely contributed to increased retention rates. • Limitations in Retention Beyond First Year: Further research, including randomized control trials, is needed to understand long-term retention beyond the initial year of employment.	• Studies included focused on retention rates and turnover among new graduate nurses participating in NRP versus those who did not. • No specific quantitative measures were provided, as the review focused on qualitative synthesis.	• Low Number of Studies: Only 5 studies were included in the final review after screening 189 studies. • Methodological Heterogeneity: The variability in study designs prevented a meta-analysis and limited the ability to generalize findings. • Bias: Risk of bias was assessed using the Cochrane ROBINS-I tool, but details of bias in individual studies were not specified. • Limited Scope: The review primarily focused on short-term retention (first 12 months), with a need for further investigation on retention after the first year.
Yamamoto, K., Nasu, K., Nakayoshi, Y., & Takase, M. (2023). Sustaining the nursing workforce - exploring enabling and motivating factors for the retention of returning nurses: a qualitative descriptive design.	Level III, Good	• HSO Type: Healthcare institutions, hospitals • Research Domain: Nursing workforce retention, particularly focusing on returning nurses • Specific Problem: Exploring factors that facilitate the retention of nurses who return to work after a significant break from practice.	• Enabling Factors: 1. Work-life Balance Support: Nurses returning to work emphasized the importance of conditions that help them balance work and personal life. 2. Acknowledgment and Career Growth: Nurses appreciated workplaces that recognized their past experience and provided opportunities for career growth as experienced professionals.	Qualitative analysis through semi-structured interviews, using inductive analysis to identify enabling and motivating themes.	• Sample Size: The study included a small sample (15 nurses), which limits the generalizability of findings. • Sample Bias: Limited to a single country (Japan) and convenience sampling, which could affect transferability to broader populations. • Limited Scope: The study did not explore longitudinal effects or

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			• Motivating Factors: 1. Pride and Contribution: Returning nurses felt a sense of pride in reconnecting with and contributing to society. 2. Confidence and Professional Development: Incremental professional development and envisioning future growth were key to nurturing nurses' confidence in their roles. 3. Enrichment of Life: The return to work was seen as enriching for both the nurses and their families.		provide in-depth insights into long-term retention strategies.
Pressley, C., & Garside, J. (2023). Safeguarding the retention of nurses: A systematic review on determinants of nurse's intentions to stay.	Level III, High	• HSO Type: Healthcare sector, focusing on nursing workforce retention • Research Domain: Nurse retention, workforce sustainability • Specific Problem: Investigating the factors influencing registered nurses' intentions to stay in the healthcare sector and the role of job satisfaction and organizational commitment.	• Key Findings: 1. Job Satisfaction: Nurses are more likely to stay in their jobs when they have high job satisfaction, which is influenced by environmental, relational, and individual factors. 2. Organizational Commitment: Strong commitment to the organization is a key factor influencing retention. 3. Generational Differences: Nurses' needs and factors affecting their intention to stay vary by age and career stage. Younger and older nurses may have different priorities regarding workplace satisfaction, job security, and career advancement. • Conceptual Framework: The review synthesizes a Nurse Intention to Stay theoretical framework that includes protective factors, which can guide the	Data synthesis based on systematic review methodology, with a narrative approach due to methodological differences across included studies.	• Language Limitation: Only English-language studies were included. • Contextual Variations: Wide variations in study designs, contexts, and outcome measurement methods prevented meta-analysis. • Bias Potential: Some studies had methodological issues that could introduce bias, though efforts were made to mitigate this by selecting studies with a Cronbach $\alpha > 0.70$.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			development of retention strategies. The factors are categorized by organizational, relational, and individual dimensions.		
Bera, M. A. (2022). Professional development: Five strategies to support nurses' growth	Level V, Good	• HSO Type: General healthcare organizations, applicable to non-profit urban hospitals. • Research Domain: Nurse professional development and leadership. • Specific Problem: Strategies to enhance nurse growth, reduce turnover, and improve job satisfaction.	• Motivational Interviewing: Helps understand individual nurses' goals, building trust and autonomy in professional development, fostering career growth. • Bringing Education to Nurses: Offering in-house continuing education and online resources makes professional development more accessible, reducing barriers like time and cost. • Encouraging Shared Governance: Increases nurse engagement and ownership, leading to higher job satisfaction and professional development. • Promoting Self-care: Fostering a healthy work-life balance reduces burnout, which is a critical factor in job satisfaction and retention. • Creating a Mentorship Program: Provides career guidance and emotional support, which can improve retention and foster job satisfaction among less experienced nurses.	Strategies discussed include qualitative measures such as nurse engagement, career goal achievement, and burnout reduction. Specific metrics or quantitative data were not provided.	• Lacks empirical data or research findings to support the strategies discussed, being based on expert opinion and practice experience. • May not be directly applicable to all non-profit urban hospital settings, as the article covers a general nursing context.
Fitzpatrick, J. M., Bianchi, L. A., Hayes, N., Da Silva, T., & Harris, R. (2022). Professional development and career planning for nurses working in care homes for older people: A scoping review	Level III, Good	• HSO Type: Care homes for older adults, though findings are applicable to non-profit urban hospitals as well. • Research Domain: Nurse professional development, career planning, and retention. • Specific Problem: Strategies for enhancing career development and	• Access to Structured Learning: Emphasizes the importance of providing structured learning opportunities focused on skills relevant to nursing frail older adults, which supports both career development and retention. • Supportive Working Environment: A supportive	The review did not provide specific quantitative measures but emphasized qualitative findings regarding nurse satisfaction, career retention, and	• The review was limited to four databases and excluded grey literature, which could have left out valuable sources. • The focus on care homes limits direct applicability to urban hospitals, though many recommendations are relevant across healthcare settings.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
		professional growth for nurses working in care homes, with implications for retention and job satisfaction.	environment, including adequate staffing, study time, and flexible working hours, is essential to career development and nurse retention. • Leadership Development: Integrating leadership development opportunities helps nurses grow professionally and increase job satisfaction. • Career Planning: Structured career planning and pathways, such as leadership or specialized clinical roles (e.g., dementia care), are vital for long-term career satisfaction and retention. • Stigma in Care Home Nursing: The review suggests addressing stigma around care home nursing to ensure all nurses have access to professional development opportunities, which can be applied to similar settings like urban hospitals.	engagement with development programs.	• The review did not evaluate the outcomes of the professional development programs themselves, only the factors that support or challenge them.
Kallio, H., Liljeroos, H., Koivunen, M., Kuusisto, A., Hult, M., & Kangasniemi, M. (2024). Organizational Support for Nurses' Career Planning and Development: A Scoping Review	Level V, High	• HSO Type: Healthcare organizations providing nursing services, focusing on organizational support for career planning and development. • Research Domain: Organizational support for career development and planning in nursing. • Specific Problem: Identifying organizational structures and practices that support nurses' career planning and development, particularly to enhance workforce engagement, retention, and service quality.	• Strategic Organizational Support: Successful career development programs require organizational strategies that ensure adequate resources, purposeful vacancies, and a structured framework based on qualification criteria and equal assessment. • Interpersonal and Collaborative Support: Emphasized the importance of interpersonal support and multilayered interprofessional collaboration within organizations to facilitate career planning. • Link to Organizational Goals: Career planning and development were found to be closely tied to the	The review synthesized various findings without specific quantitative metrics but emphasized qualitative outcomes such as nurse motivation, engagement, and career satisfaction, and organizational retention rates.	• Methodological Limitations: The review was limited by the methodology used in the studies included, particularly the qualitative research, which varied in quality. • Search Limitations: The study only included articles published in English, and there is potential for relevant studies to have been excluded due to the search criteria, particularly those that might have been published in other languages. • Selection Bias: The review relied on title-based search criteria, which may have inadvertently excluded relevant papers.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			organization's objectives, including workforce engagement and the delivery of high-quality patient care. • Clear Career Structures: Clear, transparent career development models, including structured frameworks for competency assessment, were found to be central for ensuring equal career progression. • Employee and Organizational Benefits: Career planning and development provided mutual benefits, improving nurses' competencies while enhancing organizational capacity to provide high-quality care. • Individual Role in Career Development: Nurses' own ambitions, readiness, and career awareness are essential in contributing to their career progression. Organizational support alone is not enough; nurses must also actively engage in their own career development.		
Alshammari, F., & Alenezi, A. (2023). Nursing workforce competencies and job satisfaction: The role of technology integration, self-efficacy, social support, and prior experience	Level III, Good	• HSO Type: Healthcare organizations in the Kingdom of Saudi Arabia, focusing on nursing workforce competencies and job satisfaction. • Research Domain: The role of technology integration, self-efficacy, social support, and prior experience in enhancing nursing workforce competencies and job satisfaction. • Specific Problem: Examining the influence of nursing education and	• Impact of Technology Integration: The study found that nursing education and the integration of technology significantly improved nursing workforce competencies and job satisfaction. • Mediating Role of Self-efficacy and Social Support: Self-efficacy and social support were important mediators in the relationship between nursing education,	• Survey Instrument: The study employed a standardized online survey with scales measuring nursing workforce competencies, job satisfaction, self-efficacy, social support, and prior experience. • Analysis Methods: Descriptive statistics, Pearson correlation, multiple regression	• Geographical Limitation: The study was conducted in a single geographical area (Kingdom of Saudi Arabia), limiting the generalizability of the findings to other regions or countries. • Cross-sectional Design: The study's cross-sectional design prevents the establishment of causal relationships between variables. • Self-reported Measures: The use of self-reported measures for job

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
		technology integration on competencies and job satisfaction, while considering the mediating and moderating roles of self-efficacy, social support, and prior experience.	technology integration, and job satisfaction. • Moderating Role of Prior Experience: Prior experience moderated the relationship between nursing education, technology integration, and workforce competencies. • Practical Implications: Recommendations for nursing organizations include investing in technology to enhance nursing education and focusing on fostering self-efficacy and social support within the workforce. Programs should also consider the prior experience of nurses to optimize training and development.	analysis, and structural equation modeling (SEM) using SPSS 23 and SmartPLS 3.0 software.	satisfaction and competencies could introduce bias, such as social desirability effects. • Unexplored Moderating Variables: The study did not consider other potential moderating factors, such as age, gender, or educational background, which may impact the outcomes.
Allegrow. (2024). Nurse Retention Strategies	Level V, Good	• HSO Type: Healthcare organizations addressing nurse retention challenges. • Research Domain: Nurse retention strategies and their impact on reducing turnover rates. • Specific Problem: Addressing high turnover rates among nurses and exploring strategies to improve retention, focusing on organizational practices and nurse well-being.	**Retention Importance**: Nurse retention is vital for ensuring the stability of healthcare organizations, enhancing patient care quality, and preventing the negative effects of high turnover, such as burnout, increased workloads, and operational challenges. **Common Reasons for Nurse Attrition**: Common reasons include burnout, stress, workload, inadequate compensation, lack of career advancement, poor work-life balance, lack of management support, and negative workplace culture. **Effective Retention Strategies**: 1. Promoting work-life balance through flexible scheduling and sufficient time off.	N/A: The blog post does not present original research but lists best practices and strategies based on existing knowledge.	• **Lack of Original Research**: The blog post does not provide empirical data or research findings, relying on existing knowledge and practices. • **General Applicability**: The strategies discussed may vary in effectiveness across different healthcare settings and regions. • **No Data on Impact**: The blog does not present data on how effective these strategies are in real-world settings.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			2. Enhancing compensation and benefits to remain competitive. 3. Providing opportunities for career advancement and professional development. 4. Fostering a positive workplace culture with respect, inclusivity, and collaboration. 5. Implementing wellness programs to reduce stress and support physical and mental health. 6. Ensuring adequate staffing levels to avoid burnout. 7. Recognizing and rewarding contributions regularly. 8. Investing in strong management and leadership development. 9. Supporting continuing education and certifications. 10. Encouraging employee feedback and involvement in decision-making. 11. Offering mentorship and peer support programs. 12. Providing flexible scheduling options to improve work-life balance.		

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
Gularte-Rinaldo, J., Baumgardner, R., Tilton, T., & Brailoff, V. (2023). Mentorship ReSPeCT Study: A Nurse Mentorship Program's Impact on Transition to Practice and Decision to Remain in Nursing for Newly Graduated Nurses	Level III, High	• HSO Type: Healthcare organizations and nursing leadership focusing on the support of newly graduated nurses (NGNs). • Research Domain: Mentorship programs, nurse retention, and professional development. • Specific Problem: Addressing the high turnover rates among newly graduated nurses (NGNs) and the impact of mentorship on retention, self-confidence, professional communication, and transition to practice.	**Mentorship Impact**: The study found that the Be1Support1 mentorship program, which pairs NGNs with culturally congruent, experienced nurse mentors, had a positive impact on the following areas for mentees: 1. **Decision to Remain in Nursing**: Mentees showed an increased likelihood of staying in the nursing profession. 2. **Self-confidence**: Mentorship improved mentees' self-confidence in their role as nurses. 3. **Problem-solving**: Mentees demonstrated better problem-solving skills related to clinical and professional challenges. 4. **Professional Communication**: There was a significant improvement in mentees' communication skills, aiding their interactions with patients and colleagues. 5. **Transition to Practice**: Mentorship facilitated a smoother transition from nursing education to professional practice, contributing to increased job satisfaction and reduced stress.	• Self-reported measures of mentee self-confidence, problem-solving ability, professional communication, and transition to practice. • Retention rate: Mentees were more likely to remain in the nursing profession compared to their non-mentored peers.	• Sample Size: The study focused on 96 mentees, which may limit the generalizability of the findings to a larger population. • Program-Specific: The study evaluated a specific mentorship program (Be1Support1), so results may not apply universally to all mentorship models. • Self-Reported Data: Results are based on mentees' self-reported measures, which may introduce bias or inaccuracies.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			Long-term Benefits: The benefits of mentorship continued to improve over a two-year period, indicating sustained positive impacts on retention and professional development. **Implications**: The study emphasizes the importance of culturally congruent, individualized mentorship programs in addressing the nursing shortage, improving retention, and enhancing the overall quality of the healthcare workforce.		
Hakvoort, L., Dikken, J., Cramer-Kruit, J., Molendijk-van Nieuwenhuyzen, K., van der Schaaf, M., & Schuurmans, M. (2022). Factors that influence continuing professional development over a nursing career: A scoping review. Nurse Education in Practice, 65, 103481.	Level III, High	• HSO Type: Healthcare organizations addressing continuing professional development (CPD) needs of nurses across various career stages. • Research Domain: Continuing professional development (CPD) in nursing and its impact on nurse retention, job satisfaction, and career progression. • Specific Problem: Identifying the factors influencing CPD in nursing across different career stages and proposing interventions to support ongoing professional development.	**Factors Influencing CPD**: 1. **Personal and Contextual Facilitators and Barriers**: Factors affecting CPD vary by career stage, including personal motivations and external contextual challenges (e.g., lack of resources, time constraints). 2. **Newly Graduated Nurses (NGNs)**: NGNs face anxiety, stress, and insecurity, which affect their ability to access CPD. They need supportive work environments and empowerment to engage in learning activities. 3. **Experienced Nurses**: This group pursues CPD for career advancement and patient care, but they encounter barriers such as inadequate	N/A: The scoping review synthesizes findings from various studies but does not include original empirical measurements or metrics.	• Diversity of Settings: The studies included in the review cover diverse settings and time periods, which may influence the generalizability of findings. • Lack of Concrete Recommendations for Practice: While the review identifies important factors, it lacks detailed recommendations for how to create positive learning environments that meet the CPD needs of all nurses.

Author, date, and title	Evidence level and quality rating	Focus: HSO type, research domain, and specific problem being addressed	Findings that help answer the review question(s)	Metrics and measures if used	Source limitations
			access to CPD resources, lack of role models, and insufficient managerial support. 4. **Nurses with Ambitions for Advanced Roles**: Barriers to CPD for advanced roles include nursing culture focusing on direct patient care, limited role clarity for academic positions, and lack of infrastructure for clinical-academic career integration. **Structural and Organizational Barriers**: Across all career stages, lack of access to CPD resources and organizational support were major barriers. Developing strong leadership, supportive infrastructures, and collaborative partnerships between nurses, employers, and educational institutions are essential for successful CPD.		

Appendix D: DHA Thematic Analysis Results

Author(s) and date	Findings with initial codes	Preliminary themes
Alzahrani, M. S. J. (2022)	• Career development opportunities, such as educational programs and mentorship, significantly influence nurse retention and satisfaction. • Nurse involvement in decision-making processes enhances empowerment and job satisfaction. • Addressing workplace abuse, staffing inadequacies, and poor leadership creates a more supportive work environment.	• Career development: Includes structured learning pathways, mentorship programs, and access to advanced certifications. • Empowerment through decision-making: Promotes autonomy, participative management, and shared governance. • Supportive workplace: Focuses on addressing systemic challenges, fostering a positive culture, and building resilience. • Professional recognition: Encompasses peer acknowledgment, awards, and appreciation by management. • Career advancement: Supports leadership development, access to specialty roles, and continued education. • Equitable pay structures: Highlights fair compensation practices and salary transparency. • Leadership influence: Encourages transformational leadership, effective communication, and mentoring. • Inclusive workplace practices: Incorporates policies for diversity, equity, and belonging. • Staffing adequacy: Focuses on optimal nurse-patient ratios and workload balance. • Career pathway structuring: Details clear progression plans, role hierarchies, and leadership pipelines. • Professional development programs: Supports on-the-job training, scholarships, and academic partnerships. • Skill-building and diversity: Emphasizes inclusivity, resilience training, and interdisciplinary collaboration.
Ayalew, F., Kibwana, S., Shawula, S., Misganaw, E., Abosse, Z., van Roosmalen, J., et al. (2019)	• Recognition, professional advancement opportunities, and equitable remuneration are key motivators of job satisfaction. • Nurses with over 10 years of experience show higher satisfaction levels, emphasizing tailored strategies. • Dissatisfaction stems from inadequate recognition systems and limited career progression.	
Kannan, G., Kulandai, A., & Ramachandran, M. (2023)	• Transformational leadership styles and supportive work environments enhance retention. • Diversity management initiatives promote inclusivity and job satisfaction. • Mandating nurse-patient staffing ratios positively impacts retention and care quality.	
Nashwan, A. J. (2023)	• Structured career pathways enhance satisfaction and retention, reducing turnover by up to 34%. • Programs like the Magnet Recognition Program® and NHS Preceptorship Framework support career development. • Diversity, resilience, and skill acquisition are critical in retaining nursing staff.	
Shiri, R., El-Metwally, A., Sallinen, M., Pöyry, M., Härmä, M., & Toppinen-Tanner, S. (2023)	• Continuing professional development (CPD) links to higher retention and reduced turnover intention. • Job satisfaction and commitment mediate the relationship between CPD and retention. • Younger employees value CPD more for retention than older employees.	
Mohamed, Z., & Al-Hmaimat, N. (2023)	• Nurse residency programs (NRPs) improve retention rates among new graduate nurses. • NRPs increase new nurse competence, confidence, and support within the first 12 months. • Long-term retention strategies beyond the first year require further research.	

Author(s) and date	Findings with initial codes	Preliminary themes
Pressley, C., & Garside, J. (2023)	• High job satisfaction correlates with retention and organizational commitment. • Organizational commitment varies by generational and career-stage priorities. • Protective factors for retention include relational, organizational, and individual dimensions.	• Ongoing professional training: Advocates for regular CPD, workshops, and certifications. • Job satisfaction as a retention mediator: Connects employee satisfaction to loyalty and reduced turnover. • Generational focus in CPD strategies: Tailors programs to meet diverse generational needs and preferences. • Residency programs for skill-building: Focuses on structured onboarding, mentorship, and simulation training. • Support for early-career nurses: Emphasizes peer support, gradual responsibilities, and counseling services. • Competency-focused retention strategies: Highlights measurable outcomes like skills validation and certification. • Generational retention strategies: Considers customized benefits, mentorship for newer staff, and phased retirement plans for senior nurses. • Organizational commitment: Builds on alignment with values, mission, and engagement activities. • Relational support structures: Includes team-building efforts, conflict resolution mechanisms, and strong peer networks. • Work-life balance: Supports flexible schedules, remote work options, and personal-life accommodations. • Recognition of prior experience: Highlights valuing experienced nurses for mentoring roles and advanced positions. • Incremental professional development: Focuses on tailored re-entry training programs and confidence-building initiatives.
Yamamoto, K., Nasu, K., Nakayoshi, Y., & Takase, M. (2023)	• Work-life balance support is critical for nurses returning after career breaks. • Recognizing past experience and offering career growth opportunities increase satisfaction. • Returning nurses value incremental professional development to rebuild confidence.	
Fitzpatrick, J. M., Bianchi, L. A., Hayes, N., Da Silva, T., & Harris, R. (2022)	• Career planning enhances nurse retention and satisfaction in long-term care settings. • Leadership development and specialized roles are critical for career growth. • Addressing stigma in care home nursing improves job satisfaction.	
Bera, M. A. (2022)	• Motivational interviewing fosters autonomy. • In-house/online education improves accessibility. • Shared governance increases engagement. · Mentorship enhances retention. • Work-life balance reduces burnout.	
Alshammari, F. & Alenezi, A. (2023)	• Technology integration improves competencies and satisfaction. • Self-efficacy and social support mediate outcomes. • Prior experience moderates training effectiveness.	
Allegrow (2024)	• Retention requires flexible scheduling, competitive pay, wellness programs, and mentorship. • Attrition drivers: burnout, workload, poor culture. • Effective strategies: Recognition, leadership development.	
Gularte-Rinaldo, J. et al. (2023)	• Culturally congruent mentorship improves retention and confidence. • Long-term benefits over 2 years. • Smooth transition to practice reduces stress.	

Author(s) and date	Findings with initial codes	Preliminary themes
Hakvoort, L. et al. (2022)	• CPD barriers vary by career stage (e.g., anxiety for new nurses, resource gaps for experienced). • Structural barriers hinder CPD across all stages. • Recommendations: Leadership development, partnerships, supportive infrastructures.	• Career planning: Incorporates structured pathways for leadership and specialization. • Leadership development: Promotes training for future nurse leaders in care settings. • Stigma reduction: Encourages awareness campaigns to elevate the status of long-term care nursing. • Organizational support: Provides mentorship, resources, and fair promotion opportunities. • Transparent career frameworks: Develops competency-based assessments and equal access to advancement. • Interprofessional collaboration: Encourages teamwork and shared decision-making to foster loyalty.
Kallio, H., Liljeroos, H., Koivunen, M., Kuusisto, A., Hult, M., & Kangasniemi, M. (2024)	• Organizational support enhances nurse career planning and engagement. • Transparent career frameworks and interprofessional collaboration improve retention. • Aligning career goals with organizational objectives strengthens nurse commitment.	

Appendix E: Final Concept/Thematic Map