Supporting Nurses to Increase Retention: A Literature Review

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Abstract

Background: Nurse retention has become vital to ensure that healthcare settings have a sufficient number of nurses who are confident and knowledgeable in providing safe patient care. Factors that influence nurses to leave their current jobs include self-care, relationships with peers, interprofessional communication, knowledge base, leadership team, and professional development.

Objectives: The objectives were to conduct a comprehensive review of the related literature to examine recent findings related to supporting nurses to increase retention, and to identify methodological challenges and the implications of new evidence for future studies.

Design: A comprehensive search of the recent literature related to supporting nurses to increase retention was undertaken to summarize relevant findings published in the past 12 years.


Review methods: Keyword searches were conducted for publications published between 2006 and 2018 that examined nurse retention in all healthcare settings, both within the United States and internationally. Literature findings are presented using an integrative approach and a table format to report individual studies.

Results: From 100 citations or abstracts that were initially scanned for content relevance, ten studies were included in this summary review. The majority of studies focus on new nurses and the determinants of nurse retention. Recent studies offer insight into generational factors that should be considered in creating nurse retention programs.

Conclusions: Primary factors affecting nurses’ decisions to stay at an organization include job satisfaction, nurse self-concept, and burnout. The implementation of nurse residency programs
and mentor programs in institutions that employ new nurses has been shown to reduce turnover rates, increase the quality of patient care, and empower nurses in professional development. The existing literature supports the use of mentor programs and encourages their implementation in healthcare institutions. Longitudinal research is needed to produce new evidence of the relationship between mentor programs and nurse retention, the impact of these programs on cost, and impact on patient outcomes.

*Keywords:* job satisfaction, nurse, retention, turnover
Introduction

The current healthcare climate, policies and generational differences in the nurse workforce appear to be contributing to a potential nurse shortage in the next 20 years (Hayes et al., 2006). Nurse retention has become vital to ensure that healthcare settings have a sufficient number of nurses who are confident and knowledgeable in providing safe patient care. Recent literature supports the need to retain nurses in their chosen careers in order to ensure a sustainable workforce that can deliver safe patient care (Trossman, 2013). Mills, Wood, Harrison, Chamberlain-Salaun, and Spencer (2017) recognized that one of the biggest contributors to nurses leaving the field in the first five years of their careers is nurse self-concept (NSC), defined as the nurse’s professional identity. NSC is the nurse’s perception of professional self, work performance, and confidence (Mills et al., 2017).

Other factors that influence nurses to leave their current jobs include self-care, relationships with peers, interprofessional communication, knowledge base, leadership team, and professional development (Jones & Ramsbottom, 2017; Mills et al., 2017). Hayes et al. (2012) acknowledged that NSC and job satisfaction depend on each nurse’s prioritized needs. The needs correlate with the generation to which the nurse belongs. In developing plans or programs that help organizations retain nurses, Hayes et al. (2012) pointed out the importance of providing interventions appropriate to different generations.

The average cost of turnover for a bedside nurse is $36,000 to $48,000, and the average cost of replacing a specialty nurse is between $82,000 to $88,000 (Trossman, 2013). Turnover in health care can be external or internal, with nurses leaving the organization or transferring to another unit within the organization (Hayes et al., 2012).
The purpose of this literature review is to identify effective methods of fostering nurse self-concept, increasing job satisfaction, and confidence in providing safe care to patients, with the goal of increasing nurse retention.

**Search Strategy**

A review of current evidence in the literature was performed using the Cumulative Index to Nursing and Allied Health Literature (CINAHL), OVID and Pubmed. Key terms included in the search were: *nurse, nurse retention, job satisfaction, nurse retention and job satisfaction, nurse turnover, nurse turnover and job satisfaction, and nurse self-concept*. Evidence was limited to English language articles published between 2006 and 2018. The articles reviewed in this paper were chosen if they demonstrated a correlation between job satisfaction and nurse turnover, demonstrated a methodology to retain nurses in any specialty, demonstrated positive outcomes of an intervention, and if results could be generalized to nurse populations internationally. From the initial yield of 100 articles, ten were selected for this review because of their relevance to the purpose of the literature review.

**Critical Appraisal of Evidence**

**Appraisal Tools**

The *Johns Hopkins Non-Research and Research Evidence Appraisal Tool* (Dearholt & Dang, 2012), and *U.S. Preventative Services Task Force* (Grade Definitions, 2018) were used to appraise the strength of evidence and quality of the studies included in this review. These tools assist with the critique of the level and quality of evidence, indicating the relevance of the literature the research problem.

**Review of the Evidence**
Factors influencing nurse retention. Several studies have explored why nurses leave their jobs. Some factors identified by Trepanier, Early, Ulrish, and Cherry (2012) included NSC, work environment, opportunity for advancement, group cohesion, leader empowerment, and, nursing competency. Even when personal factors such as age, educational level, and prior work experience were excluded, nurse turnover was correlated with feelings of disconnect between nursing career and reality. To better understand the implications of turnover, Trepanier et al. (2012) conducted a cost-benefit analysis for the implementation of a nurse residency program. While gathering data, they found that new nurses were likely to leave their new jobs within twelve months if they did not receive proper social support or felt they were not adequately prepared to transition adequately from the classroom to a clinical setting (Trepanier et al., 2012).

Hayes et al. (2012) conducted a literature review to identify factors that influence nurse retention. They identified job satisfaction as the biggest indicator of a nurse’s intent to leave a current job. The authors included organizational climate, workload and burnout, management style, employee empowerment, role perceptions, and personal factors as contributors to job satisfaction. Additionally, the study revealed that younger nurses were more likely to leave their current job early in their career because of work climate, lack of personal challenge and a high workload. Older nurses were more likely to stay in their jobs if they had dependents. Another contributor to intent to leave the organization is job embeddedness—the factors that keep nurses in their current jobs. External factors— not related to the particular organization—that contributed to turnover included the possibility of other opportunities or the chance for advancement. The authors identified younger nurses as more likely to leave their organization because of their own goals rather than elements of the organization (Hayes et al., 2012).
Additionally, Hayes et al. (2012) observed that the workforce is often made up of three generations (Baby Boomers, Generation Xers, and Millennials) and recognized the need to retain nurses through individualized programs focused on the needs of each generation. Baby Boomers are characterized by job commitment and placing a high value on a match between person and organizational values. This generation would be most likely to leave the organization because of high workload. Compared to Baby Boomers, Generation Xers and Millennials experience their work settings as less consistent with their personal values, display more indicators of job burnout, and are less inclined to participate in knowledge sharing. They are most likely to leave their organization because of an imbalance between work and life, or for lack of autonomy, recognition, and intellectual stimulation. The authors’ research demonstrated that the generation with which one identified shaped the values, attitudes, expectations, career aspirations, and work ethic of the individual (Hayes et al., 2012).

**Approaches to increasing nurse retention.** Spector and Echternacht (2010) discussed the importance of developing a regulatory model for transitioning newly-licensed nurses to practice. The authors explored five modules to complement information learned in nursing school: experiential learning, patient-centered care, communication and teamwork, evidence-based practice, quality improvement, and informatics. In addition, they observed that new graduate nurse residency programs typically had nurses who identified as Generation X, and Millennial, or Generation Y. These two generations were seen as more adept at using technology in their everyday lives and were found to benefit from residency programs that incorporated more technology. Spector and Echternacht (2010) suggested that organizations interested in increasing nurse retention needed to invest in nurse retention programs that helped prepare new nurses for the demands of the job by building on information the nurse had learned in school. By
using this information about knowledge learned in nursing schools and generational makeup of the new nurses, the authors proposed the Transition-to-Practice regulatory model, which they suggested could be used at any organization and with all educational levels of nurses. The model relies heavily on the presence of a preceptor-nurse relationship to help the new nurse transition from student to nurse. Spector and Echternacht (2010) also recommend obtaining feedback and reflections from those involved in the model through the first six months of the transition program and then six months post-transition program. The authors noted that no national regulations exist in the United States for transitioning student nurses to the workforce although regulations exist for other healthcare professions. Currently only Kentucky has set regulations on how new nurses are supported upon entering the workforce. Spector and Echternacht (2010) strongly advocated for the standardization of a transition-to-practice program that could be independently adapted by each organization.

Cowin and Hengstberger-Sims (2006) conducted a longitudinal survey with a descriptive correlation design to assess NSC and retention plans. The authors identified NSC as the perception people have of themselves that affects their thoughts, emotions, and behaviors. A positive self-concept was associated with high performance. In new nurses, NSC can be low after transitioning from student to graduate nurse. Cowin and Hengstberger-Sims (2006) stated that support in three areas—professional socialization, interpersonal relationships, and the workplace environment—was instrumental for new nurses in order to foster positive NSC. The aim of this study was to explore how NSC develops in the graduate nurse, and if NSC and retention plans were linked. Participants were asked to respond to the same two surveys, three times (NSCQ and NRI) during their first year as graduate nurses. These surveys included questions on nurse general self-concept (NGSC), care, staff relations, communication, knowledge, and leadership.
The results of the study indicated that the relationship between NGSC and retention plans were significant. Cowin and Hengstberger-Sims (2006) suggested to future researchers that the creation of nursing self-concept enhancement programs will have a flow-on effect on improving nurse retention.

In their quasi-experimental and retrospective study, Schroyer, Zellers, and Abraham (2016) explored different stages of nurse advancement using Benner’s Stages of Clinical Competence: novice, advanced beginner, competent, proficient and expert. Although not all nurses may reach an expert level, all nurses start as novices. Therefore, fostering each nurse’s education and clinical competence is essential for progressing through the levels to expert. The study included the implementation of a mentor program created with Benner’s Stages of Clinical Competence theory as a foundation. This study was conducted in three units of a 325-bed acute care hospital in Indiana. Measurements and evaluations were taken six months before and after the implementation of the mentor program. Seventy registered nurses, newly-hired to a specialty area, were selected for the study. For this study, a mentee was a new graduate nurse, a transitioning nurse, or re-entry nurse. A Chi-Square test of independence was conducted; the result was 6.873. The authors expected a result of 7.5. $P = .009$ with a confidence level of 95%. The data evaluation upheld the alternate hypothesis, indicating that nurses who participated in a mentor program were retained at a higher rate. Schroyer et al. (2016) recognized policy changes in mandatory overtime, floating increments and shift length may have influenced the positive correlation between the mentor program and nurse retention. Limitations to the study included not having data on why previous nurses had left the specialty units. Schroyer et al. (2016) maintained that while a new nurse’s preceptor provides the beginning stages of support and
guidance, it is the continued relationship with a mentor that truly builds the new nurse’s clinical confidence.

Furthermore, Cottingham, DiBartolo, Battistoni, and Brown (2011) conducted a study on a mentor program, Partners in Nursing (PIN), created by hospitals, schools, and the community to support new nurses. PIN started as a nationally funded program and was used as a pilot to test the theory of whether a mentor program in the community would be beneficial in reducing nurse turnover rates. The program not only aided new nurses in feeling more confident in their new role but also helped the mentors build professional development and leadership skills. Cottingham et al. (2011) asserted that implementing a mentor program helps the nursing profession to “grow its own,” while promoting collaboration, education, and networking in the nursing field. During the study, data was hard to collect and measurements difficult to make as the evaluation tools were being modified. However, the study achieved its primary goal of increasing nurse retention. Additionally, the mentor program positively affected nurses’ motivation in the workplace and enhanced their confidence in a desirable career pathway.

Lastly, Fox (2010) maintained that “retention is key in nurse satisfaction and patient safety” (p. 311). In this study, a pilot program of twelve registered nurses and twelve protégés was undertaken. Fox (2010) found that institutions which had implemented a mentor program had significantly lower turnover rates than those with no mentor programs. New nurses were less likely to leave their unit when they did not feel overwhelmed during critical times and had someone to talk to about their experiences. In the study, mentors were chosen based on their level of education, communication skills, ability to maintain current practices and level of expertise on the unit in which they worked. Mentors were paired with protégés based on similar schedules and education levels. The goal of the mentor was to encourage the protégé to feel
empowered, have autonomy, self-confidence, and responsibility (Fox, 2010). Pre- and post-evaluation surveys were collected from all mentors and protégés to measure the effectiveness of the mentor program. Meetings were held at four to six-week increments to touch base on the progress the protégé was making. The initial cost of the mentoring program was $291,000. After a year of the mentoring program being implemented, there was a 6.29% decrease in turnover rate, equivalent to a savings of $1,040,153. Beyond the financial benefit, Fox (2010) demonstrated the positive effect of a mentor program in being able to publicize the institution’s success in having more registered nurses who reported higher job satisfaction.

Trepanier et al.’s (2012) cost-benefit analysis demonstrated that although the initial cost of implementing and running a program that helps new nurses acclimate to their jobs and responsibilities after graduation is high, the return on investment of these programs is positive in the long run. Nurse residency or transition programs should be seen as investments by organizations, rather than expenses because of their positive influence on NSC, job satisfaction and nurse retention.

**Summary of Evidence**

In summary, the literature surrounding nurse retention addresses contributing factors to turnover, the risk factors impacting retention, and strategies for increasing nurse retention rates. While an exact monetary value cannot be directly “calculated” from an individual nurse’s experience and knowledge, comparisons of the costs of retaining a nurse with the high cost of losing a nurse and hiring and training replacement have been demonstrated in the studies included in this literature review. The financial savings of a nurse mentoring and support program is attributed to a decrease in nurse turnover once time and money have been invested in ensuring the nurse is not only clinically capable of caring for patients but also has the necessary
support to foster job satisfaction and combat burnout. Across all research examined, job satisfaction (or lack thereof) is one of the biggest indicators of turnover. Retention plans, like transition-to-practice and mentor programs, can help the new nurse to adapt to life post-graduation.

**Implications for Nursing Practice**

The research and review of evidence consistently identified job satisfaction, nurse self-concept, and generational differences as factors for nurses’ decisions to leave the profession or transfer to another organization. The articles reviewed in this literature review demonstrated that the implementation of transition-to-practice and mentor programs in institutions that employ new nurses has proven to reduce turnover rates, increase the quality of patient care, and empower nurses in professional development. Nurses surveyed about job satisfaction, clinical confidence, interprofessional communication, and social support in the workplace cited lack of resources available to them when they transition from a student to a registered nurse as a source of dissatisfaction (Jones & Ramsbottom, 2017; Mills et al., 2017). Overall, the articles reviewed advocated for organizations to invest in the nurses currently in practice and those coming with a program to enable nurses to build a strong foundation for their careers. Any quick solution for decreasing turnover rates, increasing job satisfaction and improving patient care will be insufficient. Rather, an investment must be made to truly support nurses throughout their entire careers.

Institutions must turn their attention to nurse job satisfaction and retention rates in order to reduce turnover rates in specialty areas. The cost of losing and training a new nurse has been shown to be higher than the cost of implementing a transition-to-practice or mentor program. Over the next several years, there is a predicted to be a nurse shortage with the potential to
negatively impact the quality of care patients receive. By acting now to properly educate, train and mentor novice nurses, when the time comes for them to be expert, these nurses will be better able to handle patient care competently and safely. The existing literature supports the use of transition-to-practice, and mentor programs while urging their growth in healthcare institutions.
References


### Appendix A

#### Evaluation Tables

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<th>Citation</th>
<th>Conceptual Framework</th>
<th>Design/ Method</th>
<th>Sample/ Setting</th>
<th>Major Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
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<th>Appraisal: Worth to Practice</th>
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<tbody>
<tr>
<td>Trepanier et al. (2012)</td>
<td>Beecroft Model and Benner’s Model</td>
<td>Cost-Benefit Analysis</td>
<td>Setting: multi-site health care corporation</td>
<td>IV=% of NGRN resident penetration &amp; individual characteristics</td>
<td>Focus group interviews</td>
<td>Stepwise regression</td>
<td>12-month turnover across hospitals went from a mean of 36.8% pre-residency to a mean of 6.41% post-residency</td>
<td>Strengths: Allowed researchers to determine positive impact of a nursing residency program in community-based hospitals. Demonstrated positive impact on contract labor dollars spend for nursing services.</td>
</tr>
<tr>
<td>New graduate nurse residency program: A cost-benefit analysis based on turnover and contract labor usage</td>
<td>Purpose: To assess the economic outcomes of a NGRN residency program utilizing turnover rate and contract labor usage data from a multi-site health care corporation</td>
<td>DV=Turnover</td>
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<td>Annual contract labor dollars per average daily census went from a mean of $19,099 pre-residency to $5490 post-residency</td>
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<td>database and may not be applicable to other health care settings</td>
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**Critical Appraisal Tool & Rating:**

*Johns Hopkins: Evidence level 2: good quality of evidence, B*

*USPSTF: Level B, Class I*
<table>
<thead>
<tr>
<th>Hayes et al. (2012)</th>
<th>Literature review</th>
<th>Sample characteristics</th>
<th>Literature review</th>
<th>Nurse turnover presents serious challenges at all levels of healthcare Longitudinal research is needed to produce new evidence of relationships between nurse turnover and related costs</th>
</tr>
</thead>
</table>
| Purpose: To examine recent findings related to the issue of nurse turnover and its causes and consequence, and identify methodological challenges, and implications of new evidence on future studies | 68 studies | • IV=Nurse self-concept, job satisfaction  
• DV1= nurse turnover |  |  |
| Sample characteristics: 68 studies |  | • Retention plans should take generatio nal needs into account  
• Most studies measured internal factors for turnover not external factors |  |  |
|  |  |  |  | Strengths: Articles reviewed were relevant to nurse turnover  
Limitations: Need clear set of definitions on turnover intention  
Missing longitudinal data on actual turnover  
Critical Appraisal Tool & Rating:  
Johns Hopkins: Evidence level 2; good quality of evidence, B  
USPSTF: Level B, Class I |
| Spector & Echternacht (2010) | None | A review for a regulatory model for transitioning newly licensed nurses to practice | Sample characteristics: 51 studies | IV=Transition-to-practice programs DV1= New nurse readiness to practice DV2= Job satisfaction | Need for transition-to-practice program Increase nurse retention | Literature review | • No-blame model assumes educational programs are adequately preparing our nurses for practice and that practice settings are not expecting new nurses to hit the ground running  
• 5 modules for experiential learning: patient-centered care, communication and teamwork, evidence-based practice, quality improvement, informatics  
• No national standard exists for transitioning new nurses from education to practice | Strengths:  
• Demonstrates success of transition programs internationally  
• Demonstrates 5 aspects to learning | Limitations:  
• More research needs to be done on how to fund the program | Critical Appraisal Tool & Rating:  
Johns Hopkins: Evidence level 2; good quality of evidence, B  
USPSTF: Level B, Class I |
<table>
<thead>
<tr>
<th>Cowin &amp; Hengstberger-Sims (2006) New graduate nurse self-concept and retention: A longitudinal survey</th>
<th>Theory of multidimensionality; Self-concept theory</th>
<th>Longitudinal Survey; descriptive correlation design</th>
<th>Sample characteristics: Nurses (n=83)</th>
<th>IV=Nurse job DV1= Nurse self-concept DV2= Nurse retention plans</th>
<th>NSCQ survey NRI survey</th>
<th>• General linear model analysis of variance w/ repeated measures • Multiple regression analyses</th>
<th>• Results offer strong support for psychometric properties of the NRI • Final results of NGSC show self-concept has not returned to pre-workplace level • Results in general revealed that specific dimensions of nurse self-concept increased while others decreased</th>
<th>Strengths: • Sample size consistent for all 3 collection times • Results can be generalized Limitations: • Information left out of the equation may be more relevant than what is included • Difficult to keep track of students once they graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose: To explore the development of multiple dimensions of nursing self-concept and examine their relationship to graduate nurse retention plans</td>
<td>Setting: graduates from an undergraduatre Bachelor of Nursing degree at a major university in Australia</td>
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<td>Critical Appraisal Tool &amp; Rating: <em>Johns Hopkins: Evidence level 2; good quality of evidence, B USPSTF: Level B, Class I</em></td>
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</tbody>
</table>
### Schroyer et al. (2016).

**Increasing registered nurse retention using mentors in critical care services**

<table>
<thead>
<tr>
<th>Patricia Benner’s Novice to Expert</th>
<th>Quasi-experimental, descriptive, quantitative research method</th>
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</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong> To calculate retention rates of RNs of a 325-bed community hospital in Northern Indiana.</td>
<td><strong>Setting:</strong> 325-bed acute care hospital in Northern Indiana; 3 specialty units (CCC, ICC, PCU)</td>
</tr>
<tr>
<td><strong>Sample characteristics:</strong>  - Newly hired RNs (n=70); 35 mentored, 35 non-mentored  - Mentors (n=32)</td>
<td><strong>Backgrou nd Informati on questionnaire adapted from AMSN Satisfaction Survey adapted from AMSN</strong></td>
</tr>
<tr>
<td><strong>IV = facility addition of a mentorship program for newly hired RNs to CCS</strong></td>
<td><strong>DV = nurse retention rates in CCS</strong></td>
</tr>
<tr>
<td><strong>Background Information:</strong>  - Statistical method, nonparametric test  - Expected $\chi^2$ was 7.5</td>
<td><strong>Strengths:</strong>  - Able to recruit many new RNs  - Able to recruit enough mentors</td>
</tr>
<tr>
<td><strong>Limitations:</strong>  - Not having information to why non-mentored nurses left</td>
<td><strong>Critical Appraisal Tool &amp; Rating:</strong>  - Johns Hopkins: Evidence level 2; good quality of evidence, B  - USPSTF: Level B, Class I</td>
</tr>
<tr>
<td>Cottingham et al. (2011). Partners in nursing: A mentoring initiative to enhance nurse retention</td>
<td>None</td>
</tr>
<tr>
<td>Fox, K. (2010). Mentor program boosts new nurses' satisfaction and lowers turnover rate</td>
<td>None</td>
</tr>
</tbody>
</table>

Abbreviations: NGRN: new graduate registered nurse, IV: Independent variable, DV: Dependent variable, AMSN: Academy of Medical-Surgical Nurses, USPSTF: U.S. Preventative Services Task Force EBP: Evidence-based practice, Partners in Nursing (PIN)