

SUCCESSFUL TRANSITION OF NEW GRADUATE NURSE (NGN) THROUGH MENTORING PROGRAM: AN INTEGRATIVE LITERATURE REVIEW

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ABSTRACT

The transition period for new graduate nurses (NGNs) is critical, with many experiencing challenges due to inadequate preparation for environmental pressures. This study aims to examine NGNs' knowledge, understanding, and experiences, as well as the development of curricula that prepare students for clinical practice. The transition program was evaluated using the Broom methodology for integrative review. The literature review included 15 English-language articles from Scopus, PubMed, and ScienceDirect, published up to August 2025. Structured support programs are necessary to facilitate the transition from a new graduate to a novice nurse. Mentoring, which can be initiated at the university level, has been shown to enhance skills, task performance, professionalism, and patient safety. Mentoring is a vital component in preparing NGNs and represents a concrete strategy to support best practices. No patient or public contribution was involved in this research.

KEYWORDS

Novice; program development; continuing professional development

INTRODUCTION

Newly graduated nurses (NGNs) often face challenges that are beyond their control as they transition from university to professional practice [1]. These challenges stem from a lack of experience and gaps between theoretical knowledge and practical application, coupled with limited environmental support [2]. As a result, many new graduates struggle to adapt to their new roles, leading to a lack of confidence in delivering safe patient care [3]. Additionally, some NGNs experience emotional difficulties, including depression, anxiety, and confusion [4].

The role transition from academia to clinical practice is often a difficult and complex process [5]. To ease this transition, there is an increasing need for structured programs, such as mentorship and residency programs, designed to support NGNs and NGNs share their experiences with colleagues [6-8]. Mentorship programs, in particular, have been shown to reduce turnover rates among NGNs in certain hospitals. Studies conducted in China recommend implementing mentorship programs before NGNs are assigned their initial duties [9]. Likewise, residency programs have proven effective in preparing novice nurses for their careers [10]. This review focuses on analyzing research articles that discuss transition programs designed for NGNs.

RESEARCH AIM

NGNs in hospital settings often experience stress, confusion, and feelings of unpreparedness when taking on their roles. These issues not only negatively impact their personal well-being but also pose barriers to their professional growth. To address this, it is crucial to develop strategies that effectively support NGNs during their transition into the workforce. This study seeks to explore the knowledge, understanding, and experiences of NGNs, providing valuable insights for universities to better equip their students and for healthcare institutions to design programs that cater to the specific needs of NGNs. The research question guiding this study is: What knowledge, understanding, and experiences do NGNs gain from university education programs and healthcare providers that help them prepare for their role transition?

METHODOLOGY

DESIGN

This integrative literature review follows the five-step model developed by Toronto and Remington [11] in Table 1: (1) defining research questions, (2) conducting a literature search, (3) evaluating the literature, (4) analyzing the findings, and (5) presenting the results. The Toronto and Remington model serves as a comprehensive framework, guiding researchers in conducting a rigorous and thorough literature review.

TABLE 1. DECONSTRUCTION OF RESEARCH QUESTION FOLLOWING TORONTO AND REMINGTON'S (2020) FRAMEWORK (11).

No	Steps in Toronto & Remington's Integrated Review framework	Deconstruction of the research question
1	Formulate purpose and/or review question(s)	This integrative review aims to examine the available literature on the knowledge and experiences of nurses undergoing transition programs.
2	Systematically search and select literature	The study employs the Participant, Concept, Context (PCC) method to structure the research questions and develop relevant search terms. Keywords and their synonyms were entered into databases such as Scopus, PubMed, and ScienceDirect, while Google Scholar was used to identify any gray or less-defined literature.
3	Quality Appraisal	Literature was evaluated using the JBI Appraisal Checklist for Systematic Review and Research Syntheses (Table 3)
4	Analysis and synthesis	thematic analysis was conducted following Braun & Clarke's six-stage framework (13)
5	Discussion and Conclusion	The study reports and discusses emerging themes and key findings identified through the literature review.
6	Dessimation and finding	• Published journal articles • Theses and Dissertations

SEARCH METHOD

The literature selection process was carried out independently by four researchers. In cases where differences arose, a consensus meeting was held. The first step involved setting the inclusion and exclusion criteria. Articles were included if they focused on programs for NGNs, were fully accessible, and published up to August 2025. Excluded were studies on programs for doctors, pharmacists, or professionals outside nursing, as well as review articles. Databases used included Scopus, ScienceDirect, and PubMed. Search terms were primarily derived from Medical Subject Headings (MeSH), along with English-language titles and keywords from previous research. If PubMed search formula was: ("new graduate nurses OR novice") AND ("program OR training") AND ("transition OR migration"), Scopus and Science Direct was "New Graduate Nurse" and "Transition Program". Participant, context and content (PCC) with Participant : New Graduate Nursing, Nursing student; context : knowledge, experience and understanding; concept:mentoring, preceptorship, residency, Simulated based education and Orientation program in Table 2. The last search of this review was conducted on 30th August 2025.

TABLE 2 . PARTICIPANTS, CONCEPT, CONTEXT (PCC)

Participants	Concept	Context
New Graduate Nursing	Mentoring, Preceptorship	Clinical setting and Hospital
Nursing Student	Preceptorship, residency , Simulated based education, Orientation program	Clinical setting and Hospital

INCLUSION AND EXCLUSION CRITERIA

Articles were include if they met the following criteria : (1) hospital based, (2) were published in English or Spanish, (3) published between 2019-2025. The exclusion criteria include study protocols, conference papers, in-complete studies or papers that were not primary research were also excluded.

DATA EXTRACTION

The general characteristics of the selected articles were analyzed based on the country of origin, publication year, research methods, and the specific mentoring programs implemented for NGNs (Table 3).

TABLE 3. SUMMARY OF PROGRAM FOR NEW GRADUATE NURSES

No	Author	Country	Method	Program	Result
1	Webb (19)	USA	Quasi- Experiment al	Nurse residency Program	Nurse residency programs enhance the quality of nursing care by standardizing evidence-based nursing practices and supporting NGNs as they transition from academic environments to clinical settings.
2	Gautam (16)	Nepal	Qualitative	Mentorship program	New nursing graduates often describe their transition into professional practice as an intense experience. Inductive thematic analysis identified four key themes that encompassed their transition experiences: 'getting hit by reality', 'losing confidence', 'feeling unsupported', and 'gathering strengths.'
3	Siow (20)	Singapur a	longitudinal study	Residency Program	The residency program has proven successful in increasing the confidence of NGNs
4	Chen (22)	Taiwan	Quasi- Experiment al	Adaptive education program	Adaptive learning programs help NGNs manage their emotions and increase their motivation to work. Statistical analysis revealed significant differences both within subjects (over time and group interaction) and between subjects (across groups) (p < 0.001). Those who received gentle care and counseling showed better outcomes compared to those who did not.
5	Hu (17)	China	A Quasi- Experiment al	Preceptorship Program	Fifty-three newly graduated nurses (NGNs) completed the program, with their professional identity scores significantly increasing post-intervention—from 111.5 (SD = 16.72) at T1 to 114.2 (SD = 9.12) at T2 (p

< 0.05). However, scores declined at T3, reaching 105.8 (SD = 9.44), significantly lower than at T1 and T2 (p < 0.05).

6	Abiodun (23)	Africa	Cross-sectional	Peer Support Program with Whatsapp	Interactions with alumni, bridging and bonding social capital, professional integration, and a sense of belonging within a community of practice all showed notable improvement. Among graduate nurses in rural settings, the sense of bonding, professional identity, and theory-practice integrations were significantly higher compared to urban graduates. The findings highlight the value of a WhatsApp community of practice, especially for isolated graduated nurses during critical phases of transition and their professional development.
7	Charette (24)	Canada	Qualitative	competency-based education (CBE)	The competency of NGNs improved with a six-month rotation system and a 12-month orientation phase.
8	Kim (25)	Korea	A Quasi-Experimental	Program Tailored	A tailored nursing practice readiness program significantly reduced the transition shock experienced by newly graduated registered nurses (F = 9.18, p = 0.004), while also improving their practice readiness (F = 19.90, p < 0.001), job satisfaction (F = 4.09, p = 0.049), and retention intentions (F = 6.20, p = 0.016).
9	Jiang (26)	China	Phenomenology	Pre-service safety training program	Three main themes and nine sub-themes emerged from the research: (1) satisfaction with the program's approach and content, (2) personal benefits and growth, and (3) recommendations for future training.
10	Sterner (28)	Sweden	Cross-sectional	Simulated based education	A Wilcoxon signed-rank test revealed that simulation-based education resulted in a statistically significant improvement in nurses' perceptions of their ability to manage acute situations (n = 99; Z = 7877; P < .001).
11	Jangland (14)	Sweden	A Case Study	Mentoring program	Out of 46 hospital units, 14 had implemented one or more components of the mentoring program. This program addressed the needs of newly graduated nurses, provided career development opportunities for senior nurses, and contributed to a more attractive workplace. The overarching theme, Giving NGNs confidence, offering senior nurses a positive challenge, and creating learning opportunities for the organization, reflects the comprehensive value of the mentoring model for nurses and the institution as a whole.
12	Raletooane (15)	Afrika Selatan	Qualitative	Clinical mentoring	Structured clinical guidance is essential to helping newly graduated nurses become competent and confident practitioners. As they come from varied university backgrounds, clinical mentorship is crucial.
13	Horii (27)	Vietnam	Qualitative	a novel clinical training system	The clinical training system was found to enhance the diverse competencies of new graduate nurses, preceptors, and nurse managers while facilitating collaboration among different professions, departments, and organizations and ultimately creating a more supportive learning environment.
14	Clochesy (30)	USA	Cohort Study	Retention and Mentoring (INFORM) Program	INFORM activities can effectively increase faculty knowledge, skills, and productivity early in their careers.
15	Lalithabai (29)	Saudi Arabia	Quasy-Experimental	Orientation program	The results demonstrated statistically significant improvements in overall pre-and post-test scores (P < 0.05) across all dimensions, except for teaching, coaching, and managing complex situations, indicating its effectiveness.

*SD : Standard Deviation

*P : Probability

*n : Number of Sample

QUALITY EVALUATION OF THE LITERATURE

The selected articles were evaluated using the Joanna Briggs Institute (JBI) appraisal checklists [12] in table 4,5,and 6 . The JBI tool adapts to different study designs, and each item on the checklist is answered with "Yes" (Y), "No" (N), "Un Clear (U'Clear), and "not applicable" (N/A). Two researchers independently assessed the quality of each article, comparing their results. Any discrepancies were resolved through discussion to reach a consensus. The study designs of the selected articles included Quasi-Experimental (n=5), Qualitative (n=5), Cohort Study (n=2), Cross-sectional (n=2), and one article with case study design. Result in JBI, fifteen article is Very good rating.

ETHICAL CONSIDERATIONS

This study did not require ethical approval or an ethics reference number, as it was based exclusively on secondary data derived from previously published literature. No human participants, patient data, or identifiable personal information were directly involved in this integrative literature review. Therefore, ethical clearance was not applicable in accordance with institutional and international research ethics guidelines.

TABLE 4. METHODOLOGICAL QUALITY ASSESSMENT OF INCLUDED QUASY-EXPERIMENTAL STUDIES (5 STUDIES)

Question	Webb et al (19)	Chen et al (22)	Hu et al (17)	Kim et al (25)	Lalithabai (29)
Is it clear in the study what is the "cause" and what is the "effect" (i.e. there is no confusion about which variable comes first)?	Y	Y	Y	Y	Y
Was there a control group?	Y	Y	Y	N/A	Y
Were participants included in any comparisons similar?	Y	Y	Y	Y	Y
Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	U'Clear	Y	Y	Y	Y
Were there multiple measurements of the outcome, both pre and post the intervention/exposure?	Y	Y	Y	Y	Y
Were the outcomes of participants included in any comparisons measured in the same way?	Y	Y	Y	Y	Y
Were outcomes measured in a reliable way?	Y	Y	Y	Y	Y

Was follow-up complete and if not, were differences between groups in terms of their follow-up adequately described and analyzed?	Y	Y	Y	Y	Y
Was appropriate statistical analysis used?	Y	Y	Y	Y	N/A

TABLE 5. METHODOLOGICAL QUALITY ASSESSMENT OF INCLUDED QUALITATIVE RESEARCH (5 STUDIES)

Question	Gautam (16)	Charette (24)	Jiang (26)	Raletooane (15)	Horii (27)
Is there congruity between the stated philosophical perspective and the research methodology?	Y	Y	Y	Y	Y
Is there congruity between the research methodology and the research question or objectives?	Y	Y	Y	Y	Y
Is there congruity between the research methodology and the methods used to collect data?	Y	Y	Y	Y	Y
Is there congruity between the research methodology and the representation and analysis of data?	Y	Y	N	Y	Y
Is there congruity between the research methodology and the interpretation of results?	Y	Y	Y	Y	Y
Is there a statement locating the researcher culturally or theoretically?	Y	Y	Y	Y	Y
Is the influence of the researcher on the research, and vice- versa, addressed?	Y	Y	Y	Y	Y
Are participants, and their voices, adequately represented?	Y	Y	Y	Y	Y
Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Y	Y	Y	Y	Y
Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	Y	Y	Y	Y	Y

Note: Y (Yes); N/A (Not Applicable); N (NO)

TABLE 6. METHODOLOGICAL QUALITY ASSESSMENT OF INCLUDED COHORT STUDY (2 STUDIES)

Question	Clochesy (30)	Sio (20)
Were the two groups similar and recruited from the same population?	Y	Y
Were the exposures measured similarly to assign people to both exposed and unexposed groups?	Y	Y
Was the exposure measured in a valid and reliable way?	Y	Y
Were confounding factors identified?	Y	Y
Were strategies to deal with confounding factors stated?	N/A	Y
Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	Y	Y
Were the outcomes measured in a valid and reliable way?	N	Y
Was the follow up time reported and sufficient to be long enough for outcomes to occur?	N	Y
Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	Y	Y
Were strategies to address incomplete follow up utilized?	N	Y
Was appropriate statistical analysis used?	Y	Y

Note: Y (Yes); N/A (Not Applicable); N (NO)

TABLE 7. METHODOLOGICAL QUALITY ASSESSMENT OF INCLUDED CASE STUDY/REPORT (1 STUDIES)

Question	Jangland (14)
Were patient's demographic characteristics clearly described?	Y
Was the patient's history clearly described and presented as a timeline?	Y
Was the current clinical condition of the patient on presentation clearly described?	Y
Were diagnostic tests or assessment methods and the results clearly described?	Y
Was the intervention(s) or treatment procedure(s) clearly described?	Y

Was the post-intervention clinical condition clearly described?	Y
Were adverse events (harms) or unanticipated events identified and described?	Y
Does the case report provide takeaway lessons?	Y

Note: Y (Yes); N/A (Not Applicable); N (NO)

TABLE 8. METHODOLOGICAL QUALITY ASSESSMENT OF INCLUDED CROSS-SECTIONAL (2 STUDIES)

Question	Abiodun (23)	Sterner (28)
Were the criteria for inclusion in the sample clearly defined?	Y	Y
Were objective, standard criteria used for measurement of the condition?	Y	Y
Was the exposure measured in a valid and reliable way?	Y	Y
Were the outcomes measured in a valid and reliable way?	Y	Y
Were confounding factors identified?	Y	Y
Were strategies to deal with confounding factors stated?	Y	Y
Was appropriate statistical analysis used?	Y	Y
Were the study subjects and the setting described in detail?	Y	Y

Note: Y (Yes); N/A (Not Applicable); N (NO)

RESULT

Fifteen articles were critically analyzed and synthesized to address the research questions regarding the knowledge and experiences of NGNs in both university education programs and the workplace, particularly in preparing them for their transition into professional practice. Braum and Clarke [13] six-step thematic analysis was used to explore the relationships between themes, refining them until no new themes emerged. Two key themes surfaced: (1) Mentoring programs for NGNs and (2) the implications of mentoring on their transition.

SEARCH OUTCOME

The literature search followed the guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Articles were collected using EndNote V.21 bibliographic software, then reviewed and classified (Figure 1). Initially, 1,428 articles were identified. After removing duplicate articles, not retrieved and excluded with other reason (example title and abstract) using the inclusion and exclusion criteria = 1,413 articles. The final filtering was conducted based on open access and full-text availability, resulting in 15 articles selected for detailed review.

NGNS MENTORING PROGRAM

Four articles focus on mentoring programs for newly graduated nurses [14-17]. The expectation for new hospital nurses to provide safe and effective patient care remains high [18]. Mentorship can involve direct guidance from colleagues and senior nurses who serve as role models [14]. Often, the mentor, or "supervisor," is selected from among experienced senior staff. This mentoring relationship helps foster professional development, supports career advancement, and provides opportunities for NGNs to demonstrate their skills [19].

Two additional articles discuss residency programs for NGNs [20-21], which are shown to significantly boost their confidence . While the duration of these programs varies, Rush [22] suggest that a minimum of four weeks is necessary to effectively transition NGNs into the residency program.

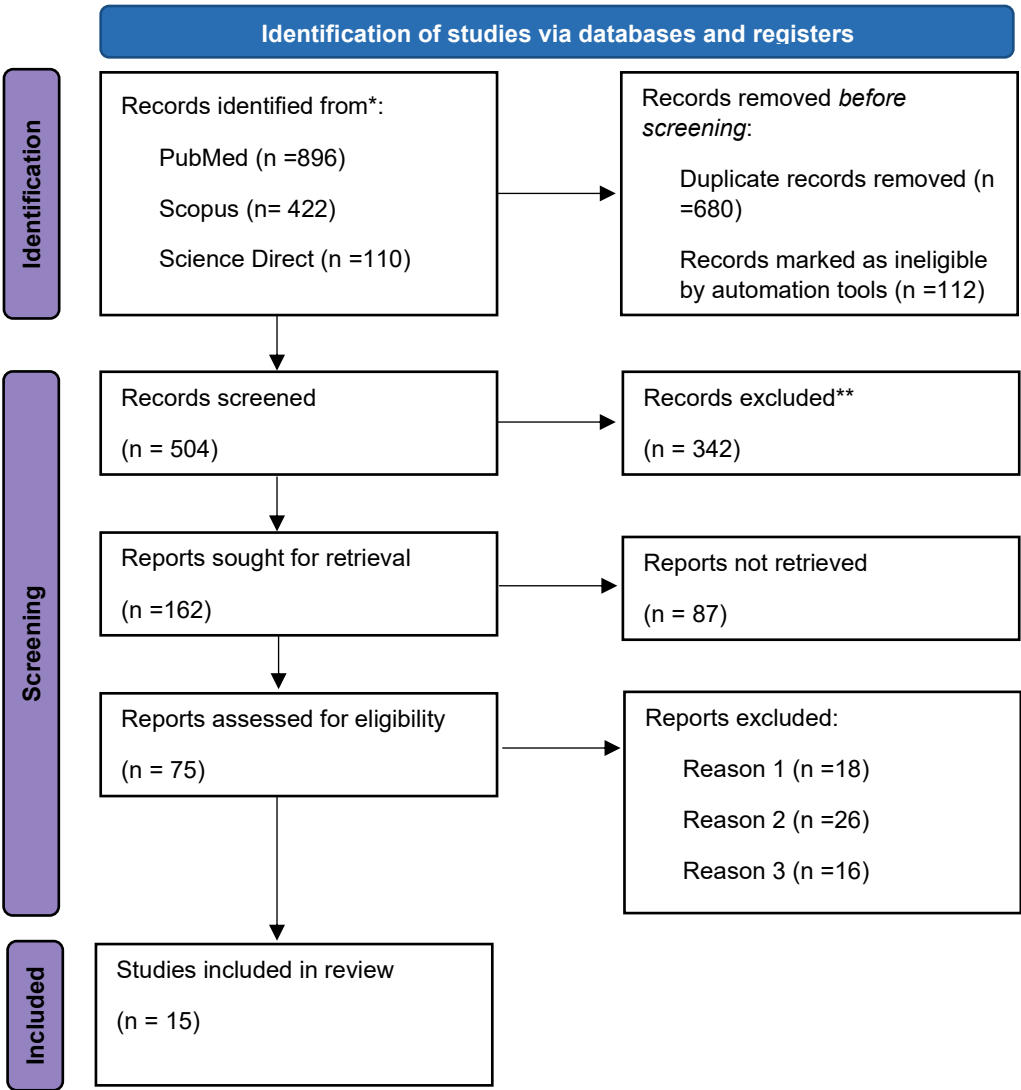
Nine other articles highlight various transition support programs for NGNs, including peer support, competency-based education (CBE), pre-service training, simulation-based education, and orientation programs [23-31]. For instance, Abiodun [24] explored the use of WhatsApp as an eight-week support program, where NGNs were guided through topics like interprofessional relationships and career management. Involving all stakeholders in supporting the transition process accelerates the NGNs' adaptation and helps build their confidence in their new roles and responsibilities.

IMPLICATIONS OF MENTORING PROGRAMS FOR NGNS PERSONAL AND PROFESSIONAL

Mentoring helps NGNs enhance their knowledge and understanding while also alleviating the effects of transition shock [26]. Orientation and mentorship have a direct positive impact on nurses' competence [30. 32, 33]. Competence in NGNs encompasses not only cognitive and psychomotor skills but also affective abilities. While affective skills are more difficult to measure, they can be developed through education and supervised practical training [34].

Mentorship for NGNs should not be limited to routine hospital programs , suggest that mentorship can begin even at the university level, where it helps support students emotionally as they approach graduation, better preparing them for the transition into professional practice. Simulation-based education, a structured form of mentorship, has been proven effective in preparing NGNs for acute clinical situations, as demonstrated in a Swedish hospital study [29].

FIGURE 1 : PRISMA 2020 FLOW DIAGRAM



DISCUSSION

The fifteen articles analyzed highlighted the critical role of mentoring programs for NGNs. Rather than functioning as a uniform intervention, mentoring programs demonstrate differential effectiveness depending on their design, context, and targeted outcomes. This review reveals that structured, institution-based mentoring (e.g., residency and preceptorship programs) is most effective in improving clinical competence, patient safety, and retention, whereas flexible and peer-supported models contribute more significantly to emotional adaptation and professional identity formation.

Research indicated that the increasing turnover rates among NGNs in recent decades negatively impact patient care. To address this, mentoring programs were recommended as a key strategy to improve retention and support NGNs during their transition [14]. The synthesis suggests that turnover is not merely reduced by the presence of mentoring, but by the quality and continuity of mentoring interactions. Programs that integrate ongoing feedback, reflective practice, and competency evaluation are more successful in retaining NGNs compared to one-time orientation-based interventions. This transition is a pivotal phase in a nurse's career journey. Importantly, the findings indicate that transition shock is mitigated when mentoring addresses both technical and psychosocial domains simultaneously. Studies that combined clinical supervision with emotional support reported greater reductions in anxiety, improved job satisfaction, and stronger professional commitment [24,31].

University faculty also play a significant role Baharum [35] identification Universities or colleges play an important role in the success of new nurse transition. However, beyond identifying themes, a cross-study comparison revealed that mentoring interventions varied substantially in structure, duration, and delivery mode, which influenced their effectiveness across different outcomes. Structured mentoring programs (e.g., residency and preceptorship models) consistently demonstrated stronger effects on clinical competence and patient safety outcomes, whereas informal or peer-based mentoring (e.g., WhatsApp support groups) showed greater impact on psychosocial adaptation, professional identity, and sense of belonging [22,24].

Programs such as NGNs mentoring are not only implemented during employment or orientation, but the involvement of universities through their own programs can actually shorten the orientation period.

This integrative review emphasizes that mentoring for NGNs is not just another program but a vital initiative that universities should incorporate into their curricula. Early exposure to the clinical environment and hands-on experience in hospital settings are essential in preparing nursing students for professional practice. Additionally, enhancing knowledge, experience, and professionalism during the transition period can be achieved through Continuing Professional Development (CPD) programs. CPD equips NGNs with skills that they can immediately apply in their clinical roles [36].

CONCLUSION

Mentoring is essential in preparing NGNs to enter the workforce as competent, professional healthcare providers. It helps bridge the gap between academic learning and direct patient care, enabling a smoother role transition. However, the differences in hospital policies and guidelines present unique challenges. Therefore, there is a need for clear, structured, and sustainable policies to ensure that mentoring programs for NGNs are consistently implemented. Universities are also encouraged to integrate career planning into their curricula, helping students become more prepared for their roles as healthcare professionals upon graduation.

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