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How to Prepare New Nursing Workforce in the New Era: An Observational Study on the Foundational Skills, Knowledge and Preparedness

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Abstract

Background: Despite structured new graduate nurses' program across healthcare settings, new graduate nurses are still experiencing clinical challenges as they transition to professional practice. These challenges can hinder confidence and clinical proficiency, understanding these challenges can be used to improve program design and minimise transition shock in new graduate nurses. **Aim:** To assess the competence of newly graduated nurses in Australia and secondarily to evaluate the quality of the new graduate program offered across a local health district in Australia. **Design:** This prospective study will collect both quantitative and qualitative data. **Methods:** The study was conducted at a local health district in Australia consisting of four acute hospitals and a primary and community health setting. Data was gathered at varies periods throughout a twelve month new graduate nurse program. The survey questionnaire focused on questions on perceived competence from the perspective of new graduate nurses and nurse leaders using a Likert scale. There were no interventions applied, and participants were allowed to answer the survey voluntarily. **Findings:** The study identified key insights to the recruitment, retention and attri-

tion across the local health district. In addition, the study identified inconsistences on how senior leaders and new graduate nurses perceive new graduate nurse competence throughout the program. **Discussion:** The study offers valuable perspectives of a new graduate nurse program within a large health district, highlighting strengths in the large sample size and the longitudinal design. The findings gave us valuable insight into the positive trends in skill development among new graduates as they transition into professional practice and program quality. Future recommendations include the re-designing program aspects and tailoring assessments tools to be able to track individual progression over time and exploring ways how we can maintain long term retention of early entry workforce. **Conclusion:** The transition to a registered nurse's role from an undergraduate nursing student is shaped by new graduate programs and the clinical environment. Role expectations are required to be set from the beginning of the program for a successful transition.

Keywords

New Graduate Nurse, Skill, Knowledge, Preparedness, Transition to Practice, Recruitment and Retention

1. Introduction

The Australian healthcare system is committed to providing excellent patient-centered care. Within this commitment and across various clinical settings, the nursing workforce plays a pivotal role in the ever-changing nursing profession within the Australian healthcare system.

The office of Nursing and Midwifery—New South Wales (NSW) Health has maintained a consistent commitment to a yearly statewide recruitment process for nurses and midwives (NSW Ministry of Health, 2025). The Local Health District (LHD) has been involved in this long-standing graduate nurses and midwife recruitment partnership with the NSW Health for over 20 years to demonstrate its commitment to providing stable and effective healthcare within the district and across the state.

A nurse's professional journey commences as a new graduate nurse which can be both exciting and daunting. Transition challenges and the importance of new graduate programs have been well reported in literature. These challenges vary from lack of clinical experience, fitting into a new environment and consolidating skills and knowledge from their undergraduate degree. Experiences during the first years in the nursing profession have a significant impact on nurses' future decisions concerning their careers (Johansson et al., 2021). New graduate nurses' transition into the nursing workforce is characterised as stressful and challenging (Waddell et al., 2015). They encounter serious difficulties with transition into their new role (Trepanier et al., 2012), although the phenomenon of reality shock has been acknowledged for decades (Kramer, 1974), it emphasises the need of new graduate programs to support the transition phase of new graduate nurses.

Many hospitals in Australia fund and operate new graduate programs for newly registered nurses. New graduate programs aid the newly Registered Nurse (RN) to transition from university to the clinical environment in order to bridge theory-practice gap (Levett-Jones & Fitzgerald, 2004).

This paper challenges the status quo and examines the knowledge and skill of new graduate entering professional practice. Obtaining a better understanding in this area provides senior leaders and program designers a greater understanding of a new graduate nurses development and preparation. "Preparation of new graduates in nursing is often viewed as a shared responsibility between the universities and nursing service sectors, universities should act as a facilitator of learning in collaboration with partners of the healthcare services" (Chang & Daly, 2019).

2. LHD New Graduate Program

The LHD new graduate program is highly competitive, with applications received exceeding actual positions given, by 45% to 80% between 2022 to 2025. The program is intended to enhance knowledge and clinical proficiency among new graduate nurses as they transition to the role of a RN. The LHD program now offers graduate nurses' permanent employment with two clinical placements over 12 months, clinical support and education study days beyond standard orientation and induction of new employees, monthly education forums and support beyond their areas of employment by dedicated new graduate program coordinators.

Each year LHD offers approximately 300 new graduate nurse placements. LHD employed 317 new graduate nurses in 2022 and 307 graduate nurses in 2025, accounting for approximately 5% - 10% of the acute care nursing workforce.

Graduate nurses are an essential part of the future nursing workforce and require continuing learning on the job to transition from university to proficient clinicians. Over the 12-month period of employment in LHD, there is a great deal of investment in terms of resources and time spent in orientating, supporting, and educating our graduate nurses via new graduate programs.

Published evidence on the efficacy of new graduate nurses transitioning from university to proficient practitioner is lacking. Studies evaluating new graduate nurses' programs have focused on graduate nurses' experiences and satisfaction with the program (Smyth et al., 2018; Tuckett et al., 2017).

This study will aim to evaluate the 12-month new graduate program offered to graduate nurses throughout LHD by surveying stakeholders (New graduate nurses, Nurse Managers and Clinical Nurse Educators) to glean their perspectives of the program and clinical proficiency of new graduate nurses and overall satisfaction.

3. Methodology

This prospective observational cohort study was approved by Human Research Ethics Committee of the participating organisation (Reference number 2020/ETH02096). The study collected quantitative data using a questionnaire tool via a traditional collection tool.

The sample size for this study was determined to ensure meaningful trends from clinical nurse educators, managers and new graduate nurses. The research team, in cooperation with the new graduate program coordinators at each facility, introduced the study to all graduating nurses during their orientation week and a total of 353 new graduate nurses were invited to participate voluntarily in the study. A total of 210 clinical nurse educators and nursing unit managers, representing a diverse range of expertise across six facilities in the local health district, were asked to participate to enable meaningful insights into clinical practice and workforce perception.

Given the lack of information on what constitutes foundational knowledge and skills in the new graduate program in LHD, the principal researcher used a previous clinical skills need analysis as a framework to build what constitutes foundational knowledge and skills for new graduate nurses. These clinical skills need analysis was developed using the evidence from the literature and expert review by the working party and research team. A total of 39 pre-determined foundational knowledge and skills were identified and used in the questionnaire. This questionnaire was then tested by senior leaders to ensure clarity and user-friendliness.

In order to measure the success of new graduate nurses participating in the graduate program, the study utilized four (4) stages of competency model developed by Noel Burch in 1970: Unconscious competence, Conscious competence, Conscious incompetence and Unconscious Incompetence (Adams, 2025). These stages were implemented in a self-assessment questionnaire, where participants rated their perceived awareness and proficiency in specific clinical knowledge and skills. Each stage was defined as follows:

- Unconscious incompetence: Unaware that a skill or knowledge gap exists;
- Conscious Incompetence: Aware of the skill or knowledge gap but not yet proficient, Conscious Competence: Able to perform the skill however still require practice, conscious though and hard work;
- Unconscious Competence: Performing the skills has become automatic for me;
- N/A Unable to assess due to lack of clinical experience.

New graduate nurses were invited to assess their own level of competence, while Nursing Unit Managers and Clinical Nurse Educators completed a parallel version of the survey to evaluate the competence of new graduates as they progressed through the program. The survey questionnaire also used Burch's four stages of competence to assess their new graduate nurses level of competence.

In addition, new graduate nurses were also asked to provide demographic information, including age, gender, employment facility, area of work, prior nursing related experience (such as assisted in nursing or enrolled nurse), clinical placement experience in LHD, and the type of facilitation model experienced as an undergraduate student.

3.1. Data Collection

The questionnaire was sent to the new graduate nurses at three (3) months and

nine (9) months of their new graduate program. Senior leaders were sent the same questionnaire nearing the end of a new graduate nurse's first and second clinical placement. Recruitment, Attrition and Retention data was collected after the studied cohort finished their new graduate program.

To establish the content validity of the survey, the survey was subjected to an evaluation by senior clinicians. These experts were selected based on their experience working with new graduate nurses or being a previous new graduate nurse themselves. Each question was measured on relevance, clarity, consciousness and ambiguity using a 3-point rating scale (low, medium and high) and a comments section. A total of five responses were received. Upon review by the research team, the ratings and comments were analysed, and corresponding changes and actions were subsequently completed. This process ensured that the survey questionnaire demonstrated content validity and was appropriately aligned with the aims of the research study.

3.2. Data Analysis

Descriptive analysis was used to identify confidence among graduates and the current characteristics of the graduate program. This encompassed variables such as age, gender (categorized as male, female, or other), nursing education (university attended, or other nursing-related diploma), prior nursing-related employment, and additional educational background. Response to open ended questions were analysed using a combination of thematic and content analysis.

4. Results

4.1. Demographics

The age range of the focused cohort was 22 to 54 years, with the age range of 22 to 26 years representing the largest new graduate nurses (57.7%) (Table 1). There were 48 participants whose demographics were unable to be obtained due to either not answering the question or had resigned from LHD.

Table 1. SWSLHD 2023 cohort demographics data (n = 305).

Variable	n (%)
Age Range (22 - 54)	
22 to 26	176 (57.7%)
27 to 31	48 (15.7%)
32 to 36	34 (11.1%)
37 to 41	24 (7.8%)
42 to 45	17 (5.5%)
46 to 54	6 (1.9%)
Gender	
Female	264 (86.5%)
Male	41 (13.4%)

Continued

Employment capacity	
Full-time	100%
Part-time	0%
Postcode of Residence	
Local to SWSLHD	244 (80%)
Outside SWSLHD	61 (20%)
Prior experience	
Enrolled Nursing	Yes—14 (20.59%) No—54 (79.41%)
Assisting in Nursing	Yes—35 (51.47%) No—33 (48.53%)
Clinical placement in SWSLHD	Yes—60 (88.24%) No—8 (11.76%)
Facilitation Model as undergraduate nurses	Facility Appointed Base (FAB) facilitation—13 (19.12%) University appointed facilitation—55 (80.88%)

4.2. Recruitment, Attrition and Retention

There was a 26% increase in the number of new graduate nurses employed across the LHD in 2023, with a total of 353 nurses—up from 261 in 2022 and 255 in 2021.

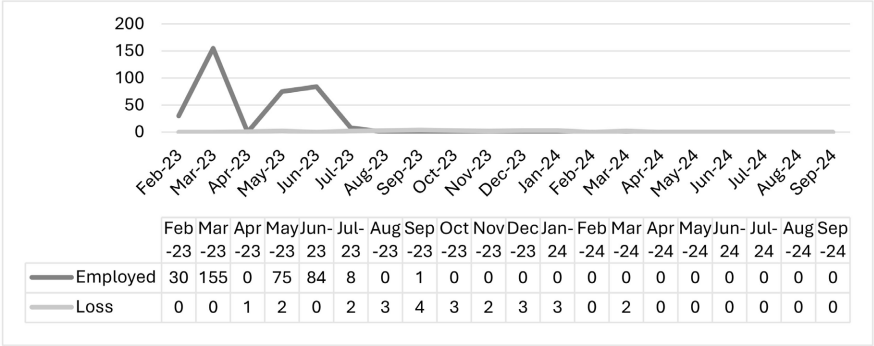
This demonstrates the progression and demand of hiring new graduate nurses has increased over the years in LHD. The data indicates fluctuations in the number of commencements across the District, with the highest number in the new graduate program occurring in the month of March (155) followed by June (84). This is because each facility in the district identifies their own commencement dates and number of intakes.

New graduate nurse attrition in the cohort studied was (25) in total, peaking in the months of September (4) and increases also evident in the month of August 2023 and October 2023, all these months correlates to attritions during their first clinical placement in their new graduate program (**Figure 1**). Other increases were also evident in the months of December 2023 (3) and January 2024 (3) which correlates with the commencement of their second clinical placement.

Reasons for attrition were analysed and categorised into 4 groups (Personal matters, career development, staff behaviours and job characteristics). These were then further analysed to identify at which rotation most attritions were occurring. (**Table 2**).

Job characteristics had a higher occurrence (3.3%) throughout the 12-month program for the researched cohort. Job characteristics identified factors such as

role expectations, workload and location as a reason for resignation from the program. Personal matters and career development were on par throughout the 12-month program, however, were higher in first clinical placement than second clinical placement.



	Feb -23	Mar -23	Apr -23	May -23	Jun-23	Jul-23	Aug -23	Sep -23	Oct -23	Nov -23	Dec -23	Jan-24	Feb -24	Mar -24	Apr -24	May -24	Jun-24	Jul-24	Aug -24	Sep -24
Employed	30	155	0	75	84	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Loss	0	0	1	2	0	2	3	4	3	2	3	3	0	2	0	0	0	0	0	0

Figure 1. Attritions.

Table 2. Reasons for attrition.

Attrition	1st Rotation	2nd Rotation	Total % (out 353 employed)
Job characteristics	1.1%, n 4	2.2%, n 8	3.3%
Personal Matters	1.1%, n 4	0.5%, n 2	1.6%
Career Development	0.8%, n 3	0.5%, n 2	1.4%
Staff Behaviour	0.5%, n 2	0%, n 0	0.5%

A reason for this could be that new graduate nurses are eager to build their skills and explore other avenues in their nursing career. The new graduate nurses did not wish to disclose the reason for departing the program, either due to the complexity of the situation, uncertainty of their decision or fear of repercussions. Staff behaviour was more evident in first clinical placement rather second clinical placement, an explanation for this is that new graduate may face struggles adjusting to team dynamics as they begin their nursing career however this settles by second clinical placement which correlates with Kramer's reality shock theory and Duchscher's transition stages.

The data suggests that new graduate nurses initially make decisions based on their work environment and career exploration. However, as they gain experience, their choices become more influenced by personal circumstances. Parker et al. (2014) outlined that the transition period, (the first 12 to 24 months of practice) for new graduate nurses is reported as the most vulnerable time during which they formulate decisions about their intent to commit to the profession and/or their organisation.

Interestingly, there was no direct impact on retention during the COVID-19 pandemic period where staff wellbeing, burnout and workload was a significant challenge (Willis et al., 2022). For accurate comparison, non-COVID years were

used as a benchmark (Figure 2). One reason for high retention in LHD is the region's growing population and the fact that 80% of new graduate nurses live locally, making it easier to retain staff.

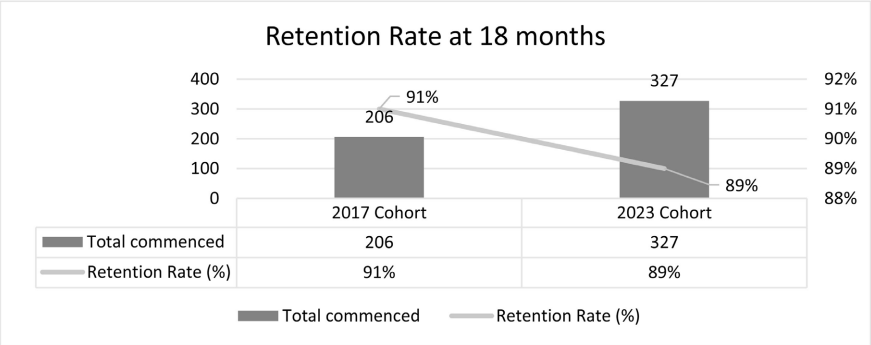


Figure 2. Retention rates.

4.3. Knowledge and Skills Responses

A total of 107 responses were received throughout the 12-month program and responses were significantly higher in some facilities than others with the highest number of responses received from clinical nurse educators (Table 3). Survey responses were also higher for nurse leaders working in areas of medical and surgical wards. The survey received a higher response rate from senior leaders for new graduate nurses during their first clinical placement (68 responses) compared to the second clinical placement (39 responses). Additionally, new graduate nurses had a lower overall response rate, with a total of 68 responses received, with the highest responses received during their first clinical placement (49) than during their second clinical placement (19).

Four knowledge and skill areas were selected for in-depth analysis due to their high relevance to the clinical practice of new graduate nurses. These areas, detailed in Table 4, were chosen based on frequent feedback received from program coordinators and to provide a distinguished representation of both technical and soft skills. While the survey tool and subsequent analysis aimed to broadly explore the experiences of new graduate nurses within the program, these four domains were examined more closely to illustrate key findings. A comprehensive list of all identified knowledge and skill areas is available in the **Appendix**.

Data analysis reveals a discrepancy in perceptions of "medication administration" proficiency between senior nurses and new graduate nurses. Senior nurses acknowledge that new graduates are performing the skill however reinforce the need for continued practice. Conversely, new graduate nurses report a higher level of confidence, suggesting they perceive the skill as becoming automatic for them.

When questioned on their ability to communicate effectively with other nurses and utilise appropriate communication tools, senior nurses acknowledged that new graduate nurses were demonstrating these skills but required further practice. Similarly, new graduate nurses reported a slightly higher confidence in their communication abilities yet recognised the need for continued development.

Table 3. Foundational knowledge and skills.

Table: Summary of nurse leader demographic details (n = 107)	
Variable	n (%)
Facilities	
Bankstown-Lidcombe Hospital	18 (16.82)
Bowral and District Hospital	1 (0.93)
Campbelltown and Camden Hospitals	29 (27.10)
Fairfield Hospital	14 (13.08)
Liverpool Hospital	43 (40.19)
Mental Health Service	1 (0.93)
Drug Health Service	1 (0.93)
Primary and Community Health Service	0 (0)
Areas working in	
Medical Ward	31 (28.97)
Surgical Ward	12 (11.21)
Women and Children's Services	10 (9.35)
Perioperative Services	8 (7.48)
Critical Care (ICU, ED, CCU)	20 (18.69)
Mental Health Services	2 (1.87)
Primary and Community Health Service	0 (0)
Outpatient Departments	1 (0.93)
Rehabilitation Departments	6 (5.61)
Other (please specify)	16 (14.95)
Role	
Nursing/Midwifery Unit Manager	32 (29.91)
Clinical Nurse/Midwifery Educator	70 (65.42)
Other (please specify)	5 (4.67)

Table 4. Knowledge and skills results.

	Senior leaders' responses		*New graduate nurses' responses*	
Skill/Knowledge	**Conscious competence:** Able to perform the skill however still requires practice	**Unconscious competence:** Performing the skill has become automatic for them	**Conscious competence:** Able to perform the skill however still requires practice	**Unconscious competence:** Performing the skill has become automatic for them
Demonstrates capability and safety in medication administration via all routes	**50.49%**	**33.01%**	48.72%	**48.72%**
Capable in communicating with other nurses and other members of the multidisciplinary team using appropriate communication tools	**43.69%**	**33.98%**	**57.69%**	39.74%
Demonstrates capabilities in prioritization/delegation in nursing practice	**46.08%**	**13.73%**	**66.67%**	26.92%
Demonstrate time management in nursing practice	**50.98%**	**16.67%**	**71.05%**	23.68%

When questioning prioritisation, delegation, and time management skills, new graduate nurses reported a higher level of confidence in their ability to perform these tasks. In contrast, senior leaders provided significantly lower ratings, demonstrating a considerable discrepancy between the two groups' perceptions.

4.4. Themes from Comment Section

When nursing leaders were asked to provide any further comments at the end of the questionnaire, a thematic analysis was made. The below themes identified that new graduate nurses do not work in isolation however in an organised environment (Mellor & Gregoric, 2016) within a complex new graduate nurse program.

Theme One: Critical Care and Specialised Rotation

A major recurrent theme identified by senior leaders was that new graduate nurses should not be allocated in critical care or a specialised unit/area as part of their first clinical placement due to the struggle with the completion of advanced competencies whilst consolidating their foundational knowledge and skills, highlighting the need for further support and guidance in these areas.

The impact of specialised or critical rotations for new graduate nurses in Australian literature is limited however, numerous studies highlight the positive influence of structured orientation programs and preceptors to creating a positive experience for new graduate nurses (Pupkiewicz et al., 2015; Innes & Calleja, 2018; Kelly & Ahern, 2009).

Theme Two: Preceptoring and Support

Senior leaders recognised that improvements in the preceptorship model could better support new graduate nurses who are struggling in their clinical setting. Clipper and Cherry (2015), in their research, identified that a structured preceptor training program could facilitate a smoother transition to practice and improve first-year retention rates for new graduate nurses. It was recognised as a crucial tool for organizations that can enhance the transition process and is likely to result in a safer and more effective patient care environment. Additionally, senior leaders noted challenges in providing adequate support to new graduate nurses due to nurses' expected patient load. There was also a highlight by the new graduate nurses responses the need for further clinical support from their clinical nurse educator.

Theme Three: Skills Gap

Senior leaders identified some new graduate nurses have significant gaps in clinical skills. A key to point for consideration is to determine the last time a new graduate nurse completed the skill or had exposure to it. This is particularly relevant for those who have limited or no prior healthcare experience. A number of senior leaders indicated new graduate nurses are unprepared in the knowledge and skills that the survey asked and noted the impact of COVID-19 pandemic was evident in their knowledge and skills and work readiness. A particular point was made that work readiness was only evident in new graduate nurses that have been assistant in nursing (AIN) prior to commencing the new graduate program. Smith

et al. (2021), in their study on the impact of COVID-19 on new graduate nurses' transition to practice, highlighted that "this cohort faced unique losses and gains that influenced their transition into clinical practice". As a result of COVID-19 disruptions, nursing student instructional methods and clinical experiences have been altered, reduced, or eliminated. This may have impacted the knowledge, skills, and overall preparedness of new graduate nurses for professional practice.

Theme Four: Program Feedback

Senior leaders acknowledged that the new graduate program provides a valuable experience however more attention is needed to foster teamwork, communication and leadership development. However, this is a difficult aspect to incorporate in a class setting. Sahay & Willis (2022), in their study on creating an environment conducive to supporting graduate nurses, explores how nurse leaders can cultivate a culture of safety. This includes mentoring graduate nurses to develop critical thinking, promote safe communication, and reinforce essential practices such as handover procedures, teamwork, medication protocols, and care plans by leveraging their authoritative and influential positions. Therefore, the importance that our new graduate program extends beyond the classroom experience and must also incorporate the clinical environment.

Theme Five: Role Expectations

Senior leaders identified that new graduate nurses struggled with nursing shift work, lacked understanding of the registered nurses role by demonstrating a lack of engagement and accountability to the role. It was also evident that senior leaders expected new graduate nurses to be higher level of competence by their second clinical placement during the new graduate program. Prosen and Ličen (2023) identified that new graduate nurses indicated a high level of commitment to the profession immediately after graduation. This potentially identifies a gap on the role expectations from both new graduate nurses and senior leaders in this rapidly changing healthcare system. Messmer (2000) suggested that during the first few weeks on the job, the new graduate nurse forms attitudes and opinions about their role, co-workers, leadership and the organisation, which can have a long-term influence on staff satisfaction.

5. Discussion

5.1. Strength and Limitations of the Work

This study has provided valuable insights into evaluating the quality of the new graduate program across the LHD The findings highlighted several key themes related to the program and preparedness of new graduate nurses as they transition into the workforce, offering key findings into their knowledge and skill development throughout their program in line with current literature (Charette et al., 2023; Prosen & Ličen, 2023).

A limitation of the study was the inability to track an individual's knowledge and skill progression, which could have provided a more comprehensive understanding of each participant's development over time.

The large sample size is a key strength of this study, adding to a robust, reliable and generalised results. Additionally, the longitudinal design enabled the analysis changes over time, offering a deeper understanding of the research question and allowing for the exploration of trends.

5.2. Recommendations for Further Research

Based on the findings from the study on foundational skills, knowledge, and preparedness of the new graduate nursing workforce, the following recommendations for future research can be proposed:

Co-Design a Tool with New Graduate Nurses to Enhance Compliance and skills and knowledge Competency.

Successful completion of the new graduate program in LHD depends on meeting the required clinical hours and fulfilling specific program requirements, including two performance development reviews (PDRs) over 12 months. The PDR tool determines a person's performance and is considered fundamental to determine a person's skills and knowledge and empowering staff to commitment to providing quality and safe healthcare (Joseph & Varghese, 2024). This tool may be particularly accurate for current staff who have already developed proficiency in their skills and knowledge. However, it does raise the question of whether this tool effectively determines the competence of new graduate nurses entering the workforce in LHD specifically with the discrepancies evident in the foundational skills and knowledge questionnaire results.

Therefore, a potential future direction is the development of an end-of-program comprehensive final assessment to accurately assess the readiness of new graduate nurses entering the workforce and mutual understanding between the appraiser and the appraisee (Jaber et al., 2024). A key recommendation for future studies is to co-design a sustainable tool for the new graduate nurses that integrates foundational skills, knowledge, and preparedness measures with the current PDR. This tool should be developed collaboratively with input from both newly graduated nurses and key stakeholders to ensure that it meets the needs of newly graduated nurses as well as the organisation. By involving new graduates in the design process, the tool would be more likely to resonate with their experiences and be more effective in increasing compliance, role clarification from new graduate nurses/senior leaders and engagement from stakeholders.

Longitudinal Studies on Skill Retention and Professional Growth

Future research should explore the long-term retention of foundational skills and knowledge gained by newly graduated nurses. This could involve longitudinal studies to track how nurses' competencies evolve over time and identify factors that contribute to sustained skill development and professional growth. This approach would allow for a detailed understanding of how the transition from novice to experienced nurse unfolds in real clinical settings.

Evaluation of Preceptorship and Support Systems in Early Career Nurses

Further research is needed to evaluate the role of preceptors and support systems in the professional development of newly graduated nurses. Future studies

could explore the effectiveness of structured preceptorship programs, structured orientation programs, peer support networks, and transition-to-practice initiatives in improving nurses' confidence, job satisfaction, and retention rates. A key focus should be the emotional and psychological support given as new nurses adjust to the challenges of practice.

Addressing Work-Life Balance and Well-Being in New Nurses

Future studies could focus on the importance of work-life balance and nurse well-being in the early stages of a nursing career. Investigating how workload, stress, burnout, and personal well-being influence new nurses' decision to stay in the profession or leave early could provide crucial insights for health systems to implement more effective support mechanisms for early career nurses.

Longitudinal Studies on Retention

Future research should explore the long-term retention of new graduate nurses in LHD. This could involve longitudinal studies to track their employment status over the years. This approach would allow for a detailed understanding of retention of staff in LHD.

6. Implications for Nursing Education, Workforce, Policy and Practice

Healthcare education and future workforce planning require sustained investment and support so advocating for policies that reduce financial barriers to nursing education and expand access to training opportunities will be essential in meeting the future healthcare demands in retention and ensure the quality and safety of our patients.

7. Conclusion

This study evaluated the quality of the new graduate program across a local health district in Australia using both quantitative and qualitative data. Recognising that the transition period is one of the most challenging phases in a new graduate's journey, careful consideration must be given to the design and delivery of new graduate programs. While high retention and satisfaction rates are a positive indicator of the program's success, further research is needed to assess retention beyond the end of the new graduate program. The study also identified areas for improvement in both nurses' preparedness on commencement and clinical proficiency upon completion. In her influential book, From Novice to Expert: Excellence and Power in Clinical Nursing, Patricia Benner describes the development of nursing expertise through five stages, from novice to expert. According to Benner, experience is the key factor in becoming an expert clinician. As a workforce, we must acknowledge that new clinicians are not fully work-ready at the start of their careers; rather, it is through experience that they develop proficiency.

Summary of Relevance

1) Problem

Little is known what constitutes clinical proficiency for new graduate nurses as they transition and complete a new graduate program.

2) What is Already Known

Literature clearly outlines that the transition to professional practice for new graduate nurses is a difficult and often stressful period. Successful programs will benefit in minimising transition shock in new graduate nurses.

3) What this Paper Adds

This study offers valuable insights to the broader healthcare community by examining a large cohort of new graduate nurses within a major local health district. It highlights key aspects such as recruitment trends, demographic profiles, attrition rates and their underlying reasons, perceptions of clinical competence, and thematic findings from both new graduates and senior nursing leaders. The study also identifies significant challenges faced during the graduate program.

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Conflicts of Interest

All authors declare that they have no conflict of interest in relation to this work.

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Appendix

	Senior leaders' responses					*New graduate nurses' responses*				
Skill/Knowledge	**Unconscious incompetence:** They are unaware that a skill or knowledge gap exists	**Conscious incompetence:** Aware of the skill or knowledge gap but not yet proficient	**Conscious competence:** Able to perform the skill however still requires practice	**Unconscious competence:** Performing the skill has become automatic for them	**N/A** Unable to assess due to lack of clinical experience /exposure	**Unconscious incompetence:** Unaware that a skill or knowledge gap exists	**Conscious incompetence:** Aware of the skill or knowledge gap but not yet proficient	**Conscious competence:** Able to perform the skill however still requires practice	**Unconscious competence:** Performing the skill has become automatic for them	**N/A** Unable to assess due to lack of clinical experience/ exposure
Demonstrates capability and safety in medication administration via all routes	2.91%	11.65%	50.49%	33.01%	1.94%	0.00%	2.56%	48.72%	48.72%	0.00%
Demonstrates capability in performing drug calculations	1.94%	14.56%	57.28%	24.27%	1.94%	0.00%	0.00%	65.38%	33.33%	1.28%
Capable in performing an A-G nursing assessment safely	71%	19.42%	52.43%	17.48%	0.97%	0.00%	2.56%	64.10%	33.33%	0.00%
Capable in communicating with patient/relatives	10.68%	9.71%	50.49%	29.13%	0.00%	0.00%	5.13%	48.72%	46.15%	0.00%
Capable in communicating with other nurses and other members of the multidisciplinary team using appropriate communication tools	6.80%	14.56%	43.69%	33.98%	0.97%	0.00%	2.56%	57.69%	39.74%	0.00%
Demonstrate capability and safety in measuring a patient's vital signs	4.85%	11.65%	35.92%	45.63%	1.94%	0.00%	1.28%	33.33%	65.38%	0.00%
Demonstrate capability in recognising, escalating, initiating management for a deteriorating patient	4.85%	23.30%	51.46%	17.48%	2.91%	0.00%	6.41%	66.67%	26.92%	0.00%
Perform nursing documentation safely as per hospital policy/procedures and guidelines	0.97%	11.65%	49.51%	36.89%	0.97%	0.00%	2.56%	37.18%	60.26%	0.00%
Demonstrate capability in applying infection prevention in clinical practice (including hand hygiene and PPE)	1.94%	16.50%	47.57%	30.10%	3.88%	0.00%	3.85%	52.56%	43.59%	0.00%

Continued

Demonstrates capabilities in performing aseptic technique safely	4.85%	23.30%	45.63%	12.62%	13.59%	0.00%	10.26%	61.54%	16.67%	11.54%
Demonstrate capability and safety when administering and managing a patient receiving Blood and Blood products	3.88%	11.65%	50.49%	33.01%	0.97%	0.00%	1.28%	51.28%	47.44%	0.00%
Perform nursing documentation safely as per hospital policy/procedures and guidelines	1.94%	22.33%	36.89%	29.13%	9.71%	0.00%	2.56%	39.74%	55.13%	2.56%
Demonstrate capability and safety in performing a 12 lead Electrocardiography (ECG)	2.94%	14.71%	45.10%	33.33%	3.92%	0.00%	3.85%	42.31%	51.28%	2.56%
Demonstrate capability in performing a falls risk assessment	4.85%	21.36%	49.51%	18.45%	5.83%	0.00%	3.85%	47.44%	44.87%	3.85%
Demonstrate capability in implementing falls prevention strategies	8.74%	25.24%	39.81%	15.53%	10.68%	0.00%	7.69%	61.54%	25.64%	5.13%
Demonstrate capability and safety in the management of a patient post fall	6.80%	22.33%	36.89%	16.50%	17.48%	0.00%	6.41%	57.69%	30.77%	5.13%
Capable to identify the need for increased Supervision and Specialling of At-Risk Patients	0.97%	10.68%	50.49%	35.92%	1.94%	0.00%	3.90%	45.45%	50.65%	0.00%
Capable to perform safe manual handling procedures	9.80%	26.47%	43.14%	7.84%	12.75%	0.00%	22.08%	53.25%	18.18%	6.49%
Capable to perform a nutritional assessment on a patient safely	9.00%	37.00%	21.00%	1.00%	32.00%	0.00%	41.03%	33.33%	6.41%	19.23%
Capable to perform nasogastric tube insertion and management safely	1.94%	17.48%	49.51%	20.39%	10.68%	0.00%	2.56%	52.56%	43.59%	1.28%
Capable to perform a neurological assessment using the Glasgow Coma Scale (GCS) safely	5.83%	25.24%	45.63%	21.36%	1.94%	0.00%	6.41%	43.59%	44.87%	5.13%

Continued

Capable and safely monitor a patient's fluid status	0.98%	23.53%	35.29%	23.53%	16.67%	0.00%	2.56%	34.62%	61.54%	1.28%
Demonstrate capability in performing bladder scanning safely	0.97%	21.36%	46.60%	28.16%	2.91%	0.00%	1.28%	41.03%	56.41%	1.28%
Demonstrate capability in performing pain assessment and provide appropriate pain management safely	3.92%	8.82%	35.29%	43.14%	8.82%	0.00%	1.28%	26.92%	67.95%	3.85%
Demonstrate capability in performing personal hygiene (Bed bath, oral care, showering, bed making, bowel care) for a patient safely	1.96%	21.57%	34.31%	21.57%	20.59%	1.28%	11.54%	43.59%	28.21%	15.38%
Capable in performing a pre-op assessment for a surgical patient and manage their needs safely	0.98%	26.47%	29.41%	21.57%	21.57%	1.28%	10.26%	55.13%	21.79%	11.54%
Demonstrates capability in post-operative care (communication, assessment and management)	4.90%	22.55%	50.00%	18.63%	3.92%	0.00%	6.49%	49.35%	42.86%	1.30%
Demonstrate capability in identifying high risk patients for a pressure injury	7.84%	23.53%	46.08%	15.69%	6.86%	0.00%	1.28%	51.28%	47.44%	0.00%
Demonstrate capability in implementing pressure injury prevention strategies for high-risk patients	8.91%	23.76%	43.56%	11.88%	11.88%	0.00%	3.85%	58.97%	35.90%	1.28%
Demonstrate capability in managing patients with an identified pressure injury	1.96%	9.80%	40.20%	39.22%	8.82%	0.00%	5.19%	42.86%	49.35%	2.60%
Demonstrate capability in the collection of a specimen (stool, urine, swabs)	4.95%	33.66%	24.75%	3.96%	32.67%	0.00%	37.18%	37.18%	5.13%	20.51%
Demonstrate capability in performing a urinary catheterisation (female)	10.89%	28.71%	13.86%	0.00%	46.53%	3.85%	48.72%	16.67%	3.85%	26.92%

Continued

Demonstrate capability in performing a urinary catheterisation (male)	0.99%	13.86%	53.47%	18.81%	12.87%	1.28%	10.26%	47.44%	37.18%	3.85%
Demonstrate capability in performing a wound swab collection	8.82%	32.35%	49.02%	8.82%	0.98%	0.00%	7.69%	76.92%	15.38%	0.00%
Demonstrate capabilities in critical thinking in nursing practice	8.82%	31.37%	50.98%	7.84%	0.98%	0.00%	7.69%	74.36%	16.67%	1.28%
Demonstrate capabilities in critical reasoning in nursing practice	3.92%	35.29%	46.08%	13.73%	0.98%	0.00%	6.41%	66.67%	26.92%	0.00%
Demonstrates capabilities in prioritisation/ delegation in nursing practice (RN Standards for practice	5.88%	25.49%	50.98%	16.67%	0.98%	0.00%	5.26%	71.05%	23.68%	0.00%
Demonstrate time management in nursing practice (RN standards for practice	10.78%	24.51%	46.08%	9.80%	8.82%	0.00%	11.69%	67.53%	16.88%	3.90%
Demonstrate de-escalation techniques in nursing practice	2.91%	11.65%	50.49%	33.01%	1.94%	0.00%	2.56%	48.72%	48.72%	0.00%