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# EDITORIAL

## Image-based sexual abuse – A priority for nurses

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### INTRODUCTION

Image-based sexual abuse (IBSA) is an escalating national and international problem that has evolved rapidly. In addition to recorded images, the emergence of artificial intelligence (AI) has enabled sophisticated image manipulation. As technology enables new forms of exploitation, IBSA must be recognised as a critical nursing issue that impacts professional conduct, public safety, and therapeutic trust. This editorial aims to raise awareness among all nurses about creating intimate digital images, the expanding forms of IBSA, its impacts on survivors, and the practical actions nurses and nursing leaders can take, grounded in trauma-informed care, moral courage, and professional accountability.<sup>1,2</sup>

### WHAT COUNTS AS IBSA?

The terminology ‘image-based sexual abuse’ refers to all forms of the nonconsensual creation, sharing, or threats to share, nude or sexual images, including altered images, deepfakes, and other AI-generated sexual images.<sup>3</sup> These images are sexual or intimate and may include an image of the person’s genital or anal area (bare or covered by underwear) or breasts if the person is female, transgender, or an intersex person identifying as female, when most people would expect privacy.<sup>4</sup> Image-based sexual abuse is one example of sexual violence that has rapidly evolved with technological advances.<sup>5</sup> While smartphones and covert

cameras remain relevant, nurses must also understand risks posed by synthetic imagery and the ease with which images can be generated or manipulated.

### WHY IS THIS URGENT FOR NURSES?

Evidence indicates IBSA is widespread and underreported. A multinational study surveyed over 16,000 adults in 10 countries found that 1 in 5 adults (22.6%) have experienced IBSA, however, one-third (30.9%) of them did not disclose this to anyone, highlighting significant barriers to help-seeking.<sup>6</sup> Gender based violence has continued, with males accounting for 91% of perpetrators of IBSA, who primarily target their former or current intimate partners.<sup>6</sup> Consistent with international data, 23% of people in Australia aged 16-49 have experienced some form of image-based sexual abuse.<sup>7</sup> Over half (54%) of image-based offences have occurred in a context suggestive of family violence, as noted by the courts,<sup>8</sup> however, the frequency is likely to be much higher as family violence is not always reported, nor is IBSA. Nurses are likely to encounter the downstream effects of IBSA across settings, including emergency, primary care, mental health, community, and specialist services.<sup>1</sup> Given the high prevalence of IBSA<sup>6,7</sup> and other sexual violence, nurses are likely to provide care for survivors, however, their history of trauma may not be disclosed.<sup>9</sup> Therefore, we don’t actually know how often nurses are caring for survivors, and further research could explore help-seeking, disclosure, and the role of nurses.

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### THE LEGAL CONTEXT IS EVOLVING – BUT SLOWLY

Several Australian jurisdictions have strengthened laws to address imagebased abuse and are moving to explicitly prohibit AI-generated sexual images.<sup>10</sup> Every state and territory has criminalised the distribution of intimate images, however, Tasmania is the only jurisdiction to criminalise possessing a prohibited visual recording. Nonetheless, the pace of legal reform often lags behind technological change, and legislation may have developed before there was a consistent understanding of IBSA.<sup>10</sup> For survivors, the justice journey can be retraumatising: intimate images may be repeatedly scrutinised, cross-examination can be distressing, and proceedings are lengthy. In Victoria, most sentences consist of a fine, an undertaking, or a community corrections order, with only 22% of perpetrators imprisoned.<sup>8</sup> Although the court may be closed to the public, the alleged perpetrator can be present during the cross-examination, consequently adding to the traumatisation of the affected person, while they witness the person's distress and humiliation when questioned about their recollection of the experience.

### PROFESSIONAL CONDUCT AND PUBLIC TRUST

IBSA arises among health professionals and within health settings. Nurses will be providing care for survivors but also need to be aware of their own behaviour. Health professionals in Australia have been found guilty of IBSA in their personal lives, including a mental health nurse found guilty of creating an intimate digital image.<sup>11</sup> Allegations and convictions against health professionals for creating or distributing intimate images demonstrate the need for regulators to act decisively and protect the public. Such behaviours violate the Code of Conduct for Nurses, erode public trust, and conflict with core values of dignity, consent, and integrity.<sup>12</sup> While regulators such as AHPRA and the NMBA must ensure procedural fairness and therefore may move cautiously, professional peak bodies can often act rapidly to update codes of ethics, credentialling, membership standards, and public statements that set clear expectations for safe, respectful conduct. In Victoria, Australia, an extensive investigation is in progress where a medical officer is facing 908 charges for stalking, installing optical surveillance, and producing digital images over a 4-year period at 3 major hospitals. These images were allegedly obtained in staff showers and toilets, creating over 10,000 intimate files, including 4500 videos of mostly women.<sup>13</sup>

### TRAUMA-INFORMED CARE AS OUR LENS

Trauma-informed care (TIC) provides a framework for nursing responses to IBSA. TIC emphasises safety, trustworthiness, choice, collaboration, and empowerment; it recognises the neurobiological and psychosocial impacts of trauma and seeks to avoid retraumatisation.<sup>14,15</sup> Survivors of IBSA describe wide-ranging impacts on their daily lives.

This includes relationships, activities, feeling degraded and shameful, needing to be perpetually vigilant, and social isolation.<sup>16</sup> Trauma-informed care requires nurses to do no harm, understand the effect of stress on the brain and body, and consider what “happened to them” rather than what “is wrong with them?”<sup>15</sup> Integrating TIC principles into undergraduate curricula and ongoing professional development for nurses builds readiness to identify IBSA, respond sensitively to disclosures, and advocate for safer systems.<sup>17</sup> TIC should be practiced by all nurses regardless if the persons history of IBSA is known or not.<sup>9</sup>

### CALL TO ACTION FOR NURSES AND NURSING LEADERS

Nursing's response to IBSA should be practical, values-driven, and system-aware. The following actions align with our professional obligations to safeguard the public and uphold trust. This is a responsibility for all nurses, through leadership, education, and professionalism.

*Clinical practice:* Create psychologically safe spaces for disclosure; use sensitive, nonjudgemental language; assess immediate safety risks; and provide clear information about supports, reporting options, and digital evidence preservation. Document objectively and avoid unnecessary image handling.<sup>17,18</sup>

*Education across the career span:* Include IBSA and technology-facilitated abuse in preregistration curricula and mandate continuing professional development coverage, including AI-generated imagery, basic digital forensics literacy, and referral pathways.<sup>1,17</sup>

*Workplace governance:* Ensure policies address IBSA explicitly, including prohibited conduct, secure change facilities, clear reporting pathways, bystander responsibilities, and rapid managerial responses. Embed TIC in procedures for managing complaints and supporting staff and patients.<sup>12,15</sup>

*Professional leadership:* Leverage peak bodies to set expectations through codes of ethics, credentialling standards, and timely disciplinary processes where permitted. Publicly affirm zero tolerance for IBSA by health professionals and support members to meet standards.<sup>12</sup>

*Legal literacy and advocacy:* Maintain up-to-date knowledge of jurisdictional laws regarding imagebased abuse, including AI-generated images. Advocate for processes that reduce retraumatisation and for sentencing that reflects community expectations and survivor harms.<sup>8,19</sup>

*Digital professionalism and self-protection:* Model safe digital behaviours; discuss image consent and privacy with students and colleagues; and be prepared to challenge normalised practices that trivialise IBSA. Moral courage and ethical agency are central to speaking up early and reporting concerns when they arise.<sup>1</sup>

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## CONCLUSION: TRUST, MORAL COURAGE, AND SAFEGUARDING

As technology evolves, so does the landscape of IBSA. For nursing, the cornerstone remains trust: the therapeutic space must be safe for disclosure, care, and recovery. A trauma-informed, valued approach combined with moral courage, strong governance, and legal literacy will better safeguard patients, the public, and the profession. IBSA should remain a priority for nursing education, practice, and leadership so that we can prevent harm, respond compassionately, and uphold the integrity on which our profession depends.

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## RESEARCH ARTICLES

# Business intelligence dashboards facilitating nursing management practices: An Australian local health district qualitative study

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## ABSTRACT

**Objective:** To reflect upon the potential of digital processing of Business Intelligence (BI) to facilitate nurse management practices across operational, financial and workforce areas. That is, beyond the usual safety and quality monitoring and improvement.

**Background:** Nurse managers are responsible for nursing service delivery within their unit/division/directorate(s), taking a crucial role in the accountability of the functioning of the health system. While use of nursing dashboards as BI supports safety and quality nursing management practices, there is a need to understand BI's potential to enable nursing practices to broader nursing management, such as financial and workforce areas.

**Study design and methods:** This study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist. In this qualitative research, in August 2022, four nurse (unit) managers and two nurse leaders, with years of work experience ranging between 2 and 18 years, participated in one-on-one semi-structured interviews. Interview participants shared their experience of BI implementation in operational, financial, and workforce areas of nursing management. The participants were purposively selected from the medical and surgery units in two hospitals: a major metropolitan hospital and another, a principal tertiary referral hospital.

**Results:** Thematic analysis, following an inductive analysis of the interview data, generated two overarching themes. One, BI contributing to enabling of nursing management and two, BI requiring continuous improvement.

**Discussion:** Nursing dashboard implementation as BI in operations, finance and workforce areas provided efficient and timely access to consolidated, visually meaningful, and relevant data. The dashboard showed potential for supporting nursing management practices, such as proactive data analysis, data-informed work conversations with staff, and better decision-making in areas such as budgeting, staffing and patient flow management. However, the implementation of BI needs to be a continuous improvement process, with greater focus on educating and collaborating with end-users. The study implies nursing dashboards should be implemented with metrics of broader nursing management practices in alignment with the needs of the end-users and the relevant health system.

**Conclusion:** There is a case for using BI in work areas beyond safety and quality to support nurses in broader nursing management practices. Future studies exploring nurses' long-term experiences with BI and co-designing with end-users of BI would be beneficial to facilitating nursing management practices.

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**What is already known about the topic?**

Nurse managers are accountable for the functioning of the health system across a wide spectrum of work areas, for example, consumer-centred care, financial issues, team performance management, and the well-being of staff.

Use of BI, particularly dashboards on safety and quality, has been demonstrated to enable effective nursing management through presentation of timely, relevant, and consolidated data.

As BI in health organisations rarely cover work areas beyond safety and quality, for example, finance, people, and culture; there is limited understanding of BI's potential to support nurses towards broader nursing management practices.

**What this paper adds**

- The qualitative study provided empirical evidence of how utilisation of BI in work areas beyond safety and quality, that is, finance, operational and workforce management, can facilitate nurses for better work rapport and higher-level decision making.
- Nurse managers' experience with dashboards highlights that BI implementation in broader nursing management practices needs to be more end-user centred and a continuous improvement process.
- Greater support to nurses is possible if health organisations implement BI with a robust feedback process and ongoing education packages to address the needs of the end users.

**Keywords:** Nursing Dashboard; Nursing Business Intelligence; Nurse Management Strengthening; Business Intelligence Implementation

**BACKGROUND**

Nurse managers are responsible for the nursing service delivery within their unit, division, or directorate. This includes managing elements of high-quality consumer-centred care, service operational flow, financial issues, and the team's performance, development, and well-being.<sup>1-4</sup> As nursing managers hold such broad accountability in the functioning of the health system, it is critical to always look for opportunities to facilitate them with data-driven decision-making and support nursing management practices.

Globally and in Australia, aligned with strategies at the state and national levels of health systems, the premise is that strengthening nursing management practices should involve access to digital health technologies and data-informed innovative responses.<sup>5-8,9-10</sup> Data-informed approaches will facilitate nursing care to support the delivery of connected and quality care.<sup>9-10</sup> Current nursing care issues, including management of patient risks and safety, information across the patient journey, and staffing and nursing workload distribution, elevate the need for relevant, timely and accurate digitised information.<sup>14,11-13</sup> Digitised health information now needs to be easily accessible, coherently presented, and interactive, to facilitate information literacy and evidence-based decision making in nursing management.<sup>14-15</sup>

Business intelligence (BI), a digital health solution, uses integrated technologies to apply technological processes to capture, manage, and analyse data from multiple data sources into meaningful insights for business strategies and operations, primarily through interactive dashboards and reports.<sup>11-12,19</sup> Within healthcare systems, BI has become an

increasingly important capability to support data-driven decision making, performance monitoring, and workforce management amid growing service demand, workforce pressures, and expectations for quality and safety.<sup>11-12,16-18</sup>

BI in nursing, delivered through nursing dashboards, enables managers to monitor performance, identify trends, and drive quality and safety improvements in patient care.<sup>11-12,15,20-21</sup> Nursing dashboards visually consolidate key clinical and operational data such as safety indicators, patient acuity, and workload, providing nurse managers with timely insights to support informed decision-making and quality improvement.<sup>11-12,20-21</sup> Nursing dashboards have improved patient outcomes by consolidating performance trends about patient care and usage of resources in a visually meaningful way.<sup>11-12,20-21</sup> Dashboards have enabled nurses to track evidence of the impact of their work and areas of improvement in safety and quality.<sup>3,11-12,20-21</sup> Additionally, a dashboard can be an avenue for nurses to move away from less efficient disparate reporting systems and extraneous hard copy reports.<sup>3,20-21</sup>

However, the use of dashboards is still facing challenges in areas of end-user satisfaction, development of design and content of dashboards, and dashboard integration with other legacy systems in health organisations.<sup>15,22</sup> These challenges have complex components and cannot be resolved with standardised solutions, as dashboards are developed to address context-specific needs of management of care.<sup>15</sup> A key issue here is understanding the end-user experiences of what works and does not work with dashboards in various contexts.<sup>15,23</sup>

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Currently, within Australia and internationally, the application of BI in nursing, including the use of nursing dashboards, is typically centred on safety, quality, and operational metrics rather than providing a truly holistic view of nurse management practice.<sup>1,4,11-13,24</sup> BI often does not cover broader nursing management responsibilities, especially a combination of people and culture, finance, and operational management with patient flow. Whereas these areas fall within the accountability of nurses for consumer-centred care, financial viability of the service unit and the nursing team's wellbeing and development.<sup>1,3-4</sup> Moreover, nurses relying on dashboards for management of quality improvement initiatives could miss the required holistic perspective if people, finance, and patient flow information are not covered.<sup>15,25</sup> Hence, there is a limited understanding of BI's potential to be responsive to support nurses with broader nursing management practices.<sup>6,14,26</sup>

Addressing the above issues, this research has investigated how the implementation of BI influenced work practices and experience of nurse leaders and managers, in the context of a Nursing Dashboard rolled out in April 2022 at an NSW Health Local Health District (LHD). The LHD developed the dashboard internally as a quality improvement project, aiming to facilitate nursing management through relevant, accessible, and understandable metrics into a consolidated platform. Nurse management initially identified the need for a centrally accessible dashboard that could deliver timely nursing management information through an efficient and streamlined process. This qualitative study focuses on the use of dashboard metrics in operational, financial, and workforce areas, rather than the well-researched area of safety and quality.<sup>11</sup>

## METHOD

A qualitative phenomenological approach has been applied to conduct this research.<sup>27</sup>

## SETTING

The research setting is a single NSW Health Local Health District, confined to the surgery and medicine division wards/units at two hospitals. As medical and surgical nurses have significant accountabilities towards patient flow, particularly through their role in facilitating timely and safe discharges, the selection of the chosen wards is rational. Out of the two selected hospitals, one was a major metropolitan hospital and the other a principal tertiary referral hospital. At the time of the study, the dashboard had been available for six months, and the principal tertiary referral hospital recorded 50% fewer dashboard user sessions at the chosen wards. Inclusion of two different types of hospitals allowed the study to understand the use of dashboard across different facility-level cultures and priorities that influence nursing practices in association with BI.<sup>28-30</sup>

## BI DASHBOARD & METRICS

This study focuses on nurse managers' use of a locally designed nursing dashboard that integrates operational, financial, and workforce metrics. The aim of the dashboard is to better support and facilitate nursing management decision-making through the provision of relevant, accessible, and accurate information. The dashboard, developed in QlikView's 2022 platform, an analytics solution offered by Qlik, consolidated multiple disparate reporting systems into a single access point. In this dashboard, reporting of the data comes from source systems following appropriate extraction processes to ensure accuracy of the data. Due to the extraction process check built into the system, the dashboard faces a slight delay in reporting the metrics from the source. Finance and operations metrics are updated daily, and workforce metrics are updated fortnightly as per the payroll cycle.

The metrics to be reported in the dashboard were identified through consultations with nurse management, operations, finance, and workforce departments. The operational metrics included 'Discharge before noon' or 'Discharge via Transit Lounge' and 'Emergency Treatment Performance' data, promoting patient flow. Financial metrics covered data about budgets, actuals and variances, private elections, and excess leave. Finally, the workforce metrics included leave utilisation, performance development review rates, and health training courses needing completion data.

## PARTICIPANTS

The study participants are nurse unit managers (NUMs) and nurse leaders (NL). NUMs report to the NL, a senior nursing manager with higher classifications and responsibilities. Both NUMs and NLs are the primary end-users of the Nursing Dashboard at hospitals, needing to access nursing management information according to their roles and accountabilities.<sup>1,20</sup>

Participants were purposely recruited, following the inclusion criteria of nurses who were in the NUM or NL role, with a minimum of 4-5 months' experience with the BI at the study organisation. All prospective participants were contacted by email by the first author, a male health professional who was also an officer in the BI project at the study organisation. The participant information sheet clearly stated that this research was conducted with the second author, who is an expert health management researcher and academic at a university in Australia. All contacted participants participated in the study and did not report any bias. The number of participants was guided by voluntary responses from invited nurses according to the consent process in the approved study protocol by the LHD Human Research Ethics Committee (Approval "2022/ETH00987" with site approvals "2022/STEO1738" and "2022/STEO1739"). Therefore, the participant recruitment process

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was not influenced by the objective of data saturation, that is, recruiting interviews till no new data are generated.<sup>31</sup> As Table 1 shows, the cohort of participants came from the selected two hospitals of the study organisation, reflecting varying nursing management positions and years of work experience.

TABLE 1. COHORT OF PARTICIPANTS

Identifier	Hospital Type	Position	Nursing Management Experience (Years)
NUM1	Tertiary – Referral	NUM	12
NUM2	Tertiary – Referral	NUM	2
NL1	Tertiary – Referral	NL	15
NUM3	Metropolitan	NUM	18
NUM4	Metropolitan	NUM	8
NL2	Metropolitan	NL	14

## METHODOLOGY &amp; ANALYSIS

In August 2022, six one-hour one-on-one semi-structured interviews were conducted, with the interviewee at locations without privacy concerns, through either Microsoft Teams videoconferencing platform or face-to-face, based on participants' preferences. The overarching interview question was "how nurse managers perceive the utilisation of BI had influenced their practice". The interviewees were interviewed only once in a semi-structured format, following an interview guide that allowed inclusion of refined probing questions based on participants' responses.<sup>26,32–33</sup>

As per the approved protocol, the interviews were audio-recorded and transcribed. The authors had confirmed the transcribed content against the audio recording. Moreover, transcripts were emailed back to the respondents for review and feedback, but no amendments to the transcripts were suggested or made. The transcribed data were then subjected to thematic analysis, following an inductive approach, where themes were identified from the data. The first author had manually conducted the theme development, while the second author reviewed and validated the process. This was a non-linear process, with the first author identifying, analysing, and organising codes through quotations in the transcripts and finally, drawing the preliminary themes from the codes.<sup>25,33</sup> The second author then independently reviewed the work of the first author and validated the preliminary themes against the transcript data. For example, the second author suggested merging multiple codes to support a more stable theme about BI's contribution to nursing management processes. Decisions on such suggestions were resolved in agreement between the two authors. Hence, the independent and then collective data analyses of the two authors, where the first author is an insider researcher, ensured a credible and non-biased theme development from the research data.<sup>34</sup>

The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used to ensure a thorough report of the findings.<sup>35</sup>

## FINDINGS

Two overarching themes were identified following thematic analysis: 1) 'BI contributing to enabling of nursing management' and 2) 'BI implementation requiring improvement'. Table 2 shows how these themes were supported by certain sub-themes.

TABLE 2. OVERVIEW OF THE THEMES AND ASSOCIATED SUB-THEMES

Themes	Sub-themes
BI contributing to enabling of nursing management	<ul style="list-style-type: none"> <li>• Efficiency in accessing information</li> <li>• Value from the use of dashboard data</li> </ul>
BI implementation requiring improvement	<ul style="list-style-type: none"> <li>• Specific BI elements needing improvement</li> <li>• Collaboration in BI implementation</li> </ul>

## BI CONTRIBUTING TO ENABLING OF NURSING MANAGEMENT

The nurse manager cohort, in comparison to the nurse leaders, were more frequent users of the dashboard. However, all the interviewees, across the two hospitals and different levels of professional roles, expressed a general sense of positive experience with access to information from the introduction of the dashboard at work.

## Efficiency in accessing information

Half of the participants described the Nursing Dashboard as a "one-stop shop" due to its consolidation and provision of operational, finance and workforce metrics. Participants recognised significant time savings as the Nursing Dashboard presented all information from different systems in one place. It enhanced the provision of information previously not accessed due to systematic or time related constrains. The following statements are reflective of their experience of how BI improved efficiency in accessing information.

"Improved my time management as a manager ... I don't like using other databases, I like just using the one" (NUM1)

"Definitely made our reviewing of operational data, staff management type data and financial data much more efficient" (NUM4)

"I wouldn't look for that information, but now it's presented here to me ... I can use that information in terms of my staffing and my rostering" (NUM2)

"I could be a more effective manager when that information is consolidated there for me so I can get things done quicker and more efficiently" (NUM2)

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Furthermore, participants recognised that the Nursing Dashboard presented relevant information in a visually meaningful manner. They stated the dashboard:

- “presented (information) in a way you know is very logical for me as a NUM” (NUM4)
- “makes it quicker to find that information and it’s much more visual” (NL1)
- “is very nursing specific” (NL1)

### Value from the use of dashboard data

The value of the dashboard to the participants depended on the content, that is, the different types of data metrics covered in the dashboard. All participants identified the workforce metrics, for example, the leave utilisation and performance development reviews, as most beneficial and relevant for staff management and development. A few NUMs also found operational metrics valuable for a better understanding of the patient flow. They reflected on such experiences of the dashboard, stating:

- “I just find it very easy to use. I like that it’s all in the one spot and you get a very quick overview of who is overdue for their PDR’s [Performance Development Reviews]” (NUM4)
- “if I got issues with patient flow, it provides me the evidence” (NUM1)

Another interesting insight from participants was that dashboard data created opportunities for proactive work conversations between nurse leaders and staff. Efficiencies gained by the dashboards’ timely and easy access to information facilitated nurses to engage in proactive work conversations. As a nurse leader stated:

- “When you’re trying to run these reports, you can’t as you’re constantly interrupted ... but if you got the dashboard, you can just open up now and look ... you can have those conversations with staff earlier” (NL2)

Nurses had also shared their experience of how the dashboard facilitated data-informed higher-level decision-making across various areas, for example, budgeting, staffing, and patient flow management. The following statements from the participants can elaborate this point:

- “to make sure that they’ve been costed properly” and “if you’re over ... how are you going to pull it back then the following month to try and keep your budget on track” (NUM4)
- “trying to work out what we could do with revenue ... and then also around being able to explain the variance” (NL2)
- “help you look retrospectively at ... what’s been happening over the last couple of weeks and ... is there anything that we could be doing to try and improve, you know, getting patients up from the emergency department or ... getting people out quicker” (NUM4)

## BI IMPLEMENTATION REQUIRING IMPROVEMENT

### Specific BI elements needing improvement

Nurses also explained how certain business intelligence (BI) elements needed improvement to ensure a better experience with the dashboard. A few nurses indicated that they faced difficulties using the dashboard data, most prominently, the financial metrics. They explained that further fine-tuning of the dashboard data content was necessary to make it understandable and suitable for the end-users’ scope of work. For instance, they stated:

- “I think a lot of the NUMs are scared of financial stuff. We’re nurses at the end of the day” (NUM1)
- “I don’t exactly know what to do with it and I don’t exactly know what it all means” (NUM2)
- “some aspects of it are outside of our control and some aspects are within our control” (NUM4)
- “I don’t look at the finance dashboard very often ... financial responsibility for me is looking at my premium Labour as well as looking at overtime” (NUM1)

Additionally, it was evident that an element of “education for end users” needed to be part of BI implementation. As the statements below indicate, such education could be about how to interpret certain dashboard data and realising the value addition of the dashboard.

- “if someone sort of sat me down and went through everything and I had a better understanding of it, then maybe I could use that information better” (NUM2)
- “I just don’t know a lot of nurse managers are aware. Probably aware of the dashboard, but don’t know the benefits ... if it’s a new NUM, it might be a bit daunting ... understanding how that is going to benefit” (NUM1)

### Collaboration in BI implementation

Both the cohort of nurse managers and nurse leaders conveyed that the dashboard design and implementation needed strong collaboration with end-users. This is to ensure regular rapport with end-users, so that information and design of BI is relevant and understandable to the nursing management. In the words of a nurse leader, this means the dashboard development team will “just need to keep collaborating with them” (NL1). In the above quotation, the words “keep collaborating” are important, as it reflected the notion of continuous collaboration between the strategic and operational views of BI throughout the BI project.

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### DISCUSSION

This research presents nurse managers' and leaders' perceptions of how a recently implemented nursing dashboard, focusing on operational, financial, and workforce areas, influenced their work in a hospital setting. Based on nurses' perception, who are the end-users of the dashboard, this study found that a nursing dashboard reporting metrics beyond the usual safety and quality areas can support nursing management practices and decision making to enhance management effectiveness. This finding expands the current literature, which has predominantly focused on reporting the usage of safety and quality dashboards in nursing.

This research explained how dashboards at the research site facilitated processes such as proactive data analysis and data-informed work conversations with staff for better decision-making in various areas, for example, staff performance management, budget variance assessment, and patient flow optimisation from the emergency department. The dashboard at the research site provided timely and relevant data, with features such as efficient access to accurate information, consolidation of data from various databases, and meaningful visual presentation of nursing-specific data as reported in the literature.<sup>12,15</sup> These findings endorse the effectiveness of dashboards for informed decision-making, enhanced data sharing, performance tracking, and communication with stakeholders.<sup>15,22</sup>

Another finding is how nursing dashboard implementation can be compromised due to inadequate focus on education of and collaboration with end-users. It was identified that a few nurses faced limited capability in utilising the recently implemented nursing dashboard. Some nurses, including new nurse managers, may not have known how to interpret the data or felt that the dashboard covered a scope beyond their work area. It is possible that nurses needed guidance to understand how different metrics were linked and interdependent within their scope of work. This resonates with the insight that dashboard implementation should be supported with continuous education and capability development initiatives for end-users in nursing management.<sup>26,36</sup> In line with previous literature, the study also highlighted that regular collaboration with end-users would be necessary to fine-tune the portfolio of metrics in a dashboard.<sup>26,37</sup>

A limitation of the research was the situational healthcare environment at the time of the research. Situational factors, including the presence of COVID-19 and the subsequent actions, for example, fluctuating number of COVID-19 cases, stoppage of elective surgery, varying patient complexity, and limited staffing levels, may have influenced the usage of the nursing dashboard. Furthermore, the availability of participants for interviews was affected by the COVID-19 environment. Despite such limitations, this study has

covered the perception of all relevant levels of end users of BI, nurse managers and leaders, as required by the aim of this study.

### IMPLICATIONS AND RECOMMENDATIONS

An implication of this study is that nursing dashboards should be implemented with metrics of broader nursing management practices in alignment with the strategic direction of the relevant health system and nursing service. Given the current advancement of digital technology and relevant national and state-level policy guidance, it should be possible to present nurses with a dashboard that hosts the required breadth and depth of data for timely and holistic management decision making and support delivery of connected and quality care.<sup>9-10,15,22,26</sup> A key recommendation would be to strategically plan the implementation of the nursing dashboard, in joint commissioning between national governing bodies and state health organisations, ensuring relevant BI projects are funded, resourced and evaluated with the core purpose of supporting decision making of relevant stakeholders. This approach should serve as a long-term strategy to enable nurses to make data-driven decisions and achieve organisational success.<sup>25</sup>

This study also implies that nursing dashboard implementation should be more end-user oriented. Accordingly, another key recommendation is to focus on education of and collaboration with end-users by BI developers throughout, from idea generation to business-as-usual stages of the nursing dashboard project, to ensure relevancy and value of BI.<sup>37-38</sup> The national nursing governing bodies are also recommended to make such education, training and collaboration at local health organisations a condition for the possible funding support for nursing dashboard projects. Moreover, educating end-users about the benefits of a nursing dashboard and their required capabilities should be prioritised and approached collaboratively.<sup>37-38</sup> This process should involve co-designing, where the authority implementing the dashboard and nurses collaborate for design, selection of measures, capability development training, feedback on continuous improvement of the dashboard, and evaluation.<sup>37-38</sup>

### CONCLUSION

The study has made a case for the utilisation of BI in work areas beyond safety and quality, in an Australian public healthcare context. This indicates opportunities to plan BI implementation with metrics that represent the broad range of nursing management responsibilities in alignment with local and national strategic direction of the health system. Furthermore, the study has demonstrated the importance of implementing BIs with continuous improvement processes and greater focus on end-users.

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Future studies investigating BI experience in the long-term and how to co-design BIs in this era of artificial intelligence, with an appropriate portfolio of metrics for optimum value to nursing management, would be beneficial. With unprecedented momentum for data-driven decision making in health, it is critical to implement BI approaches to offer the most benefit to nursing management.

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# A qualitative exploration of the normative and formative aspects of reflective practice groups for nursing staff in an acute care hospital setting

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## ABSTRACT

**Objective:** This study explored nurses' perceptions of whether and how reflective practice groups (RPGs) had influenced professional practice and skills development.

**Background:** A growing emphasis on technical competence has coincided with decreased focus on interpersonal aspects of nursing. Consequently, nurses can feel less prepared for the emotional requirements of their role, with potential adverse impacts on patient care. RPGs are a form of group supervision that prioritise interpersonal aspects of nursing care.

**Method:** Purposive sampling recruited thirty-nine nurses who attended RPGs at an Australian regional teaching hospital. Transcripts from four semi-structured focus groups underwent inductive and deductive thematic analyses.

**Results:** Inductive analysis revealed three prominent themes: (1) Trust: Participants who had attended fewer RPGs reported being more guarded, citing prior experiences of workplace incivility, while those who had attended more RPGs reported higher levels of trust. (2) Feedback: Differing opinions on RPGs

as a space for giving and receiving feedback were also related to level of attendance, as well as sense of psychological safety and effectiveness of RPG facilitation. (3) Development of Relational Skills: RPGs were identified as a forum for exploring and enhancing interpersonal communication skills.

Deductive analysis indicated that nurses used RPGs as a form of job crafting to develop interpersonal skills consistent with requisite professional standards.

**Discussion:** Findings suggest that whilst RPGs are already valued by nurses for their restorative benefits, they also provide normative and formative functions in regard to definition and development of relational skills.

Over time, effective facilitation can promote psychological safety and trust within RPGs, helping mitigate unhealthy workplace culture and dynamics that might inhibit authenticity, reflection, and self-evaluation.

**Conclusion:** When effectively facilitated, RPGs can provide restorative, formative, and normative functions in relation to the interpersonal aspects of

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nursing, with potential positive impacts on workplace culture and patient care.

**Implications for research, policy and practice:**

RPGs should be considered as a mechanism for providing emotional and professional support, promoting critical reflection, and developing interpersonal skills for nurses.

**Keywords:** Nursing, reflective practice, clinical supervision, standards, wellbeing.

**What is already known about the topic?**

- RPGs prioritise and support interpersonal aspects of nursing care.
- RPG attendance is associated with increased personal and job resources.

**What this paper adds**

- RPGs may also provide formative and normative functions regarding the interpersonal aspects of nursing care in the context of professional and health care standards.
- RPGs can promote healthy communication and positive workplace culture.

## INTRODUCTION

As a caring profession, nursing requires a blend of technical and relational competence. Unfortunately, nursing education does not always provide nurses with the opportunity to develop the knowledge and skills required to navigate the emotional and interpersonal aspects of their role. Acute hospital settings expose nurses to significant demands and challenges that can impact their physical and psychological well-being, with a potential adverse impact on patient safety and clinical outcomes.

Reflective practice (RP) is a key component of professional development, fostering critical thinking and enhancing skills. The current study set out to investigate the experiences of nurses participating in process-focused reflective practice groups (RPGs) at an Australian regional teaching hospital, the aim being to examine how RPG attendance might influence interpersonal aspects of practice through norm setting and skills development. An emergent consideration was the role that RPGs could also play in positively influencing workplace culture and patient care.

## BACKGROUND

The holistic, humanistic nursing model emphasises caring as a relational activity requiring patience, understanding, compassion, and engagement.<sup>1</sup> At times, nursing education can prioritise technical skills over relational competencies,<sup>1,2</sup> leaving nurses inadequately prepared for the emotional demands of their role.<sup>1,3</sup> Attending to the emotional needs of patients can create a burden of emotional labour.<sup>1,3</sup> Occupational stressors such as high workloads and increasing administrative tasks exacerbate this burden,<sup>4,5</sup> as emotional dissonance arises when workplace expectations conflict with personal principles and aspirations of care.<sup>6</sup> This combination of factors can lead to decreased work engagement, compassion fatigue, burnout, and increased workplace attrition.<sup>6</sup>

Mental health is a pressing concern in nursing, with studies indicating that approximately one in three nurses experience burnout.<sup>7</sup> Mental ill-health can compromise relationships with patients and colleagues, negatively affecting care quality and safety. Presenteeism, when nurses work while mentally or physically unfit, leads to increased clinical errors and reduced quality of care.<sup>5,8</sup>

Workplace incivility and lateral violence can further exacerbate these challenges by eroding professional relationships and adversely impacting communication, creating unsafe environments for both staff and patients.<sup>9,10</sup> In the past, insufficient organisational support for the development of relational skills and a healthy workplace culture has compounded these issues.<sup>9</sup>

Nurses and the healthcare services that employ them have legal and ethical obligations to ensure both physical and psychological safety.<sup>11</sup> The Nursing and Midwifery Board of Australia (NMBA) is an independent authority that regulates the registration and practice of nurses and midwives in Australia. The NMBA outlines seven professional standards that require nurses to engage in ongoing professional development and maintain capability for practice, including emotional well-being.<sup>12</sup> Correspondingly, healthcare services need to offer nurses emotional support and professional development opportunities relating to these standards.<sup>11</sup> Postulating that relational competence might be developed through reflective practice (RP), Dawber introduced process-focused RPGs to help nurses enhance their people skills in acute care settings.<sup>3,13</sup>

RP enables nurses to critically analyse experiences and develop self-awareness and is considered a core component of professional nursing practice.<sup>14,15</sup> RPGs provide a facilitated space for nurses to engage in RP,<sup>13</sup> promoting critical reflection on workplace-related clinical, organisational, and interpersonal challenges. Previous research has identified that RPGs can support and empower nurses to develop self-awareness and emotional resilience.<sup>13,25</sup> Other studies indicate that RPG participation is correlated with improved

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professional quality of life, increased social support, and enhanced confidence in managing uncertain situations.<sup>16,17,26</sup> In this way, RPGs may be seen to foster job crafting; a process whereby nurses proactively make changes to the way they manage job demands through cognitive reframing, task modification and relationship development.<sup>20</sup>

RPGs are facilitated in a way that promotes constructive communication and critical reflection and have been linked to increased team cohesion and social support.<sup>17</sup> Because of this, it is proposed that RPGs might have a role in addressing workplace incivility and promoting a healthy workplace culture. Nonetheless, gaps remain in the literature regarding the effect of RPGs on workplace culture, clinical practice, and patient care. Identifying links between RPGs and nursing practice might indicate how they could support nurses to meet relevant professional standards and promote quality patient care.

## METHODOLOGY

### DESIGN

A cross-sectional qualitative design was employed to explore nurses' subjective perceptions and experiences of RPGs. Findings were articulated using terminology relevant to the research questions.<sup>19</sup>

### THEORETICAL FRAMEWORK

RPGs in this study are defined as a form of facilitated, process-focused, inter-subjective supervision. RPGs provide the opportunity to reflect on practice and to practice reflection. Participants share clinical narrative in a supportive group setting,<sup>3</sup> with facilitators utilising reflective questioning techniques and strategic interventions to promote cognitive, emotional, and somatic processing. A group charter includes rules like confidentiality, non-judgement, respect, and an appreciation of diversity. Sessions run fortnightly or monthly, with membership typically defined by workgroup or clinical specialty. Attendance generally ranges from 3 to 12 participants. Facilitators are nurses or allied health professionals who have completed a facilitator training apprenticeship and who receive monthly facilitator supervision.

Consistent with previous research into RPGs,<sup>16,17</sup> the Job Demands-Resources (JD-R) model served as a conceptual framework for this study. The JD-R model has been widely used to investigate the impact of job demands and resources on employee well-being, burnout, and organisational outcomes.<sup>20,21</sup> According to the JD-R model, prolonged exposure to high job demands—such as work pressures and emotional stress—can lead to strain, fatigue, and burnout. Burnout, characterised by emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment, may have significant implications for both

nurses and patients.<sup>5</sup> A lack of job resources, such as social support and performance feedback, can negatively affect motivation and engagement. Conversely, job resources help buffer against the adverse effects of job demands, enhancing staff well-being and organisational outcomes. Participation in RPGs has been hypothesised to facilitate the acquisition of job resources while promoting job crafting,<sup>17</sup> potentially mitigating burnout and increasing work engagement.

### ETHICAL CONSIDERATIONS

Ethics approval was granted by Prince Charles Human Research Ethics Committee (Ref number; HREC//18/QPCH/132). There was negligible to minimal risk identified for participants, and strategies for addressing any potential psychological risk were documented in the research protocol. Data collection only commenced after informed consent was obtained from all focus group (FG) attendees. All data was deidentified to ensure confidentiality.

FGs were held during the time normally allocated for RPG sessions to limit the impact on participating participants and clinical areas. Potential benefits from FG participation were proposed to include the contribution that the sharing of knowledge and experiences might have on the development of, and emerging evidence base regarding, nursing RPGs in acute hospital settings.

### SAMPLING AND RECRUITMENT

Purposive sampling recruited participants from four RPGs;<sup>19</sup> three that had each been running for over three years and one that had been running for 8 months, in different clinical areas of an Australian regional teaching hospital. Eligible participants received email invitations to participate in the study, along with a Participant Information Sheet and Consent Form. Those who chose to participate opted in to attend the FG held at the time of their allocated RPG.

### POPULATION AND SAMPLE

The study was conducted at an Australian regional teaching hospital. Participants were volunteers from four nursing RPGs. A total of 39 nurses participated (Female  $n = 34$ , Male  $n = 5$ ). Specialties included General Medicine ( $n = 10$ ), Paediatrics ( $n = 7$ ), a combined group of Mental Health (MH) Nurses and MH Nurse Unit Managers ( $n = 14$ ) that had all been running for over three years, and an Emergency Nurses group ( $n = 8$ ) that had been running for 8 months. Participants included Enrolled Nurses, Registered Nurses, Clinical Educators, and Nurse Managers with experience ranging from one year to over 30 years.

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### DATA SOURCES/COLLECTION

Semi-structured FGs were conducted by the lead researcher/author, an independent female post-graduate psychology student with a nursing background, who had not previously been involved with this RPG program. It should be noted that the lead researcher did have previous personal experience with other RPGs while working as a nurse and had not found this experience beneficial.

It was anticipated that FG cohorts of six or more participants would facilitate dynamic discussions, with three to five groups being enough to achieve theoretical saturation.<sup>22</sup> To ensure a comfortable, familiar environment, FGs were held in the usual RPG venues with seating arranged in a circle.<sup>22</sup> FG questions were developed from the National Safety and Quality Health Service (NSQHS), an independent Australian commission developed to ensure nationally consistent level of care for health care patients, in particular the 'partnering with consumers' standard;<sup>10</sup> NMBA standards related to reflection, cultural awareness, ethical decision making, therapeutic and professional relationships and capability to practice.<sup>12</sup> and the JD-R model, in particular the concept of job crafting.<sup>20</sup>

Sample questions included:

- How has participation in RPGs influenced your clinical practice?
- How has it affected your interactions with patients, their families, and colleagues?
- What strategies discussed in RPGs have you applied in your practice?
- How do you feel about seeking and incorporating feedback from RPGs?
- All interviews were digitally recorded, and notes were taken for reference by the lead researcher.

### DATA ANALYSIS

Digital recordings were transcribed verbatim using Otter.ai™. The transcriptions were reviewed for accuracy, with errors corrected. Identifiable data were removed, and the notes and transcripts were uploaded into NVivo™ software for both inductive and deductive thematic analysis.

Deductive analysis was used to identify data linked to the research questions, with coding frames derived from job crafting, the NMBA and NSQHS standards.<sup>24</sup> The inductive analysis enabled identification of unexpected, emergent themes. Analysis followed the six phases of thematic analysis recommended by Braun and Clarke,<sup>23</sup> and the means for establishing trustworthiness outlined by Nowell et al.<sup>24</sup>

### RESULTS

Findings are presented in two parts: the findings of the deductive analysis relating to NMBA standards, NSQHS standards and elements of job crafting, and emergent themes from the inductive analysis.

#### DEDUCTIVE ANALYSIS

Deductive analysis utilised predetermined codes from NMBA standards, the NSQHS standard regarding consumer partnerships, and job crafting definitions.

##### NMBA Standards

RPG participation was seen to help nurses meet aspects of NMBA Standard 1 that relates to reflection (FG2: Nurse 9), cultural awareness and ethical decision making; Standard 2 relating to therapeutic and professional relationships (FG2: Nurse 6); and Standard 3 relating to capability for practice (FG2: Nurse 6 and Nurse 9).

FG2: Nurse 9: "It invokes a lot more thought ... it's not only what's happening in that reflective space, but it's what happens afterwards and (the) ongoing learning that comes from that space."

FG2: Nurse 6: "Hearing other staff talk about their experiences helped me manage aggression better. ..." and "I was able to sort of remain with people and, you know, be therapeutic with them without freezing and thinking what do I do?"

##### NSQHS Partnering with Consumers Standard

Nurses reported that RPGs positively influenced their patient interactions and understanding of family dynamics, allowing for more tailored care.

FG4: Nurse 4: "Discussions to do with particular families or patients helps..." and "...you can best fit your nursing care to their experiences that have been happening and how they've been feeling about it. And then how they've been interacting with the staff around that."

##### Job Crafting

Analysis also revealed that RPGs were seen to provide formative, normative and restorative benefits with access to job resources like feedback (FG4: Nurse 2) and support (FG1: Nurse 2, FG4: Nurse 6).

FG1: Nurse 2: "It has felt like a support mechanism to be able to debrief and discuss things in a safe environment."

FG4: Nurse 2: "You get insight into how others address scenarios, which improves your practice."

FG4: Nurse 6: "You're not out there by yourself ... you can talk to people in this forum."

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### INDUCTIVE ANALYSIS

The inductive analysis revealed three main themes: feedback, trust, and RPGs as a forum for support.

#### Feedback

Participants had varying experiences and opinions of feedback in RPGs. Facilitators trained in the RPG model promote a non-judgmental environment where feedback is directed to the group rather than individuals.<sup>3,13,26</sup> Facilitation aims to foster a sense of psychological safety, encouraging more open disclosure, exploration of problematic clinical situations and critical reflection by the group, but this can take time. Participants who had attended more RPGs tended to view feedback as a constructive process (FG2: Nurse 3) while those who had attended fewer RPGs noted that personal feedback could be detrimental and judgemental (FG2: Nurse 2).

FG2: Nurse 3: "... I wouldn't mind getting some feedback in that space purely because it is a safe place ... you get an opportunity to take the emotion out of it ..."

FG2: Nurse 2: "The group is meant to be a safe environment ... when you suddenly get feedback on your clinical skills, it defeats that purpose."

#### Trust

Perceptions of trust also varied, with group members who attended frequently reporting higher levels of trust and feeling safer sharing experiences within RPG. They also indicated that the process of RPG had enhanced team cohesion and positively influenced the work environment (FG3: Nurse 6).

FG3: Nurse 6: "Trust goes out onto the ward ... we can pretty much divulge anything we need to each other."

Participants who had attended fewer RPG sessions expressed more guardedness, influenced by past experiences of workplace incivility (FG1: Nurse 2).

FG1: Nurse 2: "Nurses eat their own ... we're not always forgiving of each other."

#### Perceived value of RPGs

Despite varying perceptions regarding trust and feedback, RPGs were consistently framed as a forum for emotional support and professional development (FG3: Nurse 8, FG4: Nurse 4).

FG3: Nurse 8: "Hearing different stories ... gives you more tools to deal with patients. ..."

FG4: Nurse 4: "There was a discussion then about how people manage those family members or those patients. And I found that really helpful."

In fact, some RPG members advocated that RPGs be mandatory across nursing settings (FG1: Nurse 5).

FG1: Nurse 5: "It should be mandatory ... not just for significant events that require debrief."

Ironically, mandatory participation is not a feature of this model, and all RPGs in the program are completely voluntary, as were these FGs.

### DISCUSSION

RPGs aim to facilitate interactive learning through the sharing of clinical narratives in a facilitated, supportive, group environment, enabling nurses to engage in critical analysis of their practice with the additional benefit of receiving perspectives and feedback from others. While FG findings indicate that most nurses perceive RPGs to be a constructive professional development resource that does help develop critical reflection and relational skills, the data also reminds us that healthcare workplaces are not always conducive to constructive communication and, for some nurses, the term 'feedback' can carry negative connotations. The professional standards referenced in the current study emphasise the important role that feedback, reflection, and self-evaluation play in professional development, so it is pertinent and cautionary that the term 'feedback' has elicited polarised reactions among FG participants.

With these things in mind, the principles of RPG may be seen as counter-cultural, and the groups should be implemented with consideration of workplace context and team dynamics. An awareness of potential issues allows the RPG facilitator to be cautious and aware, intentionally cultivating a sense of psychological safety for each group over time. In creating the safe, non-judgemental space required for meaningful sharing of experiences and perspectives, facilitators guide group members to listen mindfully, speak meaningfully, suspend judgement, and provide feedback to the group-as-whole rather than open disagreement or criticism. One element of the RPG charter is not only to expect different perspectives but invite and encourage them. When the group is able to explore different views collaboratively, all have the opportunity to self-evaluate against a collaboratively constructed ideal nursing prototype.<sup>26</sup> Critical reflection often involves a degree of discomfort, as existing practices and beliefs are challenged,<sup>27</sup> however, depersonalising feedback in this way can help make the process less threatening and more meaningful. Effectively facilitated RPGs encourage existing practices and implicit bias to be considered and challenged,<sup>2</sup> providing the opportunity for nurses to make positive practical modifications to aspects of their clinical work, aligning with NMBA Standard 1, which emphasises the importance of critical thinking.<sup>14</sup> Furthermore, RPGs support NMBA Standard 2, fostering therapeutic relationships and developing a culture of safety and learning through peer engagement and knowledge

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sharing.<sup>12</sup> FG participants generally viewed RPGs as a useful platform for discussing professional challenges and collaboratively formulating solutions, aligning with NMBA Standard 3 that emphasises the importance of maintaining capability for practice and promoting the health and well-being of self and others.<sup>12</sup>

Psychological safety is an essential element of RPGs, allowing group members to be authentic and honest.<sup>26</sup> Strategic RPG facilitation promotes trust and respect whilst reinforcing the tasks and goals of RPG.<sup>3,13,26</sup> Longer-term RPG attendees in the FGs identified that they felt more comfortable with the idea of giving and receiving feedback generally, indicating that RPG attendance may also potentially have a reciprocal positive impact on the provision of feedback outside of the group. Collaborative problem-solving within RPGs can allow nurses to explore relational challenges, practice interpersonal skills, and reflect on ways to manage interpersonal aspects of their role, aligning with NSQHS partnership with consumers standard.<sup>11</sup> FG participants reported increased insight into complex clinical situations and improved professional relationships through sharing experiences and perspectives in RPG. The perception of enhanced social support and team cohesion from participation in RPGs may be seen to suggest associated positive implications for clinical practice and workplace culture.<sup>21</sup>

The current study indicates that effective RPGs can facilitate relational and cognitive job crafting for nurses. Access to personal and job resources, such as self-appraisal and social support, may help mitigate the negative emotional and cognitive impact of challenging interactions with patients and colleagues. Moreover, RPG participants have indicated that shared reflection allows them to redefine their perceptions of work issues, proactively supporting personal and professional growth. By reframing the way we think about our work and learning to interact in more constructive and meaningful ways, nurses can become more empowered and effective, enhancing job satisfaction.<sup>17,26</sup>

Findings indicate that participation in RPGs does provide formative and normative functions,<sup>28</sup> however, effective facilitation is necessary to maintain psychological safety and manage group dynamics. In demonstrating that nurses utilise RPGs to cognitively reappraise experiences, process emotions, and adjust relational approaches, the findings of this study point to their potential role in fostering positive relational norms, helping improve culture, and supporting resilience and effectiveness within the nursing workforce. FG participants also indicated that RPGs might have a positive impact on patient care,<sup>25</sup> however, there is still no clear evidence to support this observation.

## LIMITATIONS

Focus groups involved members of existing RPGs. While such convenience sampling provides insight into the lived experience of nurses from these groups, findings may not be representative of all nursing environments or all RPGs. Consequently, the experiences and perceptions of nurses from other specialties or RPGs may differ.

There is also a possibility that results may reflect a degree of selection bias. RPG participants volunteered to participate in the FGs, and most spoke positively about their experience. With voluntary purposive sampling, RPG participants with negative experiences may not have volunteered to participate.

The issue of confirmation bias was also considered by the researchers and addressed by enlisting an external lead researcher with a background in both nursing and psychology. It should be noted that the lead researcher's previous personal experience with RPGs in a different context had been a negative one.

The cross-sectional nature of the study does not allow for a clear determination of causal relationships between RPG participation and outcomes. Further research employing longitudinal designs using both quantitative and qualitative methodologies could provide a deeper understanding of how participation in RPGs influences interpersonal aspects of nursing practice and emotional well-being over time.

## CONCLUSION

The current study indicates that effectively facilitated RPGs can create a safe space for emotional respite, allowing nurses to share experiences and emotions in a supportive environment. As healthcare organisations grapple with escalating challenges of staff burnout and emotional strain, RPGs may provide a supportive mechanism to nurture a more resilient nursing workforce and positive workplace culture.

These findings indicate that RPGs are more than simply a support mechanism, however, pointing to their normative and formative functions. An emphasis on personal and interpersonal aspects of nursing care encourages nurses to develop ways of engaging more effectively with both patients and colleagues, helping them to meet the standards of professional bodies such as the NMBA and NSQHS that support improved health outcomes for patients.

Unhealthy or conflictual workplace contexts and cultures are barriers to the development of both psychological safety and meaningful reflection in a group, however, when effectively facilitated, the collaborative approach to reflection, respectful communication and appreciation of diversity promoted in RPGs can foster more positive norms for interpersonal interaction, cultivating a culture of safety

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and trust. The RPG model also maintains that feedback directed toward the collective rather than the individual, in a supportive environment, allows normative self-appraisal against an ideal nursing prototype.<sup>26</sup>

As such, RPGs may be seen as one strategy to promote psychological well-being and professional development for nursing staff in acute health care settings, with potential benefits for organisational culture and quality of care. Organisations considering RPGs should take time to plan, prepare, and adopt a defined RPG model. The creation of psychological safety and a working alliance begins before an RPG commences, and it is best to allow facilitators to engage groups without direct organisational involvement. RPGs work best when they are voluntary, collaborative, and considered. Prospective group members should be educated and engaged in the establishment of their own RPG. Similarly, facilitators need to receive adequate training, supervision and ongoing support. Future research should continue to focus on the longitudinal impact of RPGs in relation to patient care, organisational context and implications for workplace culture.

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# The impact of a "clean intermittent catheterisation simulation escape room" on senior nursing students

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## ABSTRACT

**Objective:** The study aims to examine the effect of a simulation escape room developed to practice clean intermittent catheterisation on senior nursing students' knowledge, satisfaction, and self-confidence in learning.

**Methods:** The study employed a single-group pre- and post-test design. The researchers developed a clean intermittent catheterisation simulation escape room based on Flow Theory. Students participated in the game immediately after receiving clean intermittent catheterisation training. A total of 102 students volunteered to take part in the study. Data were collected using a "Sociodemographic Questionnaire", "Knowledge Test", "Self-Evaluation Scale for Simulation Laboratory Practices", and "Student Satisfaction and Self-Confidence in Learning Scale". Numbers, percentages, means, and standard deviations were used to describe the data. The Kolmogorov–Smirnov test was used to assess normality. The Wilcoxon test was used to compare the students' pre- and post-test knowledge scores.

**Results:** The difference between students' pre- and post-test knowledge scores was statistically significant ( $p = 0.001$ ). Students' levels of satisfaction and self-confidence were found to be notably high. They also expressed positive views regarding their self-evaluation of simulation laboratory practice scores.

**Conclusion:** The clean intermittent catheterisation simulation escape room positively influenced senior nursing students' "knowledge", "satisfaction and self-confidence in learning", as well as their "self-evaluation of simulation laboratory practices".

### Implications for research, policy, and practice:

The demonstrated positive impact of a clean intermittent catheterisation simulation escape room may encourage nurse educators to integrate this approach into undergraduate nursing curricula.

### What is already known about the topic?

- Performing urinary catheterisation is a complex and invasive procedure.
- Game-based strategies are recognised as an efficient way to engage and motivate students in clinical skills labs.

### What this paper adds:

- The clean intermittent catheterisation simulation escape room can be successfully developed and implemented.
- The game positively influenced senior nursing students' knowledge, satisfaction, confidence in learning, and self-evaluation of simulation laboratory practices.

**Key Words:** Clean Intermittent Catheterisation; Nursing Students; Escape Room

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### INTRODUCTION

Urinary catheterisation is a complex and invasive procedure.<sup>1</sup> The placement of urinary catheters has been associated with significant morbidity and even mortality.<sup>2</sup> Nursing students must acquire evidence-based urinary catheterisation skills before graduation to prevent complications, ensure patient safety, and strengthen their clinical competence and self-confidence.<sup>3-5</sup> However, Bhatt et al. reported that the knowledge and skills of healthcare staff, including nurses, regarding urinary catheterisation remain inadequate.<sup>6</sup> The authors also emphasised the need for training programmes that address different types of catheterisation, including clean intermittent catheterisation (CIC).<sup>6</sup>

Although many nursing programmes teach these skills in simulation laboratories, opportunities to practise in clinical settings may be limited.<sup>3,7</sup> Students are often able to perform these procedures on real patients only when circumstances and institutional policies allow.<sup>4</sup> Therefore, effective instructional strategies in simulation laboratories are essential. Nurse educators should establish environments that promote the development of clinical competence and foster students' confidence in delivering patient care. Innovative teaching approaches implemented in clinical skills laboratories may further enhance students' self-confidence.<sup>8</sup>

Game-based learning has been identified as an effective way to engage and motivate students in clinical skills training.<sup>9</sup> Among these strategies, the simulation escape room has emerged as a novel pedagogical method for interactive learning.<sup>10</sup> Simulation escape rooms typically require participants to solve clues and challenges within a specified time, creating a sense of urgency and competition. This strategy has been widely adopted in undergraduate health education programmes.<sup>11-14</sup> A systematic review by Veldkamp et al. reported that simulation escape rooms promote active learning and increase students' motivation and skill development.<sup>15</sup>

Kardong-Edgren et al. suggested that high-risk, low-frequency procedures such as urinary catheterisation are particularly suitable for game-based environments.<sup>16</sup> Simulation escape rooms enhance learning by requiring students to collaboratively solve problems within structured scenarios, thereby strengthening communication and teamwork skills.<sup>17,18</sup>

Simulation escape rooms have been used to teach a wide range of topics in nursing education.<sup>19-23</sup> However, most studies have focused on reinforcing theoretical content.<sup>24</sup> Although direct evidence regarding the use of simulation escape rooms, especially for CIC-specific training, remains limited, their adaptability to diverse clinical procedures suggests considerable potential. Integrating simulation escape room-based activities may address current educational gaps by promoting interactive, team-based

learning and increasing student engagement.<sup>25</sup> Further research is needed to explore the implications of simulation escape room use in nursing education and to identify best practices.<sup>26</sup> The present study aimed to evaluate the effect of a simulation escape room designed for CIC practice on senior nursing students' "knowledge", "satisfaction", "self-confidence", and "self-evaluation of simulation laboratory performance".

### METHODS

#### DESIGN

This study had a singular group with a pre- and post-test design.

#### SETTINGS AND PARTICIPANTS

The study population consisted of 197 senior students enrolled in the Nursing Faculty during the 2022–2023 academic year. A convenience sampling method was used. The required sample size was calculated as 101 using G\*Power Version 3.1 (effect size = 0.25,  $\alpha$  = 0.05, power = 0.80). Students were eligible for inclusion if they had completed the theoretical instruction and simulation laboratory training on urinary catheterisation. Nine students who participated in the pilot study were excluded, and 86 students either declined to participate or did not meet the inclusion criteria. Ultimately, 102 students voluntarily participated and completed all components of the study.

#### Simulation Escape Room Development

The simulation escape room was designed using Flow Theory, which describes full engagement in an activity. Flow requires a balance between skill and challenge, clear goals, and immediate feedback.<sup>27</sup> According to Csikszentmihalyi, matching task difficulty with skill level is essential.<sup>28</sup> In this study, students progressed from simple to complex tasks, ending with the CIC procedure, ensuring an appropriate challenge–skill balance. Goals were clearly defined, and feedback was provided through sound cues (soft tones for correct steps and sharper tones for errors) to support motivation and guide performance.

A design team was established to develop the CIC-themed simulation escape room. The team consisted of three facilitators specialising in simulation-based learning in nursing education and CIC. All the facilitators have experience in managing pre-briefing, simulation, and debriefing.

The Healthcare Simulation Standards of Best Practice™ (HSSOBP™) does not have specific guidelines for escape rooms. All facilitators had experience in managing prebriefing, simulation, and debriefing processes. Although the Healthcare Simulation Standards of Best Practice™ (HSSOBP™) provides no specific guidance for ERs, the

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team designed the ERG based on recommendations from a literature review.<sup>29-31</sup> Pre-briefing, simulation, and debriefing components were designed and delivered in accordance with the HSSOBP™ directive.<sup>32-34</sup>

A single-scenario design was implemented across different rooms. The scenario involved a patient with sensory and motor loss whose indwelling urinary catheter had been removed 24 hours earlier, with no subsequent urine output. Learning objectives for practising CIC were clearly defined. Based on evidence recommending fewer than six students for high-fidelity simulations,<sup>35</sup> and considering available resources, it was decided that each game would include three students to allow closer observation. The simulation escape room environment was organised as five sequential activities within clinical simulation rooms (Table 1). To ensure that all students could participate, 17 sessions were held simultaneously across two clinical simulation rooms. Facilitators observed students from the control rooms and used auditory cues to indicate correct or incorrect responses. A stopwatch displayed elapsed time on the room monitor. The simulation escape room required learners to solve a series of puzzles to advance through the activities and achieve the learning objectives. Upon completing all tasks within the allotted time, teams gained access to a final box containing the key needed to escape the room.

### Simulation Escape Room Procedures

Before beginning the activities, students were briefed on the rules, safety information, general procedures, and purpose of the escape room in line with the HSSOBP™ prebriefing standards.<sup>32-34</sup> Students signed a fiction contract, which acknowledges the simulation nature of the scenario and supports full engagement as if it were real, and then formed their own teams, encouraging collaboration and creating a performance-oriented environment.

At the start of each session, students were reminded that all three team members were required to solve the tasks together. Once the door was locked, the 15-minute timer was activated. Students were directed to complete five activities within this time frame (Table 1). Facilitators observed the sessions from the control room, unseen by the students due to the one-way mirror with high reflectivity and low light transmission. Immediate feedback on each activity was provided through auditory signals indicating correct or incorrect responses. Each session concluded when the team either solved all activities or ran out of time. All games were video recorded in the simulation rooms (Supplementary Material).

**TABLE 1. THE ACTIVITIES IN THE SIMULATION ESCAPE ROOM**

Activities	Contents
1. Matching	The cards were mixed with five questions and answers related to the CIC practice. The student was asked to make the correct match between the question and the answer.
2. Word puzzle	There is a puzzle that consists of 10 questions about the CIC practice. A password with some letters was placed in the puzzle. The student was asked to find out this password.
3. Finding the materials for the CIC	Among the many medical supplies, the students were asked to find the materials that were necessary for the practice of the CIC.
4. The CIC practice steps	The students were asked to sort the CIC practice steps on the cards in the right order.
5. The CIC practice	The students were asked to perform the CIC practice on the high-fidelity simulator according to the application steps using the materials. Students who completed the CIC practice process correctly took the key from the box and escaped from the room.

### The pilot study

A three-session pilot study was conducted with nine senior nursing students, who were not included in the main study. Feedback on the game was collected using a form developed by the researchers. Students recommended increasing the volume of the feedback sounds and enlarging the font size of the word puzzle. The final version of the game was revised in line with this feedback. The average durations for the pre-briefing, simulation escape room, and debriefing were set at 5, 10, and 25 minutes, respectively.

## INSTRUMENTS

### 1. Sociodemographic questionnaire

This two-item questionnaire collected information on age and gender.

### 2. The CIC Knowledge Test

The CIC Knowledge Test was developed by the researchers based on the learning objectives. Content validation was performed by 10 expert lecturers in fundamental nursing. Expert opinions were evaluated using the Davis method,<sup>36</sup> yielding a content validity index of 0.97. A pilot test was conducted with 20 senior nursing students to assess item characteristics. Students completed the test in 10 minutes in a classroom setting. The item difficulty index was 0.56, and the mean discrimination index was 0.32. Two distractors were revised based on the results. Internal consistency was evaluated using the Kuder–Richardson 20 coefficient, which was 0.62. The test included 10 items, with a total possible score of 100, and was administered before and after the simulation.

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### 3. The Self-Evaluation Scale for Simulation Laboratory Practices (SES-SLP)

The SES-SLP is a self-report instrument developed in Turkish by Törüner et al. (2021) to evaluate the impact of simulation laboratory experiences on students' professional understanding, skills, and attitudes.<sup>37</sup> The five-point Likert scale contains 23 items across two subdimensions: "developing" and "challenging". Negatively worded items are reverse-coded. Scores range from 0 to 92, with higher scores indicating more positive perceptions of professional growth. Cronbach's alpha values reported in the original study were 0.94 (total), 0.96 (developing), and 0.73 (challenging).<sup>37</sup> In this study, Cronbach's alpha values were .81, .65, and .78, respectively.

### 4. The Student Satisfaction and Self-Confidence in Learning Scale (SSSC)

The SSSC was originally developed by Jeffries and Rizzolo, with the Turkish adaptation conducted by Ünver et al.<sup>38</sup> The Turkish version comprises 12 items divided into the subdimensions of "satisfaction" (5 items) and "self-confidence" (7 items). No negative items are included. Subdimension scores are calculated by dividing the total by the number of items. Reported Cronbach's alpha coefficients in the Turkish validation were .85 (satisfaction), .77 (self-confidence), and .89 (total).<sup>38</sup> In this study, Cronbach's alpha values were .90, .76 and .87, respectively.

### DATA COLLECTION

Before initiating the study, the "Sociodemographic Questionnaire" and "CIC Knowledge Test" were administered in a classroom setting, with approximately 10 minutes allocated for completion. Students then received two hours of theoretical training from a faculty member specialising in CIC, comprising lectures, question-and-answer interactions, and demonstrations. Immediately afterwards, students participated in practical CIC training using a partial-task trainer. To ensure consistency between theoretical and practical instruction, both sessions were delivered by the same faculty member.

Following the training, students were pre-briefed according to the HSSOBPTM guidelines.<sup>34</sup> After the escape room, a structured post-simulation debrief lasting approximately 25 minutes was conducted using the Promoting Excellence and Reflective Learning in Simulation approach.<sup>32-39</sup> After the debrief, students completed the "CIC Knowledge Test", the SES-SLP, and the SSSC in a face-to-face setting in the debriefing room.

### DATA ANALYSIS

IBM SPSS Statistics for Windows, version 21 (IBM Corp., Armonk, NY, USA), was used to analyse the data. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were calculated. The Kolmogorov-

Smirnov test was used to assess the normality of the distribution. The Wilcoxon signed-rank test was employed to compare students' pre- and post-test knowledge scores. A significance level of  $p < 0.05$  was accepted for all statistical decisions.

### ETHICS

Ethical approval was obtained from the University Ethics Committee (date: 24 November 2022; number: 2022/154), and written institutional permission was granted before data collection. The study adhered to the principles of the Declaration of Helsinki.<sup>40</sup> The study procedures were explained to all students, and informed consent was obtained individually. Students were assured that they could decline participation or withdraw from the study at any time without penalty.

### RESULTS

The students' mean age was  $22.56 \pm 1.17$  years, and 93.1% were female.

The mean pre-test knowledge score was  $65.29 \pm 13.32$ , while the mean post-test knowledge score was  $76.76 \pm 13.23$ . The difference between the pre- and post-test scores was statistically significant ( $Z = -6.461$ ;  $p = 0.001$ ) (Table 2).

**TABLE 2. COMPARISON OF PRE- AND POST-TEST KNOWLEDGE SCORES (N=102)**

	Median (IQR)	Mean±SD (Min-Max)
Pre-test Knowledge Scores	70 (20)	65.09±13.32 (20-90)
Post-test Knowledge Scores	80 (20)	76.76±13.23 (30-100)
Test*	Z=-6.461	
P	0.001	

\* Wilcoxon signed rank number test

The distributions of the SSSC and SES-SLP scores are presented in Table 3. The total SSSC score was  $4.53 \pm 0.38$ , and the total SES-SLP score was  $68.65 \pm 5.29$ . The students' mean "satisfaction" and "self-confidence" subscale scores were  $4.74 \pm 0.37$  and  $4.38 \pm 0.43$  out of 5, respectively, indicating high levels of satisfaction and self-confidence.

**TABLE 3. THE STUDENTS' SSSC SCORES (N=102)**

	Mean±SD	Min-Max
Satisfaction	4.74±0.37	4-5
Self-confidence	4.38±0.43	3.57-5
Total SSSC Score	4.53±0.38	3.75-5

Table 4 shows the distribution of the SES-SLP item scores. Students gave higher scores to items reflecting positive perceptions ("developing") and lower scores to items representing challenges ("challenging")—specifically items 6, 10, and 11.

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TABLE 4. THE STUDENTS' SES-SLP SCORES (N=102)

Questions	Mean± SD
1. Increased my level of knowledge	3.81±0.39
2. Increased my motivation	3.61±0.85
3. Made it hard for me to learn	3.14±1.52
4. Made me realize my mistakes	3.65±0.53
5. Improved my self-confidence	3.64±0.59
6. Made me feel inadequate	1.33±0.58
7. Developed my skill	3.65±0.53
8. Increased my attention	3.63±0.72
9. Reinforced my knowledge	3.44±1.64
10. Caused me to live in fear	0.29±0.45
11. Increased my level of satisfaction	3.56±0.58
12. Developed my communication skills	3.58±0.53
13. Increased my readiness	3.71±0.45
14. Developed my collaboration skills	3.70±0.47
15. Developed my observation skills	3.72±0.44
16. Made me see my lack of knowledge	3.71±0.47
17. Increased my assessment skills	3.54±0.71
18. Strengthened my professional values	3.67±1.61
19. Caused me to experience stress	1.71±1.18
20. Developed my decision making skills	3.38±0.73
21. Made me control my excitement	3.65±0.49
22. Increased my awareness	3.60±0.58
23. Increased my ability to work with the team	3.67±0.59

0 = I do not agree, 1 = I agree a little, 2 = I am undecided, 3 = I agree, 4 = I completely agree

## DISCUSSION

In this study, the simulation escape room designed for CIC practice was found to improve nursing students' "knowledge", "satisfaction", "self-confidence", and "self-evaluation of simulation laboratory performance". The statistically significant increase in knowledge scores suggests that the escape room supported cognitive learning (Table 2), and students' responses to the SES-SLP item "increased my knowledge level" reinforce this finding (Table 4). While previous escape room research generally reports increased knowledge.<sup>11,41</sup> The present study contributes more specifically to the literature by applying the escape room strategy to psychomotor procedural training—an area where evidence is still limited.

Psychomotor skill acquisition requires the integration of cognitive understanding, motor sequencing, and perceptual cues. Procedural competence develops through repeated exposure, structured guidance, and opportunities to refine technique. Research on psychomotor learning indicates that active engagement, problem-solving, and contextualised practice strengthen memory encoding and skill transfer.<sup>42,43</sup>

In the present simulation escape room, puzzles and task sequencing may have supported these mechanisms by prompting students to recall procedural steps, interpret clinical cues, and apply decision-making within a simulation context. This structured cognitive rehearsal likely contributed to the observed knowledge gains.

High levels of student satisfaction and self-confidence were also identified. Beyond escape room pedagogy, these outcomes can be interpreted within the broader literature on procedural training and competency development. Self-confidence in technical skills increases when learners experience supportive challenges, timely feedback, and opportunities for autonomous performance—three elements known to enhance self-efficacy and subsequent competency.<sup>44,45</sup> In this study, the progression from simple to complex tasks and the immediate feedback signals embedded in the escape room design align with these principles. Students' high motivation scores on the SES-SLP further support the role of challenge–skill balance, consistent with Flow Theory, in fostering engagement and confidence.<sup>26</sup>

Although previous studies have reported positive effects of escape rooms on student satisfaction and confidence,<sup>46–49</sup> these findings should also be viewed through the lens of clinical readiness. Newly graduated nurses often report anxiety and low confidence in performing invasive procedures such as catheterisation.<sup>50</sup> Learning environments that encourage autonomous decision-making and provide simulation-based mastery experiences have been shown to mitigate this gap.<sup>51</sup> The escape room structure—requiring students to work collaboratively, make procedural decisions, and navigate a time-limited scenario—may have offered a psychologically safe yet challenging space for building procedural confidence.

Finally, students' SES-SLP scores indicated a positive perception of their developing professional skills and attitudes. While previous escape room studies with nursing students similarly report benefits for critical thinking, teamwork, and communication,<sup>47</sup> the relevance of these competencies is particularly evident in catheterisation training, where errors often stem from lapses in procedural sequencing, aseptic technique, or communication. The escape room may therefore support not only cognitive and motivational outcomes but also professional behaviours integral to safe catheterisation practice.

## LIMITATIONS

The main limitations of this study are that it was conducted at a single centre, the sample consisted solely of senior nursing students, and no control group was used. Therefore, the findings cannot be generalised to all nursing students or other educational programmes. In addition, the effect of the simulation escape room on actual performance was not evaluated. The Cronbach's alpha value for the "challenging" subdimension of the SES-SLP scale was also lower than that reported in the original validation study.

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## CONCLUSION

The CIC simulation escape room positively influenced senior nursing students' "knowledge", "satisfaction", "confidence in learning", and "self-evaluation of simulation laboratory practice". These findings indicate that simulation escape rooms are an effective and engaging teaching strategy. Integrating such approaches into undergraduate nursing curricula may enhance students' clinical preparedness and support learner-centred education.

## IMPLICATIONS FOR RESEARCH, POLICY AND PRACTICE

The findings support simulation escape rooms as a promising educational strategy in nursing education. Further research employing larger and multi-site designs is warranted to examine long-term outcomes, including knowledge retention and clinical performance. Recognising simulation escape room approaches as structured strategies may support their integration into nursing curricula and accreditation standards. Integrating simulation escape rooms into skills laboratories may enhance student engagement, confidence and preparedness for clinical practice, particularly when supported by appropriate institutional and faculty development structures.

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# The journey from enrolled nurse to registered nurse: A mixed-methods study

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## ABSTRACT

**Objective:** To explore the experiences of nursing students undertaking a vocational entry pathway of a Bachelor of Nursing course.

**Background:** In Australia, there are three levels of nurses: Nurse Practitioners (NP), Registered Nurses (RN), and Enrolled Nurses (EN). ENs typically undertake vocational diplomas, while RNs complete bachelor's degrees, and Nurse Practitioners undertake postgraduate master's degrees. Many ENs seek career advancement to become RNs through degree pathways, a transition that offers expanded knowledge, skills, and scope of practice. This study examined the difficulties and experiences of ENs undertaking bachelor's degrees to become RNs, particularly under challenges posed by the shift to online education during the COVID-19 pandemic.

**Study Design and Methods:** A concurrent mixed-methods approach was employed. Qualitative focus group interviews, individual interviews, and cross-sectional surveys were conducted among transitioning ENs at an Australian university in 2022 and 2023. The qualitative component comprised of three focus groups with a total of 18 participants and five semi-structured individual interviews. The quantitative survey was disseminated to the same student population. Descriptive frequencies were

used to analyse demographic and rating survey questions, summative content analysis for open-ended survey questions, and thematic analysis for individual interviews and focus groups.

**Results:** Of the 77 students surveyed, 70 responded (90.91% response rate), with most participants being female and Australian-born. Survey data showed academic writing and referencing as the top academic challenge (mean score = 2.21), while managing work and study was the leading personal challenge (mean score = 1.81). Content analysis of open-ended responses revealed key concerns such as pace of learning, work-life balance, and short-notice placements. Thematic analysis of interviews and focus groups identified five overarching themes: academic challenges with course structure and online learning, balancing diverse commitments, adapting to university expectations, course management and support systems, and the transformative impacts of COVID-19.

**Conclusion:** The transition from enrolled to registered nurse is marked by numerous obstacles, further exacerbated by the pandemic. Educational institutions and healthcare stakeholders need to recognise these challenges and provide individualised support. The study underscores

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the importance of holistic support mechanisms in assisting ENs in their professional development and ensuring the healthcare industry benefits from competent RNs.

**Implications for Research, Policy, and Practice:**

Research should focus on effective educational models for transition programs, considering online and traditional environments. Policies need to support flexible learning, resource allocation, and clinical placement management. In practice, institutions should implement support systems and individualised learning approaches, and healthcare settings should develop holistic development programs for transitioning nurses.

**What is already known about the topic?**

- Enrolled Nurses frequently advance their careers by transitioning to Registered Nurses via degree pathways.
- Transitioning from Enrolled to Registered Nurse involves gaining broader skills and knowledge.

**What this paper adds:**

- Offers detailed accounts of Enrolled Nurses' transitions during COVID-19, focusing on academic, personal, and professional hurdles.
- Enrolled Nurses transitioning to the Registered Nurse qualification were uniquely affected by COVID-19, particularly within the online learning environment.
- Sheds light on educators' roles in easing this transition and the importance of administrative support in nursing education.
- Stresses the need for personalised support for transitioning nurses, mindful of socioeconomic and family challenges.

**Keywords:** Challenge; Conversion; COVID-19; Enrolled Nurse; Mixed-methods; Registered Nurse; Transition

**OBJECTIVE**

To explore the experiences of diploma-qualified nursing students undertaking a vocational entry pathway of a Bachelor of Nursing course.

**BACKGROUND**

Globally, nursing workforces typically consist of three levels: Nurse Practitioners (NP), Registered Nurses (RNs), and second-level nurses, whose roles vary by country. In Australia, New Zealand, and Singapore, second-level nurses are known as ENs, while in North America, they are called Licensed Practical Nurses (LPNs). These levels differ in education, scope of practice, and responsibilities, but all are essential to the healthcare system, with RNs often supervising second-level nurses.

In the middle of the twentieth century, the rebranding of 'nurses aides' to 'enrolled nurses' in Australia signified a significant shift in their role and the nature of education they received, reflecting increased responsibilities and expertise.<sup>1</sup> As the complexity of healthcare increased, Australia recognised the need for an advanced nursing workforce. Hospital-based programs gave way to vocational colleges offering a national Diploma of Nursing to equip nurses with the skills necessary to face contemporary healthcare challenges.<sup>2</sup> ENs are now integral contributors to the healthcare system, albeit under the supervision of RNs, as opposed to being merely adjuncts in the past.<sup>3</sup> The growing scope of practice for ENs over recent years has further

enabled greater contribution to health care and raised some confusion around differences in scope of practice, with RNs seen to have greater accountability, responsibilities, knowledge, and clinical decision-making, as well as being able to delegate care-related activities.<sup>1,3</sup>

For many ENs, the decision to undertake further studies to become an RN is not merely a change in title, but a transformational step with profound personal and professional implications.<sup>4</sup> Although the exact number of ENs transitioning to the RN role is not stipulated in the literature, within Chisholm Institute there are approximately 400 Diploma of Nursing students across two campuses each year. From that number, approximately 20% (100 students) express an interest and cross over to further their studies through a pathway into a Bachelor of Nursing degree.

The appeal of becoming an RN can go beyond promotion or better financial prospects. It is inextricably intertwined with a passion for delivering superior patient care, aspirations of specialisation, an eagerness for professional development, and a desire to impact the broader healthcare ecosystem.<sup>5</sup> Although this transition has historical roots and appears linear, it is not without complex obstacles.<sup>6</sup> Transitioning EN students frequently face challenging academic pressures, must assume broader responsibilities, and adapt to an ever-changing professional environment.<sup>4</sup> Attention and comprehension are necessary for navigating these professional shifts and adjusting to the diverse workplace dynamics that accompany them.<sup>3</sup>

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Despite the number of ENs seeking to make the transition, there is a gap in the literature regarding their unique journeys after gaining substantial experience at their level, when seeking to pursue RN certification. To date, their unique challenges and potential opportunities have not been thoroughly investigated, creating a compelling case for further examination. Recently, the transition of ENs has been further complicated by the COVID-19 pandemic, which prompted a paradigm shift in the educational spectrum. While the transition to online education was unavoidable, it introduced its own set of obstacles and learning dynamics.<sup>7</sup> Thus, this study aimed to explore the experiences of nursing students undertaking a vocational entry pathway of a Bachelor of Nursing course.

## METHODS

### STUDY DESIGN

The study was designed as a concurrent mixed-methods study utilising both qualitative and quantitative components simultaneously for data collection and analysis.<sup>8</sup> The mixed-methods strategy was chosen because it offered the flexibility to investigate the research question in depth. The qualitative component facilitated a comprehensive examination of the complexities and nuances of the research questions, while the quantitative component enabled a broader examination of trends and relationships within a larger dataset.<sup>9,10</sup>

### STUDY SETTING

This study was conducted in Melbourne, Australia, over the 2022 to 2023 academic years, to explore the experiences of students in the 2022 intake of a two-year Bachelor of Nursing transition course. The students were undertaking the course offered by La Trobe University at two campuses of a dual (vocational and higher education) provider. The first intake for the transitioning pathway course was in 2018, and enrolled approximately 40 students, of which 30 students (75%) graduated. Since then, there have been 110 students enrolled across two campuses each year, with a graduate completion rate of approximately 98%.

### RECRUITMENT

Purposive sampling was used to identify students and graduates of the university pathway who met the inclusion criteria. Eligible participants were ENs admitted to the Bachelor of Nursing transition pathway who had previously completed a Diploma of Nursing. This included all students enrolled in 2022–2023 and graduates of the 2021 cohort. Exclusion criteria included anyone under the age of 18 years.

#### Recruitment for Survey

The research study assistants used student email addresses to send invitations via QuestionPro, introducing the research

project and the study's objectives and a link to the survey. They also coordinated Zoom meetings between educators and students, where they introduced the survey, ensured that students received the survey link, and addressed any questions or concerns students had with completing the survey. The survey link remained open for a total of two weeks. A reminder email was sent to non-responders approximately one week after the initial distribution to encourage participation and thus maximise response rates.

#### Recruitment for Focus Groups and Interviews

To recruit participants for focus group sessions, we employed a strategic and multifaceted recruitment strategy. Initially, a research assistant reached out to prospective student participants, providing them with an introduction to the research project. During this initial contact, the study objectives and goals were communicated. A purposive sample was drawn from students who expressed interest, and those selected were invited to participate in focus-group sessions.

For interviews, course coordinators facilitated initial contact by introducing the study to graduates. The contact details of those who agreed to participate were subsequently forwarded to a designated research assistant, who then liaised with participants to arrange interviews at mutually convenient times.

### DATA COLLECTION

A combination of qualitative semi-structured individual interviews, focus groups and quantitative cross-sectional surveys was employed.

#### Survey

The survey comprised a total of 24 questions and collected demographic data and insights into students' experiences and perceptions while undertaking the pathway program. The development of the questions was informed by a scoping review of the research question and piloted with topic experts, including academics and clinicians. Seven questions required respondents to rate their experiences on a scale of 1–5, where a score of 1 indicated the greatest significance or value and 5 indicated the least. Six open-ended questions prompted students to elaborate on challenges and enablers they encountered. The rating questions enabled participants to prioritise varying aspects of their transition experiences, while open-ended questions offered an opportunity to share detailed insights and narratives. The remaining eleven questions collated data on student demographics.

#### Focus groups and Interviews

Two trained research assistants, previously unknown to students, oversaw focus groups in order to facilitate candid responses and foster an environment conducive to open

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discussion. Their responsibilities included ensuring that discussions remained structured while allowing for the free flow of personal experiences and viewpoints.

Semi-structured interviews were conducted via Zoom and typically lasted between 30 and 40 minutes. They consisted of four parts, comprising demographic characteristics, diploma experiences, degree study experiences and perspectives on transition (Supplementary Material).

### DATA ANALYSIS

#### Survey

Demographic and educational profiling survey data were analysed using descriptive frequencies. A quantitative descriptive statistical approach was applied to the rating questions, which used a five-point Likert-type scale where participants rated a series of determinants based on their perceived significance and impact. A score of 1 indicated the highest level of significance, while a score of 5 indicated the least.

Responses to open-ended survey questions were subjected to comprehensive content analysis. This method, as described by Hsieh and Shannon<sup>12</sup> enables elucidating nuances of concise survey responses. Initially, one researcher immersed themselves in the data, identifying recurring themes and classifying them appropriately. Afterwards, frequencies of these themes were evaluated to provide context for findings. To ensure consistency and validity of the categorisation procedure, a second researcher performed cross-verification.

#### Focus Group and Interviews

Two researchers independently conducted a comprehensive thematic analysis of the interview and focus group transcriptions. This procedure adhered to the six-step methodology proposed by Braun and Clarke which included familiarising with the data, generating initial codes,<sup>13</sup> searching for themes, reviewing themes, defining and naming themes, and producing the report. Individually, the researchers immersed themselves in the data to gain an understanding of the overall content. The qualitative data analysis software NVivo facilitated the process and provided a framework for coding and classifying the rich participant narratives.<sup>14</sup> Codes were then organised into potential themes, which were reviewed and refined on an ongoing basis.

### ETHICAL CONSIDERATIONS

Ethics approval was granted by the La Trobe University Human Research Ethics Committee (HEC22023). All students were provided with participant information sheets explaining the study purpose and assured of the privacy and confidentiality of their information. Students also had the opportunity to ask the research assistants any questions or seek clarification. Written informed consent was obtained

before surveys, focus groups, or interviews proceeded. Participants were able to withdraw their participation at any stage in the research process with no implications for them. Potential power imbalances were managed through the use of research assistants, not known to students, managing all correspondence, surveys, interviews, and focus groups. This also included recording of interviews and focus groups, coding and analysis. Data security was managed by ensuring files were stored within locked password applications and in a secure centrally located area under the university data management system. All participants remain anonymous, and their data was coded to maintain their confidentiality. Focus groups were conducted on campus in an area away from teaching staff, and interviews were conducted privately over a Microsoft Teams meeting.

### STUDY RIGOR

Rigour of the study was intended to enhance its credibility, dependability, and applicability. Combining qualitative and quantitative methods, a mixed-methods approach was strategically employed to increase the breadth and depth of the data, thereby yielding additional insights. Utilising standardised tools such as QuestionPro ensured uniformity, precision, and objectivity in data collection and analysis for the survey. Survey reliability was enhanced by its cross-sectional design, which captured a snapshot of students' experiences at a particular time. The multiple researcher approach in both the content and thematic analysis served as a safeguard against possible biases for the qualitative component, thereby enhancing the study's validity. Constant comparison, iterative theme refinement, and researcher consensus building increased reliability.<sup>15</sup> The use of NVivo, a qualitative data analysis software, ensured systematic, exhaustive, and replicable coding, thereby enhancing the credibility of the findings.

## RESULTS

### GENERAL CHARACTERISTICS OF ALL PARTICIPANTS

Participants' ages ranged from 18 to 64 years (Table 1). The largest age group was 35-44 years (36.49%), followed by 25-34 years (33.78%). Most participants were female (83.56%), while 1.37% identified as 'other'. Most were born in Australia (63.51%), while 36.49% were born in other countries. The majority reported speaking English as their primary language at home (82.43%), while 17.57% spoke other languages, including Hindi and Punjabi, Filipino, Dari, Sinhalese, and Gujarati and Chinese, suggesting a multicultural and multilingual population of students.

About a quarter of participants (23.61%) reported entering the Diploma of Nursing as school leavers, while 76.39% went on to further education. Participants were asked to report their highest level of education completed prior to

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entering the Diploma of Nursing. The highest proportion (27%) held diplomas, followed by bachelor's degrees (10.8%), before starting within the nursing field. Other education levels represented included Year 12/final year of secondary schooling (35.1%), vocational Certificate III (lays groundwork for further learning into Certificate IV level, with main purpose to qualify people to undertake skilled work) (10.8%), Certificate IV (generally accepted by universities to be equivalent to six to 12 months of a bachelor degree, with credit towards further studies often granted) (10.8%), Certificate II (qualifies people to undertake mainly routine work and lay groundwork for further education) (1.4%), and did not finish secondary school (2.7%).

**TABLE 1. DEMOGRAPHIC AND EDUCATIONAL PROFILES OF ALL PARTICIPANTS**

		n	%
Age (years) (n=74)	18-24	14	18.92
	25-34	25	33.78
	35-44	27	36.49
	45-54	7	9.46
	55-64	1	1.35
Gender (n=73)	Female	61	83.56
	Male	12	16
Country of Birth (n=74)	Australia	47	63.51
	Others	27	36.49
Language Spoken at Home (n=74)	English	61	82.43
	Others	13	17.57
School-aged Children (n=74)	Yes	36	48.65
	No	38	51.35
School leaver prior to entering EN (n=72)	Yes	17	23.61
	No	55	76.39
Education level prior to entering EN (n=74)	Did not finish secondary school	2	2.7
	Completed Year 12	26	35.1
	Certificate II	1	1.4
	Certificate III	8	10.8
	Certificate IV	8	10.8
	Diploma	20	27
	Bachelor	8	10.8
	Other	1	1.4

## SURVEY

The total population of students enrolled in the 2022 intake numbered 77. The response rate for the survey was almost 91% (70). Response rates varied significantly for particular survey questions. For example, only 31% of students responded to the question related to specific transitional challenges, while a response rate of 85% and 80% was obtained regarding personal and academic challenges. This could indicate that

the majority experienced difficulties or felt uncomfortable discussing them, or interpretability issues may have been present.

## Survey Rating Questions

Participants were asked to rate various academic and personal challenges encountered during their transition, using a five-point Likert-type scale in which 1 indicated the most significant impact and 5 the least. Among the questions within academic challenges, academic writing and referencing were rated as the most significant (mean score = 2.21), followed by the independent nature of learning (2.90), assessment requirements (2.92), and complexity of concepts (2.97), thus reflecting the academic demands associated with university-level study. For personal challenges, managing work and study emerged as the most significant issue (mean score = 1.81), followed by clinical requirements (2.70), understanding university expectations (3.19), and being located on the vocational campus (3.42).

**TABLE 2. DISTRIBUTION OF STUDENTS' RATING QUESTIONS**

Question	Influences	Score
What have been the academic challenges you have faced studying at degree level? Response rate: (62 / 77) = 81%	Other	3.60
	Complexity of concepts	2.97
	Assessment requirements	2.92
	Independent nature of learning	2.90
	Academic writing and referencing	2.21
What have been the personal challenges you have faced studying at degree level? Response rate: (66 / 77) = 86%	Other	3.44
	Managing work and study	1.81
	Understanding university expectations	3.19
	Clinical requirements	2.70
	Being located on the (vocational institution) campus	3.42

## Survey Open-Ended Questions

Open-ended survey questions were comprehensively analysed through content analysis and revealed key challenges and supports experienced by students. Three key themes emerged where 'other' was selected as the highest common response: work-life balance, pace of learning, and short notice of placements. Overall, the most frequently cited challenge was managing work-study balance (38%), followed by limited face-to-face learning (29%), difficulties with assignments (15%), and course co-ordination issues (10%). Less common concerns included limited progress in placement, lack of laboratory practice, and gaps in prior education. In terms of support, teacher engagement was identified as the most helpful factor by 76% of respondents, emphasising the critical role of approachable and responsive educators. Other supports included laboratory-based learning (10%), peer

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TABLE 3. DISTRIBUTION OF OPEN-ENDED RESPONSES

Question	Response	Frequency
Tell us more about any challenges you have encountered. Response rate: (48/77) = 62%	Work Study Balance	18 (38%)
	Limited Face-to-Face Learning	14 (29%)
	Struggling with Assignment	7 (15%)
	Course Coordination Issues	5 (10%)
	Finding No Progress in Placement	2 (4%)
	Lack of Lab Practice	1 (2%)
	Education Gap	1 (2%)
Please tell us more about the things that have helped with your degree studies. Response rate: (42/77) = 55%	Teachers	32 (76%)
	Productive Lab Education	4 (10%)
	Peer support	3 (7%)
	Library Facilities	2 (5%)
	Previous nursing experience	1 (2%)
If you have used university support services, which ones have you used and how have they assisted you? Response rate: (39/77) = 51%	Not Used	10 (26%)
	Library/Librarian	9 (23%)
	ASK (University)	7 (18%)
	Studiosity	7 (18%)
	Counselling Services	3 (8%)
	Student Online	2 (5%)
	LMS	1 (3%)

support (7%), and library resources (5%). When asked about university support services, many students reported not using them (26%), while others highlighted assistance from librarians (23%), ASK and Studiosity (each 18%). Counselling and digital platforms were mentioned less frequently.

Under academic-challenges, 81% of respondents (62/77) completed this question. Pace of learning and work-life balance were highlighted as the most common recurring themes.

SR “Pace of learning.” and SR: “The intense study workload within a concentrated time of approx. 3-8 weeks when there is a 12 week semester.”

Respondents felt the intense study load, limited face-to-face learning time, and trying to juggle family and time off work was extremely overwhelming.

SR “Juggling family and placement and assessments and work all together.”

Within the question of personal challenges, 86% of respondents (66/77) completed this question, and the recurring themes identified included work-life balance again, and short notice of placements. In relation to work-life balance, survey respondents identified that studying at a degree level posed a number of issues, especially with trying to balance family commitments, work, and complete the required placement, within the allocated time frames.

SR “Managing family and study.”

SR “Managing placement and children, work and study.”

SR “Combining the young family commitments and responsibilities with available study time and work.”

It was also observed that the short notice of placements not only intensified the challenges faced by students but also compounded the pressure they faced.

SR “Very little downtime and very consuming when considering placement times.”

## FOCUS GROUPS AND INTERVIEWS

Transitional experiences of students from ENs to RNs were illuminated through a thorough examination of the collected data. Five key themes emerged: 1) Academic challenges of course structure and the new realm of online learning, 2) Balancing work-life diverse commitments, 3) Transitioning to university culture with its nuanced academic expectations, 4) Course management and organisation, and 5) Transformative impacts of the COVID-19 pandemic. Together, these themes capture the multifaceted journey of these nursing students, offering valuable insights into their unique transitional experiences.

### Academic Challenges of Course Structure and the New Realm of Online Learning

Participants identified a variety of academic hurdles while pursuing their degrees. Factors such as pace of learning, heavy workload in a short period of time, and limited class time were rated highly as the main academic challenges. Some students viewed the lack of face-to-face classes as a disadvantage, particularly those who found it difficult to adapt to online learning and navigate contemporary digital systems.

FG1 “I did my diploma 10 years ago and really struggle with online learning.”

Due to limited in-class time, some reported feeling they had to teach themselves about the subject, resulting in frustration and dissatisfaction. They emphasised the difficulty in participating in online group discussions and the significance of these discussions to their learning process.

FG1 “The amount of online learning has been a challenge; I much prefer in-class sessions as I’m able to participate in group discussions easily and that gives me a better understanding of the concepts we are learning”.

### Balancing Work-life Diverse Commitments

Findings revealed complexities faced by participants in balancing family and professional responsibilities while pursuing their studies, thus illustrating the challenges of managing multiple commitments simultaneously. Participants vocalised juggling their roles as family members,

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employees, and students, as well as specific difficulties in obtaining time off from work and family for placements. This was expressed by participants as seen below:

FG1 “Working, studying and family who relying [sic] on you only.”

FG2 “Juggling all placements, family, loss of income due to placements and still maintaining the study load.”

Financial issues also emerged as a significant challenge. This sub-theme encapsulated the financial strain participants experienced due to a lack of income, coupled with the pressure of financially sustaining their families whilst also studying.

FG2 “Time off from work and family commitments.”

FG3 “Fitting in family and no income support...available for family studying.”

Other responses emphasised the complexities of undertaking full-time study, working full-time, being a single parent, and managing expectations associated with clinical placements.

FG3 “Juggling children, work and study and placements as a single mum.”

### Transitioning to University Culture with its Nuanced Academic Expectations

Understanding and adapting to university expectations also emerged as challenging for participants. For many, entering the university ecosystem was a unique experience. Intricate theoretical concepts proved intimidating, with many expressing difficulties. In addition, difficulties of academic rigour and writing demanded adaptable approaches. The structured protocols of academic writing, particularly referencing, presented steep learning curves.

FG3 “My learning style, I hate writing. That was a personal challenge.”

FG3 “I think the lecturers definitely were the biggest resource for us, especially the ones in the class. They were very understanding. They were just so good at explaining things. That was probably one of the other reasons why I chose to stick with (the university). I really liked the lecturers and the way they always supported us and explained certain concepts.”

For some participants, clinical settings were both a testing ground and a realm of transformation. Many found it to be a humbling experience when they returned to their work settings as students, particularly after enjoying the autonomy of their previous roles. Shifting between these roles often felt disorienting, as one participant noted,

IP “I had the experience, but on placements, it felt like I was starting from scratch.”

Participants indicated that, when comparing the EN and RN curricula, the RN curriculum was more academic and theory-oriented. Nonetheless, as they progressed, many began to appreciate and embrace the expanded RN responsibilities. One student reflected:

IP “Over time, I began to understand the depth and breadth of being an RN.”

IP “Clinical knowledge actually at the beginning I didn’t think there was a great deal of difference between an EN and RN... now I’m at the end of the course I realised there’s a huge difference not just clinical knowledge but critical thinking.”

### Course Management and Organisation

Support services and support staff was another recurring theme noted under facilitation of the course. Participants identified a variety of support services whilst pursuing their degrees as facilitation towards their success. The use of library services, Studiosity (an online academic support platform which provides free and personalised help for students), or seeing librarians to help them with their studies from both institutions and being able to seek university support services were noted. All students had the ability to access resources from both the TAFE and the university through the partnership program. This gave them opportunities to gather a wealth of knowledge and support through each infrastructure setup. This was reiterated through qualitative comments such as:

FG2 “The librarian, for references checking (has been) very useful.” “ASK (university) has been a big help in navigating things. The (university) library has been fantastic resource also.”

Participants consistently identified teacher support as the most prevalent form of assistance, with multiple references to its significance throughout.

FG2 “Supportive (university) nursing educators at (the) campus who understand students’ concerns & difficulty with navigating the course content, placement & requirements.”

FG3 “Supportive learning to cater for different learning needs.”

FG1 “Knowledgeable, approachable and helpful educators.”

In addition to teacher support, participants also identified peer support as a significant source of assistance, highlighting their complementary role in fostering engagement and learning.

FG2 “Having a friend to support and encourage me through the pressures of studying and expectations of the degree, honestly without the support I would probably have quit.”

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The transition to university for a profession as demanding as nursing, however, was also difficult in and of itself. The significance of nursing placements could not be overstated. Nonetheless, a majority of participants expressed concerns about placement allocation processes. Students frequently described feeling marginalised, whether due to placements that did not align with their academic goals or logistical nightmares caused by last-minute announcements, which were more pronounced because of the COVID-19 pandemic. The sentiment of one participant resonated with many:

FG3 “Juggling work commitments with short-notice placements felt like walking a tightrope.”

Participants frequently cited a lack of timely communication related to clinical placement as a significant obstacle as a result of COVID-19 challenges. Students are required to align their schedules and make logistical arrangements in advance for clinical placements. Without proper communication, many reported being left in limbo, leading to stress, confusion, and sometimes missed opportunities.

IP “Cancellation like a couple of days before or not receiving information on where to go for placement that was to be tricky.”

IP “Very short notice of placement.”

### COVID-19's Double-Edged Sword

The COVID-19 pandemic was not only a health crisis but also created academic upheaval that altered the educational paths of many. This period was reported to be both difficult and transformative for nursing students transitioning from ENs to RNs. The abrupt transition to online learning created a void for many. Some lamented the loss of face-to-face interactions, with one recalling:

IP “The pivot to Zoom felt isolating. The absence of hands-on practice felt like a setback.”

This situation also posed a threat to integral clinical placements of nursing education. Students reported shorter, more intense placement periods, which, despite being beneficial, were often exhausting.

IP “Then last-minute placements in December before the end of the year, after you'd finished all your coursework, just to get those hours up, and sometimes you'd have a week here or a week there ... then you go into the hospital setting where it's N95s, full PPE ... I went straight into Emergency for my first rotation.”

However, the pandemic also saw positive aspects. The transition to online platforms offered flexibility in balancing work, family, and school. As one participant noted:

FG3 “The blended approach was a lifesaver, making juggling work and university commitments possible.”

Moreover, institutional support played a crucial role. The university's role in assisting students through these uncertain times was commended. Interestingly, some students believed that their transition experience was largely unaffected by the pandemic, with one expressing:

FG3 “Nice balance of face-to-face and online which makes work/uni [university] achievable.”

## DISCUSSION

This research sought to explore the experiences of nursing students undertaking a vocational entry pathway to a Bachelor of Nursing. In doing so, it uncovered a variety of reasons and motivations for ENs to pursue degrees, as well as academic challenges faced. According to the findings, there was a substantial overlap between conclusions drawn from the survey ratings, open-ended question responses, focus groups, and interviews. The survey responses provided a broader perspective and allowed for quantitative comparisons, whereas the focus groups and interviews provided rich, detailed narratives that captured the subtleties and complexities of participants' experiences. Despite their dissimilar formats, both data sources converged on a number of central themes, demonstrating consistency of the findings.

While pursuing nursing degrees, many students reported experiencing academic overload as a result of the course's pace and structure, confirming prior research.<sup>16,17</sup> In an integrative review, Pitt et al. discussed the rigorous requirements of nursing curricula and the need for educational reforms.<sup>16</sup> Reverte-Villarroya et al. further confirmed this in their multi-centre study research showing that the mental health of students was a significant factor that could influence university studies within the health sciences.<sup>17</sup> Challenges for students in this area may also contribute to issues such as student burnout, mental health concerns, or increased attrition rates.<sup>16,17,18</sup>

Following the COVID-19 pandemic, there is a need to revisit academic curricula to include promoting healthy habits and providing appropriate coping strategies for nursing students.<sup>17</sup> The research findings concur with the recommendations above, indicating a universal need for curriculum modifications that take the mental and emotional health of students into account.<sup>17,25</sup> Institutional supports that are available to students and could help mitigate these risks include student support services, counselling, library and academic support, career support, success and wellbeing support, and Koorie student support.

According to the participants, the difficulty of maintaining a healthy balance between work, study, and personal lives were a recurrent problem in their course experience. Similarly, Hodge et al. found in their descriptive survey that working students needed to constantly juggle their academic and professional obligations.<sup>18</sup> This frequently

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impacted their academic performance and well-being. The research highlights the unique socioeconomic pressures faced by these transitioning nurses. Whilst the EN cohort at Chisholm Institute are usually working ENs, this does not diminish the desire to achieve an undergraduate qualification in nursing. In addition to the obvious financial constraints associated with tuition and reduced work hours, the participants highlighted the difficulty of supporting their families without their usual income. The dual burden of financing an education and supporting a family has been somewhat neglected in prior research. Notably, the findings highlight the nuanced complexity of balancing familial obligations, professional obligations, and academic rigour. This is especially true for single parents who must navigate the academic world while ensuring their families' well-being. With these insights in hand, the need for individualised and targeted assistance becomes even more pressing. To assist transitioning nurses, institutions should provide flexible study schedules, financial aid, or stipend opportunities.

ENs transitioning to Bachelor of Nursing qualifications frequently struggle with the rigorous academic requirements of university settings, particularly when confronted with intricate theoretical constructs.<sup>6,19,20,21</sup> The feedback from the participants highlights the difficulties posed by academic rigour and the peculiarities of their writing requirements.<sup>22</sup> Differences between EN and RN curricula highlighted in the study are consistent with prevalent shifts in nursing education. The EN curriculum focuses on practical, task-specific skills, whereas the RN curriculum emphasises theory and a holistic understanding of patient care.<sup>19</sup> This emphasis on theory is crucial, especially when considering the diverse roles of RNs, which include both caregiving and advocacy. Dyson as well as Rojjanasrirat and Rice highlights the transformative potential of the RN curriculum,<sup>20, 21</sup> which aims to shape students' identities and prepare them for the extensive responsibilities of an RN. Particularly those students with a clinical background, found the transition to a theory-heavy academic setting extremely intimidating. Similarly, den Hertog and Boshuizen discovered a difference between practical nursing experience and academic writing standards.<sup>22</sup> This gap emphasises the need for individualised support and resources to facilitate students' integration and development within the RN curriculum.

Clinical placements, recognised for their transformative capacity, can also be intricate learning terrains, as noted by Scammell et al.<sup>23</sup> For those who have previously functioned independently as ENs, revisiting clinical settings highlights the interaction between their established professional roles and their developing student identities. This variation is consistent with Huston's analysis of the difficulties faced by professionals readjusting to educational environments.<sup>24</sup> Such transitions require individualised mentoring and reinforcement, particularly when reconciling seasoned clinical practice with the evolving student role.

Embarking on the journey from EN to RN is seldom a solitary experience. The participants consistently underscored the pivotal role of educators in this transformation. In transitioning from the more autonomous domain of the EN role to the structured, theory-rich environment of the RN program, many students reported feeling adrift. Educators did more than just impart knowledge; they served as navigators, helping students bridge the gap between their prior experiences and the new academic demands of the RN curriculum. It has been demonstrated that educators play a crucial role in facilitating the smooth transition of nursing students by providing them with guidance, mentorship, and support as they negotiate the complexities of their evolving professional identities.<sup>25</sup>

However, while academic and clinical challenges remain paramount, administrative barriers must not be overlooked. Ineffective course management, particularly in the area of communication, can exacerbate students' anxiety, particularly in fields requiring logistical precision, such as nursing. The significance of effective course administration emphasises that proactive and clear communication is crucial to the success and well-being of students.<sup>26</sup> Students voiced concerns regarding placements, which are a cornerstone of nursing education, and this shed light on a situation requiring immediate attention. To ensure that learning is optimised without additional stressors, it is essential that placements correspond to academic goals and are logistically feasible.

The impact of the COVID-19 pandemic on students' experiences in this study was diverse, reinforcing the varied online learning experiences reported by participants in other studies.<sup>5,7</sup> These experiences were significantly influenced by individual learning styles, digital literacy, and home learning environments. A variety of responses were found to online education. Some students found the flexibility and convenience of online education advantageous, as it allowed them to effectively manage their schedules. This viewpoint supports findings of a study by Bao, who argued that online learning platforms could provide students with opportunities to personalise their learning experiences, thereby improving academic outcomes as a whole.<sup>5</sup> On the other hand, lack of access to necessary resources and the inability to gain practical experience were frequently cited as issues by some students. This observation is consistent with the findings of a study conducted by Khalil et al., who noted that the abrupt shift to online learning in response to the pandemic posed significant challenges, especially for students who lacked necessary technological resources or whose courses relied heavily on practical, hands-on experiences.<sup>7</sup>

This study, to the best of the researchers' knowledge, includes a much-needed current investigation to examine students' experiences as they transition across roles. However, the study also has some limitations. Participants were drawn

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from only four cohorts of students with a limited sample size. Hence, being able to capture further cohorts would be beneficial to the current research and enhance overall results. In addition, students were only sourced from one specific EN to RN education pathway with a dual sector education partner and the experiences of students in other similar programs, pathways, and other settings might be different. Despite these limitations, the findings do provide useful insights into an important student group in addressing the shortages of RNs.

## CONCLUSION

The journey from EN to RN is filled with both obstacles and opportunities. This study shed light on multifaceted experiences of these professionals, illuminating the complexities of their academic, clinical, and administrative challenges. As the terrain of higher education was navigated, the participants were confronted with hurdles such as academic expectations, a tug of war between work, study, and personal life, and complexities of revisiting clinical settings in a new role. The added complication of the COVID-19 pandemic and abrupt transition to online education highlighted the resilience and adaptability required for their transitional journeys.

It is imperative that educational institutions, policymakers, and the broader healthcare community recognise these challenges and work collaboratively to develop individualised support mechanisms for these students. This would ensure that the healthcare industry has access to RNs who are well-prepared, rounded, and competent, in addition to facilitating smoother transitions. Future research should delve deeper into the development of innovative pedagogical strategies and support systems that cater to the specific needs of this population, with the goal of bridging the gap between personal aspiration and professional excellence.

## IMPLICATIONS FOR RESEARCH, POLICY, AND PRACTICE

Future studies should focus on developing specialised teaching methods and support systems tailored for ENs transitioning to RN roles. Investigating the long-term career impacts and efficacy of educational models for ENs is crucial.

Education policies need to cater specifically to the challenges faced by ENs, offering flexible learning and assessment options that consider their work-life balance. Ensuring equitable access to technology and streamlined clinical placements for ENs is vital for their professional development. Enabling policies that capture the students' wellbeing, such as library and academic writing support and counselling is essential to student success.

Practice settings should provide targeted mentorship and support for ENs during their transition. Healthcare

institutions must create environments that recognise and utilise the unique experiences and skills of ENs, promoting their continuous professional development and providing effective feedback mechanisms.

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# REVIEW AND DISCUSSION PAPERS

## Intra-professional cultural competence: Exploring a strategy to support Australia's culturally and linguistically diverse nursing workforce

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### ABSTRACT

**Objective:** The objective of this study is to provide a possible strategy to enhance professional integration through education relating to a new concept: Intra-Professional Cultural Competence (IPCC). This concept primarily focuses on the interactions between nurses within the workplace.

**Background:** Australia's nursing workforce is starting to reflect the nation's diverse population. In 2022, 43% of the nursing workforce were born overseas, with 22% being internationally qualified nurses and 21% locally qualified, but overseas-born. As a result, up to 43% of the workforce may be culturally and linguistically diverse. Locally qualified, overseas-born nurses may be first-generation migrants or international students who have remained working in Australia after graduation. The latter group has been steadily rising. These three groups of nurses (overseas-born first-generation immigrants, international nursing graduates and internationally qualified nurses) may face similar challenges

integrating into the workforce. Among the most frequently mentioned challenges for international students and internationally qualified nurses are language barriers, differences in communication patterns, and situations related to racism, discrimination, bullying, and harassment.

**Study design and methods:** This article is structured as a discussion paper, grounded in research, and backed by relevant literature.

**Results:** This paper defines IPCC as: "A set of congruent behaviours and attitudes that enable professionals to work respectfully and effectively in cross-cultural situations". IPCC involves four main domains: a) mutual collaboration, b) the prevention of racism, discrimination, bullying, and harassment among nurses, c) respect of values, attitudes, and beliefs of colleagues that may differ across cultures, and d) appropriate responses to cross-cultural interactions with colleagues.

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**Discussion:** The descriptor "cultural competence" was deliberately chosen over alternatives like "cultural safety" or "cultural humility", recognising that these concepts mainly focus on the power dynamics between healthcare providers and patients, which may not always apply to interactions between healthcare professionals. "Competence" suggests having the skills, knowledge, and abilities necessary for effective role fulfilment that could be developed through training and skill acquisition. Consequently, IPCC refers to the essential skills, knowledge, and abilities required to engage respectfully and effectively in cross-cultural interactions with other nurses.

**Conclusion:** The relevance of this paper lies in identifying the growing proportions of both overseas-born, locally qualified nurses and internationally qualified nurses. Mutual collaboration and communication are essential to prevent incidents related to racism, discrimination, bullying, and harassment, while also fostering team cohesion, well-being, job satisfaction, and retention. Clear communication is crucial for maintaining quality care, ensuring patient safety, and preventing fatalities. This is particularly important in multicultural teams, such as those commonly found in Australia, where a growing number of nurses may not speak English as their first language.

**Implications for research, policy, and practice:** With 43% of nurses being born overseas, the persistence of racism, discrimination, bullying, and harassment within clinical settings highlights the gap between existing regulations and their enforcement. Intra-professional cultural competence could positively influence communication, teamwork, and mutual respect within nursing, potentially reducing

racism, discrimination, bullying, and harassment, improving nurse retention, and overall quality of care. Strengthening IPCC frameworks at institutional, national, and clinical levels and incorporating them into orientation programs and continuous professional education could serve as an effective strategy to address these issues.

### What is already known about the topic?

- Overseas-born first-generation immigrants, international nursing students, and internationally qualified nurses often encounter similar challenges when integrating into the workforce.
- Common issues for international students and internationally qualified nurses include language barriers, differences in communication styles, and experiences of racism, discrimination, bullying, and harassment.

### What this paper adds

- In 2022, about 43% of the Australian nursing workforce was born overseas, underlining the cultural diversity and significant need to address racism and discrimination in the sector.
- The concept of intra-professional cultural competence is presented as one strategy to address conduct and behaviour related to racism, discrimination, bullying, and harassment in nursing practice.
- A means of aiding retention of internationally qualified nurses and locally qualified overseas-born nurses may be by increasing Intra-professional Cultural Competence in the practice environment.

**Keywords:** Culturally and linguistically diverse nursing workforce, intra-professional cultural competence, cultural competence, internationally qualified nurses, healthcare workforce.

## BACKGROUND

Australia's population is highly culturally diverse, with nearly half (48%) having at least one parent born overseas and a substantial 28% being first-generation immigrants.<sup>1</sup> This diverse demographic landscape is starting to be mirrored in the composition of the nursing workforce.

The surge in diversity within the nursing workforce can be attributed to various factors, with the primary drivers being the diversity in Australia, the active recruitment of internationally qualified nurses, and the influx of international students into undergraduate nursing programs. An analysis of the Australian Government Department of Health and Aged Care (DOHA) Nurses and

Midwives dashboard between the period 2016-2022,<sup>2</sup> shows that there has been a steady increase in the number of nurses who obtained their initial qualification (Bachelor of Nursing to become a Registered Nurse) in Australia but were born overseas. This group of nurses consists of first-generation migrants who were born overseas but became permanent residents or citizens by the time they pursued their nursing studies, as well as international students who may hold various visa statuses that allow them to work in Australia. The percentage of overseas-born, locally qualified nurses increased from 16% in 2016 to 21% of the total workforce in 2022. The DOHA Nurses and Midwives dashboard also shows that 22% of the RNs in the total Australian nursing workforce are internationally qualified nurses.<sup>2</sup> Internationally qualified

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nurses are those who obtained their initial qualification overseas and are registered to practice in Australia. While standard measures for calculating the culturally and linguistically diverse (CALD) population utilised country of birth as a proxy measure,<sup>2</sup> for the purposes of this study, we have added the number of internationally qualified nurses and overseas-born locally qualified nurses to conclude that 43% of the Australian nursing workforce was born overseas in 2022. In 2016, this percentage was only 38%, indicating a steady growth trend from 2016 to 2022. This trend has significant implications for the continued diversification of the nursing workforce.

To further understand the CALD nursing workforce in Australia, an analysis of the Organisation for Economic Cooperation and Development (OECD) Health Workforce dashboard provides interesting insights.<sup>3</sup> The data establish that in 2021, the main countries of origin of nurses in Australia were India (23.5%), the UK (22.8%), the Philippines (18.9%), and New Zealand (10.6%), altogether comprising a substantial proportion of the internationally qualified nursing (IQN) workforce (65%). Significantly, these four countries all have English as one of their official languages. Thus, for these nurses, the language barrier may not be an issue, although cultural issues may still arise. Other countries of initial qualification of internationally qualified nurses in 2021 include Ireland (2.8%), China (2.4%), Zimbabwe (2.1%) and the United States (1%), highlighting the diversity of nationalities within the nursing workforce.

For overseas-born, locally qualified nurses, information about their visa type or residency status is not available, making it impossible to disaggregate this data. Regarding international students, there has been a substantial rise in their enrolment across all sectors in Australia. There has been a 34% increase between the period comprising January to July 2022 and 2023.<sup>4</sup> The primary source countries for these students include China (21%), India (17%), Nepal (8%), and Colombia (5%), encompassing various educational levels such as English courses, Vocational Education and Training, and all university levels. There has also been an increase in the enrolment of international nursing students. In 2021, 17,112 students graduated with a Bachelor of Nursing (BN), and 22% of these graduates were international students.<sup>5</sup>

It is possible to identify many factors that may contribute to the continuous rise in the number of both international nursing students and internationally qualified nurses. These include Australia's migration history, the Skills Migration Program policy,<sup>6</sup> and the availability of clear information for nursing registration.<sup>7</sup> Additionally, research has identified pull factors, frequently cited by internationally qualified nurses in Australia, such as improved working conditions,<sup>8</sup> higher income,<sup>8-12</sup> and a sense of workplace and societal safety (8-12). Consequently, it can be inferred that the immigration of international nursing students and internationally qualified nurses will continue to increase in the coming

decades. Therefore, Australian nursing educational programs and workplaces need to develop a range of strategies to ensure the successful professional integration of these nurses.

### OBJECTIVE

The aim of this study is to propose a potential strategy for improving professional integration by introducing education around a new concept: Intra-professional Cultural Competence. This term primarily addresses the interactions between nurses within the workplace.

### STUDY DESIGN AND METHODS

This discussion paper is grounded in research and backed by relevant literature.

### IMPLICATIONS FOR PROFESSIONAL INTEGRATION

In 2022, overseas-born locally qualified nurses and internationally qualified nurses made up 43 per cent of Australia's nursing workforce, highlighting the profession's substantial cultural and linguistic diversity and the need for deliberate cultural integration across practice, education, and regulation.

The literature reveals that both international nursing students,<sup>13-19</sup> and internationally qualified nurses,<sup>21-31</sup> have reported facing numerous cultural and linguistic challenges as they navigate their professional integration into the Australian workforce. It is likely that locally trained nursing students who are first-generation immigrants and were born overseas experience similar challenges.

Research focusing on international nursing students in Australia has identified key hurdles faced in clinical settings that prevent them from fully participating in clinical placements. For instance, some international nursing students experience communication barriers, including speaking and understanding English (rather than writing or reading),<sup>13</sup> mastering colloquialisms and clinical jargon, and softening their accent while communicating in English.<sup>13-16</sup> Other challenges identified by educators include differences in communication styles and difficulties with being assertive.<sup>14</sup> Additionally, a need to address differences in cultural norms and body language,<sup>14,15,17</sup> difficulties in developing interpersonal interactions with patients and peers,<sup>14</sup> and problems in developing a sense of belonging,<sup>16</sup> have also been identified.

International nursing students also face challenges in clinical settings related to bullying, racism, and discrimination. Some of these instances involve direct confrontation, such as public humiliation or verbal abuse.<sup>13,18,19</sup> In other cases, students are prevented from providing full patient care

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or denied valuable learning opportunities, preventing them from growing into their professional role.<sup>13,18,19</sup> Reports of physical aggression have also been noted.<sup>19,20</sup> Others described instances of racism and discrimination as being indirect and subtle.<sup>13,18,19</sup> Racism, discrimination, and bullying may come from clinical educators, clinical placement staff (RNs, ENs, Assistant in Nursing), patients or visitors, or other nursing students.<sup>13,18,20</sup> Discrimination can also originate from staff of different racial backgrounds, often based on perceived conflicts between their home countries.<sup>13</sup>

It is also known that internationally qualified nurses encounter individual and social obstacles as they integrate professionally into the Australian workforce.<sup>21</sup> Obstacles include psychological adjustment to acculturation,<sup>22-28</sup> and communication barriers, including language proficiency.<sup>23,24,26-28</sup>

At the social level, internationally qualified nurses also deal with a wide range of issues. These can be related to: the scope of practice and differences in their roles as nurses,<sup>23,26,28</sup> inadequate support and incomplete induction programs,<sup>23,25,26,28-31</sup> failure to acknowledge their previous qualifications and experiences,<sup>23-27,29</sup> and instances of racism, discrimination, bullying, and harassment.<sup>22,23,25,26,29-31</sup> The sources of racism, discrimination, bullying, and harassment may come from other colleagues, clinical team members, patients, or visitors.<sup>22,25,26,29,30</sup> These behaviours can manifest in the form of limited opportunities for professional development, insubordination or open confrontation,<sup>25</sup> and oppositional interactions with colleagues, or marginalisation from non-professional activities or conversations.<sup>32</sup>

The challenges faced by both these groups, international nursing students and internationally qualified nurses, have the potential to hinder their integration into the Australian nursing workforce by affecting nursing relationships, communication, work satisfaction, and retention, consequently impacting the overall quality of care.<sup>33-35</sup> These challenges may be similar to those faced by overseas-born, locally qualified nurses who are first-generation immigrants. Taking into account the range of backgrounds represented in the Australian workforce previously shown, it is imperative to implement actions that enhance the retention and support of this heterogeneous workforce.

Situations linked to racism, discrimination, bullying, and harassment can have devastating effects on the mental and physical health of nurses, as well as on organisational effectiveness. Psychological effects include depression,<sup>33</sup> emotional stress, vulnerability, frustration, and burnout,<sup>34</sup> all of which can impair job performance and the ability to provide high-quality nursing care.<sup>33-35</sup> Physical effects may manifest as headaches, tachycardia, fatigue, sleep disorders, pseudo-neurological symptoms, and gastrointestinal issues.<sup>34</sup> Regarding the organisation, behaviours related to racism, discrimination, bullying, and harassment exacerbate

intentions to leave, leading to decreased retention rates, lower job satisfaction, productivity, and commitment, as well as increased errors that impact quality of care and patient safety.<sup>34</sup> A national consultation in Australia revealed that 28% of CALD nurses reported experiencing racism.<sup>36</sup>

The global shortage of RNs has intensified, particularly in high-income countries like Australia, prompting a reliance on the recruitment and retention of internationally qualified nurses to address workforce gaps.<sup>37-38</sup> Several factors contribute to the escalating demand for nurses in high-income countries, including demographic shifts and rising health care quality standards. These countries are experiencing significant demographic changes, characterised by declining birth rates, increased life expectancy, and an ageing population, including within the nursing workforce itself.<sup>39</sup> In addition, enhanced standards such as lower patients-per-nurse ratios,<sup>40</sup> improved nurse-to-patient ratios,<sup>41,42</sup> and the expanding scope of specialised nursing care have further increased the demand for nursing professionals.<sup>39</sup> Despite Australia having a relatively high number of nurses per 1,000 inhabitants (12.8 in 2021), a shortfall of 128,499 nurses is projected by 2030.<sup>43</sup> Given the current nursing shortage, increasing the number of international nursing students and attracting internationally qualified nurses to the Australian workforce has become an imperative.<sup>6</sup> We turn now to consider whether implementing intra-professional cultural competence may be instrumental in addressing the problems of racism and discrimination and/or bullying and harassment, and recruitment and retention.

### FROM CULTURAL COMPETENCE TO INTRA-PROFESSIONAL CULTURAL COMPETENCE

Cultural competence in nursing is a well-understood concept.<sup>44-48</sup> Since it was first mentioned by Madeleine Leininger in the 1970s, the nursing profession has included it in its curriculum.<sup>49-50</sup> The focus has been to improve the possession of suitable skills, knowledge, or abilities needed to perform a task or fulfil a role effectively. Research has shown that training in cultural competence impacts positively on increasing the knowledge, awareness and sensitivity of practitioners,<sup>51-53</sup> and has positive effects on patients' satisfaction and trust.<sup>53-55</sup> However, the literature and regulatory documents usually (although not always) refer to the relationships between nurses and their patients and families, rather than peer-to-peer relationships.<sup>56</sup> It is for this reason that the authors have modified the definition of cultural competence outlined by Cross et al. (1989) and developed the concept of Intra-professional Cultural Competence as a tool that might positively influence relationships between professional colleagues.<sup>56,57</sup>

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This definition of intra-professional cultural competence predominantly addresses the interactions among nurses within the workplace, and it could be similarly applicable to other professionals occupying comparable positions of relatively equal authority. The concept of “cultural competence” was intentionally chosen over other alternatives like “cultural safety” or “cultural humility”. This decision was based on the acknowledgment that concepts like “cultural safety” or “cultural humility” primarily address power dynamics between healthcare providers and patients, that do not always apply to interactions between healthcare professionals themselves. These interactions typically occur within clinical or professional settings and are different from those occurring in clinical encounters.

For instance, the concept of “cultural humility” was introduced by Tervalon and Murray-García (1998) to be used in medical education to address the possible power imbalance between healthcare professionals and patients or students during clinical encounters. Cultural humility is defined as “a lifelong commitment to self-evaluation and critique, to redressing power imbalances . . . and to developing mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations”.<sup>58(p123)</sup> Openness, self-awareness, egoless, supportive interactions, and self-reflection and critique were defined as the attributes of cultural humility.<sup>59</sup> It is also acknowledged as a lifelong learning process that demands personal transformation and a dedication to continuous reflection and self-assessment of personal actions.<sup>60</sup> The concept of cultural humility was later clarified, defining it as a process of self-reflection to understand personal and systemic biases and privilege.<sup>61</sup> The framework aimed to aid healthcare professionals in recognising situations where they exert authority over their patients or students and to promote the adoption of traits such as openness, self-awareness, humility, and adaptability.

There is no agreement about the use of the concepts of cultural humility and cultural competence. While some authors consider cultural humility a more comprehensive and superior approach,<sup>62,63</sup> other views that cultural humility is a component of cultural competence,<sup>64,65</sup> or a complement of it (“*competemility*”).<sup>66,68</sup> Although the cultural competence framework has faced some criticism, most of the concerns are centred around its application in the delivery of care.<sup>63,68,69</sup> One criticism is based on the idea that cultural competence is a static concept.<sup>70,71</sup> Another critique is related to the possible risk of stereotyping or stigmatising patients by health care professionals.<sup>63,69,72</sup> However, numerous authors have contributed to the definition and evolution of the concept. Some scholars argue that cultural competence is a continuous, ever-evolving process, rather than a fixed achievement.<sup>72,74</sup> Cultural competence has also been described as a complex educational process involving cognitive, practical, and emotional aspects, where confidence and transcultural skills are vital.<sup>75</sup>

For the purposes of this and previous papers, intra-professional cultural competence is defined as: “A set of congruent behaviours and attitudes that enable professionals to work respectfully and effectively in cross-cultural situations”.<sup>56(p18)</sup> Arising from the literature surrounding definitions of cultural competence and applying these to intra-professional cultural competence, the concept of intra-professional cultural competence involves four main domains: a) mutual collaboration and professional relationships; b) the prevention of racism and discrimination among nurses; c) respect for values, attitudes and beliefs of colleagues that may differ across cultures; and d) an appropriate response to cross-cultural interactions with colleagues.

Mutual collaboration and professional relationships in nursing are associated with elements such as job satisfaction and staff retention,<sup>76</sup> delivering high-quality care,<sup>77,78</sup> and enhancing team cohesion, a positive work environment, and well-being.<sup>78</sup> Maintaining clear communication is significantly important in the nursing role for preserving quality care, ensuring patient safety, and preventing patient fatalities.<sup>79</sup> But it is specifically important in multicultural teams, such as those commonly found in the Australian nursing workforce. The literature in the Australian clinical setting indicates that interactions between locally qualified nurses and internationally qualified nurses are typically short, focused on tasks, and often lacking in casual or interpersonal aspects, regardless of their English proficiency.<sup>25,26,29,30,80</sup>

The prevention of situations linked to racism, discrimination, bullying, and harassment could be linked to strengthening the respect for values, attitudes and beliefs of colleagues that may differ across cultures and also to managing appropriate responses to cross-cultural interactions with colleagues. Boosting intra-professional cultural competence could foster greater mutual collaboration through the sharing of knowledge and skills and improving communication, especially among nurses whose first language is not English.

The concept of “competence” implies having the necessary skills, knowledge, or abilities required for effective task performance or role fulfilment. Being “competent” encompasses a broader spectrum of overall capability and suitability for a specific purpose or role. Competence can be developed through training and the acquisition of skills. Intra-professional cultural competence would provide the basic skills, knowledge, and abilities to perform respectfully and effectively in cross-cultural situations with other nurses. The emphasis on the concept of ‘basic’ underscores its significance as a starting point or minimum requirement for professionals who may not engage in lifelong self-reflection processes but are nonetheless required to work in multicultural teams. In nursing, neglecting intra-professional cultural competence in relationships with colleagues can lead to adverse consequences for patients and missed nursing

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care.<sup>81, 82</sup> Therefore, intra-professional cultural competence should be regarded as a foundational standard rather than solely relying on individual qualities.

### RECOMMENDATIONS FOR REGULATORY BODIES, EDUCATIONAL PROVIDERS AND HEALTHCARE ORGANISATIONS

Improving the inclusivity of the nursing work environment is an ethical obligation that requires coordinated action at individual, organisational, and collective levels. Achieving inclusive workplaces depends on the commitment of all stakeholders, for example, regulatory bodies, educational providers and healthcare organisations. In this context, recognising and strengthening intra-professional cultural competence within nursing practice has the potential to play a critical role.

Regarding nursing regulations, elements of this inclusive approach are reflected in some Australian documents, most notably the Nursing and Midwifery Board of Australia (NMBA) Code of Conduct.<sup>83</sup> However, the elements of intra-professional cultural competence are not made explicit in other key regulatory frameworks, such as the NMBA Registered Nurse Standards for Practice<sup>84</sup> or the Australian Nursing and Midwifery Accreditation Council (ANMAC) Accreditation Standards.<sup>85</sup> At the same time, there is a need to address the variability in how nursing curricula address these issues in relation to education providers during the accreditation process.

With regard to the incorporation of IQNs into the Australian workforce and local context, additional content on intra-professional cultural competence could be integrated into existing orientation modules. Currently, IQNs are required to complete two orientation modules designed to introduce them to the Australian health care system.<sup>86, 87</sup> Integrating content on intra-professional cultural competence into these modules would be beneficial to ensure consistency in knowledge and understanding of its principles, significance, and benefits. Such integration would also reinforce key components of the NMBA Code of Conduct and relevant Australian federal, state, and territory legislation that protects against discrimination and harassment, including the *Racial Discrimination Act 1975 (Cth)*,<sup>88</sup> which prohibits discrimination on the basis of race, colour, descent, national origin, ethnic origin, or immigrant status.

In addition, this module should provide practical examples illustrating the various forms that racism, discrimination, bullying and harassment may take in clinical settings. This would support IQNs in recognising these behaviours, provide clear guidance on reporting, and promote self-reflection to avoid engaging in bullying, harassment, or discriminatory practices themselves. Education on these issues is particularly important, given that IQNs from diverse cultural backgrounds may be unfamiliar with reporting mechanisms,

may view reporting as inappropriate or as a source of conflict with management, or may lack confidence and knowledge about how to speak up or defend themselves in challenging workplace situations.

At the educational level, these principles should be reinforced throughout the entire nursing education pathway, from early university education to clinical placements. Key recommendations include the systematic integration of targeted content on intra-professional cultural competence across nursing curricula<sup>89, 90</sup> and the harmful impacts of bullying on victims and witnesses.<sup>91, 94</sup> Additional measures could include increased support of students from CALD (locals and internationals), for example, through mentorship programs. Mentorship between nursing students at different experience levels has demonstrated positive impacts on academic.<sup>95, 97</sup>

At the organisational level, healthcare organisations should implement mandatory intra-professional cultural competence training as a core component of in-service education and workplace induction programs. Organisations should also develop, strengthen, and enforce policies that prioritise inclusivity and equity, and that adopt a clear zero-tolerance approach to racism, discrimination, bullying and harassment. Confidential, accessible reporting mechanisms should be established, ensuring protection against retaliation and providing transparent procedures for investigation and resolution of incidents. In Australia, initiatives that support the anonymous reporting of workplace health and safety concerns are already in place. For instance, the Speak Up Save Lives app allows individuals to raise concerns anonymously.<sup>98</sup> Likewise, the Fair Work Ombudsman provides an online mechanism for confidentially reporting workplace issues, including those related to safety.<sup>99</sup>

The commitment of managers and nursing leaders to implementing intra-professional cultural competence is critical. The role of managers has been shown to be crucial to fostering healthy work environments,<sup>100</sup> preventing racism, discrimination, bullying and harassment,<sup>101</sup> and actively promoting inclusion.<sup>102, 103</sup> Unit culture is described as a dynamic factor that can either hinder or support desired behaviours and outcomes, and one that can be actively influenced to promote improvement.<sup>104</sup> Nursing unit culture could shape nurses' work experiences and decision-making, with downstream effects on practice behaviours, nurse wellbeing, and patient outcomes.<sup>104</sup> Organisations should therefore support leadership accountability, implement clear and transparent incident review processes, and establish structured mentorship and support programs for those in leadership roles.

Finally, further research is needed to examine the level of preparedness of regulatory bodies, educational providers and healthcare organisations, in relation to intra-professional cultural competence and its influence in organisational

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culture, leadership practices, and professional relationships. Although the effectiveness of intra-professional cultural competence has not yet been empirically established, there is a clear need for future research to examine its impact and determine whether it can help mitigate practices associated with racism, discrimination, bullying and harassment in the workplace.

## CONCLUSION

The growing diversity of cultures and languages within the Australian nursing workforce poses challenges across various levels. Enhancing understanding and training in intra-professional cultural competence could serve as a valuable strategy for mitigating issues arising from interactions among nurses from diverse cultural and linguistic backgrounds. Understanding the culturally and linguistically diverse nursing workforce can provide valuable insights into the challenges encountered by both internationally qualified nurses and overseas-born, locally qualified nurses in Australia. The analysis of the workforce data undertaken for this paper points to the added relevance of the need to develop targeted approaches to address these challenges in nursing, thereby enhancing attraction and retention within the Australian workforce. Implementing strategies such as intra-professional cultural competence is suggested, as it may promote attitudes, skills and behaviours in the workplace that could contribute to recruitment and retention efforts, especially given the current global nursing shortage, with the aim of enhancing the well-being of our nurses and the quality of nursing care in Australia.

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