## FINAL REPORT

Evaluation of Registered Undergraduate Student of Nursing (RUSON) Pilot Program

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The Registered Undergraduate Student of Nursing (RUSON) role was designed to build workforce capacity in regional/rural health services. As an alternative form of employment for undergraduate nursing students, the role is intended to a) increase the numbers of graduates working in regional/rural areas, b) build a more sustainable rural nursing workforce through better utilisation of students and existing staff, c) improve patient/client outcomes, and d) improve access to quality of care for people in regional and rural areas.

In 2018, the Department of Health and Human Services (DHHS) Victoria called for submissions for a rural pilot of a RUSON program. The key features of the role/pilot were:

- Students currently employed in a Bachelor of Nursing degree (year two at pilot commencement) were employed in a health service for 10 months for a minimum of 7.5 hours per week
- 2. RUSONs worked under the delegation and supervision of a registered nurse and all had access to clinical support nurses and/or clinical nurse educators.
- 3. The RUSON role was above standard nurse to patient/client ratios.

The role was consistent with Clause 106 (Undergraduate Employment Models) of the Nurses and Midwives (Victorian Public Sector) (Single Interest Employers) Enterprise Agreement 2016-2020.

Two regional applications for the pilot were successful with a total of 21 RUSONs employed. In the Loddon Mallee region, Echuca Regional Health was the lead agency (3 RUSONs) with five other smaller health services participating: Rochester and Elmore District Health Service (1 RUSON), Cohuna District Health Service (1 RUSON), Boort District Health Service (1 RUSON), Malth Service (1 RUSON), Rusons were employed for 16 hours per week. In the Grampians region, the lead agency was Ballarat Health Services (7 RUSONs), with East Grampians Health Service (1 RUSON), Otway Health (1 RUSON), Rural Northwest Health (1 RUSON), Stawell Regional Health Service (1 RUSON) and Lorne Community Health (2 RUSONs). RUSONs completed between 7.5 hours and 20 hours per week.

The cost of the pilot per service was \$43,779 and per RUSON \$25,016.

The following calculations were used: The total cost of the pilot (less the evaluation) was \$525354.

Cost per service was calculated at  $$525,354 \div 12$  services = \$43,779 per service Cost per RUSON was calculated at  $$525,354 \div 21$  RUSONs = \$25,016 per RUSON

The following salary calculations reflect the costs of a year 1 RUSON at 0.4EFT.

Classification	Annual Salary	Annual Salary	\$ Amount	Total employment costs for
	(1.0EFT)	(0.4 EFT)	(incl 30% on costs)	0.4EFT RUSON for 10 months
RUSON Year 1	(\$891.30/wk x 52wk) \$46,347.60	\$18,539.04	\$24,100.75	\$20,084

Our role was to provide an independent evaluation of the RUSON pilot that addresses DHHS objectives. A rapid review of the evidence on nursing student paid employment models provided context for the evaluation. The underpinning methodology for the evaluation was pragmatism, and the mixed method approach was partially mixed, concurrent, equal status design. Data collection were informed by the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) and Saunders et al. (2005) process evaluation. Data collection was extensive and included staff (n=56 posts) and RUSON (n=39 posts) online asynchronous focus groups conducted using a blog site, staff (n=286) and RUSON monthly surveys (n=111), monthly health service surveys of costs and client outcomes (each service), client surveys (n=80) and staff (n=61) and RUSON (n=16) interviews and focus groups. The following summarises the major evaluation findings.

#### Key advantages of the RUSON role

- Data collected indicated that the RUSON role improved person-centred patient/client care, allowing the services and staff to deliver higher quality care. The supernumerary value of RUSONs was consistently identified as valuable.
- 100% of patients/clients who responded to surveys described the care by a RUSON as excellent or very good.
- The RUSON role supported more timely care and a movement away from task orientation.
- RUSONs were seen as important in advocating for patients/clients.
- The RUSONs reported that they felt that they had impacted on the patient's/client's day to day experience within the service and the quality of care provided.
- Many of the RUSONs reported that one of the keys to their enjoyment of the program was the feeling of being part of a team within the workplace.
- Being included as part of the team was seen as integral to the success of the role, with RUSONs indicating that they were treated much more positively in their RUSON role compared to a student role.

- RUSONs reported improved confidence. This sense of confidence assisted them to further develop key nursing skills, including time management and communication, and gave them a good sense of the day to day running of a health service.
- The RUSONs highlighted how the role assisted them to bridge the theory/practice gap, providing examples from their experiences within the service.
- One of the most common themes within the RUSON and staff interviews and focus groups related to how the RUSON role supported transition to practice. Many of the RUSONs reported that they felt much more confident about making the transition to registered nurse as a result of their RUSON role and that they were work ready.
- RUSONs highlighted how their role had strengthened their intention to stay in rural practice. Some were surprised about the diversity of experience in a rural health service.

#### Considerations for health service implementation of the RUSON role

- One of the biggest challenges reported consistently across the interviews, blogs, and focus groups with staff and RUSONs was scope of practice. The scope of the RUSON role was viewed as too limited, with the scope not changing or expanding as the RUSON progressed in their courses.
- Many of the staff outlined that they thought a graduated scope of practice that grew with the RUSON over the period they were employed would be a better way to maximise the value to the service and the learning opportunities for the student.
- Some staff felt that the RUSON role did not utilise all of the skills that the students had developed over time and that this was a limitation.
- Some RUSONs highlighted the difficulty of 'stepping back' in relation to scope when they came back into their RUSON role after being on placement. Their scope of practice within a student role was much broader. Questions were raised about whether students would be better working as health care assistants rather that RUSONs because of a perceived broader practice role.

- Some of the RUSONs reported feeling disappointed in the role and the exposure that they were given to support their learning. They felt that they missed opportunities to learn new things or to consolidate key nursing skills as they were there to work and to make the workload lighter for the nursing staff.
- Balancing employment, university timetabling, and extensive travel for some students was highly problematic.
- Inflexible timetabling by universities made rostering problematic for some services, however, health services worked hard to be flexible. It is unknown whether this is sustainable in the much longer term.
- There was major concern about how a sustainable RUSON model could be funded.

A rapid review of the international evidence in the field of paid undergraduate student models was conducted to provide the context for this evaluation. Key findings of the review are directly aligned with this evaluation. The following is a summary of key findings from the literature, this study and the metropolitan UHAN evaluation completed in 2017.

Summary of international literature	Identified in RUSON evaluation	Identified in UHAN Evaluation
Student participants - improved confidence, skills and an appreciation of 'real world' nursing, teamwork and collegiality.	Yes.	Yes.
Increased retention rates of existing staff, reduced workloads, improved staff and unit morale, job satisfaction and higher quality patient/client care.	Yes but no definitive data on increased retention rates.	Yes but no definitive data on increased retention rates.
Strengthened university and healthcare service relationships.	Yes, with challenges balancing university/service requirements.	Yes, with challenges with balancing university/service requirements.
Cultivation of an organisational learning culture.	Some challenges between learning and service requirements.	Some challenges between learning and service requirements.
Role confusion, ambiguity and issues of scope of practice.	Role ambiguity and scope of practice identified as challenges.	Yes, some issues relating to role clarity identified.
Undergraduate employees and registered nurses believed that the scope of practice was limiting, with restrictive position descriptions confined to only very basic skills.	Many RUSONS and RNs outlined the limitations of the current scope of practice and the implications it had on the ward.	Limited scope was mentioned but reported as having positive impact due to level of supervision required.
Students might not utilise full range of university acquired skills and knowledge.	Some RUSONs reported that their skills were consolidated. Others reported concerns that they may not get to practice key skills.	Reported that UHAN role allowed for consolidation of skills.
Supporting students, unit managers, clinical educators, staff nurses, preceptors and other employees to understand the expectations of undergraduate employment programs were essential in preparing stakeholders and promoting learning.	Preparation of key staff and RUSONs was imperative to the success of the program.	Education sessions and information provided to each of the wards/departments was vital in ensuring they were well prepared for the introduction of the role.
Orientation needs to include student- preceptor role expectations, scope of practice, competency and other program evaluation tools.	Comprehensive orientation including an understanding of the evaluation were key to the RUSON program implementation.	Orientation needs to include a high degree of role clarity for the UHAN and the nurses, as well as preparation prior to implementation.
Coordinating work schedules with university commitments.	RUSONs were thankful for the flexibility of staff to assist them to balance RUSON role and university.	UHANs reported challenges due to rostering around university and clinical placement.
Potential for students to be used as an "economical solution" to alleviate nursing shortages, rather than to improve skills.	Yes, this was mentioned in the RUSON pilot and may be related to rurality.	Not mentioned in the UHAN pilot.
Participating in regular, ongoing didactic seminars and lectures, with group discussions, reflection and simulation classes that presented advanced nursing skills.	This was not specifically part of the RUSON program but some RUSONs wanted more time to meet with other RUSONs.	Not mentioned in the UHAN project.
The best results were reported when undergraduate employees were respected as colleagues, so that skills and knowledge could be freely shared.	RUSONs reported being part of the team as having a major impact on their development of confidence and improved nursing skills.	The UHANs feel that this role has provided them with real-life exposure to working as a nurse and has also allowed them to experience what it is like to be a part of the nursing team.
Programs need to be developed as a shared vision between healthcare services and universities, with government support, clear communication strategies, leadership, and ongoing evaluation.	RUSON program developed in partnership with key stakeholders.	Yes, key stakeholder engagement key driver of success.

This high level summary of international literature is drawn from the rapid review provided on page 48. See references provided in that section.

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#### Conclusion

This evaluation confirmed most of the DHHS outcomes/ hypotheses. The RUSON role did improve access to appropriate and accessible services. Staff saw great potential in the role and the benefits appear to indicate that the RUSON model is a cost-effective workforce strategy for rural health services. However, the issue of how ongoing funding can be sourced to build a sustainable model is a major question. There was much conjecture within data collected about the scope of the RUSON role and limitations associated with no change to scope as the student progressed through their course. There was overwhelming

agreement that the RUSON role increases intention for rural practice. Qualitative data indicated that the RUSON role impacted positively on patient/client safety, but there was no significant evidence of changes in quantifiable patient/client outcomes. However, it should be noted that a longitudinal study might yield different results. There is strong evidence of patient/client satisfaction with the role.

On behalf of the team that completed this evaluation, I am delighted to present our final report.

**⊘**.

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In 2016, the Department of Health and Human Services (DHHS) (Victoria) piloted an Undergraduate Health Assistant Nursing (UHAN) project across three metropolitan sites: Eastern Health, Monash Health, and Alfred Health for a period of 10 months. A total of 28 UHANs were employed for between 15-20 hours per week. The aim of the pilot was to evaluate the effectiveness, efficiency and sustainability of the UHAN role. The pilot was evaluated by Pitcher Partners Consulting with the final report produced in October 2017. One of the key recommendations from the evaluation was that a broader rollout should be considered. In 2018, DHHS called for submissions for a rural pilot of the Registered Undergraduate Student of Nursing (RUSON)<sup>1</sup> program. The following project overview and aims were provided by DHHS:

#### Overview

The RUSON role supports the Department's strategic plan in building the capability and capacity of the health and human services workforce.

#### Aim

The aim of the RUSON pilot was to expand the RUSON role into Victorian regional/rural health services, in line with the Nurses and Midwives (Victorian Public Sector) (Single Interest Employers) Enterprise Agreement 2016-2020 (the EBA) and to explore alternative health workforce models that make better use of staff by creating opportunities to fully utilise their skills where they are needed most. The findings of the RUSON pilot will contribute to an evidence-based business case for the potential expansion of the RUSON role in other regional/rural health services.

It was anticipated that the introduction of RUSONs into a regional/rural health setting would create a number of benefits:

- The role is above standard nurse to patient/client ratios and therefore RUSONs are more able to spend greater time with each patient/client than existing staff to provide companionship and support for patients/clients.
- It is an additional resource to support the provision of high-quality, personalised care for every patient/client, and contributes to workload management.
- It provides an effective strategy to improve the working environment for staff while continuing to improve the responsiveness and quality of services' (DHHS 2018)'.

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The RUSON role supports the Department's strategic plan in building the capability and capacity of the health and human services workforce.

<sup>&</sup>lt;sup>1</sup> To ensure consistency with Clause 106 (Undergraduate Employment Models) of the Nurses and Midwives (Victorian Public SECTOR) (Single Interest Employers) Enterprise Agreement 2016-2020 (the EBA) the UHAN term has been replaced with RUSON.



## OBJECTIVES OF THE RUSON MODEL AND KEY FEATURES

### DHHS established the following RUSON pilot objectives:

- 1. Develop an alternative and beneficial employment opportunity for undergraduate nursing students.
- 2. Increase the rate of RUSONs returning to regional/ rural areas as registered nurses after graduating.
- 3. Develop a sustainable rural nursing workforce through better utilisation of the capabilities of existing nursing staff.
- 4. Improve patient/client outcomes and experience.
- 5. Improve access to quality health services for people in regional/rural Victoria.

### The key features of the RUSON pilot were as follows:

- 1. Employment and clinical support for RUSONs currently enrolled in a Bachelor of Nursing degree (Year 2 at pilot commencement).
- 2. Employed for 10 months for a minimum of 7.5 hours per week.
- 3. RUSONs worked at all times under the delegation and supervision of a registered nurse and they all had access to clinical support nurses and/or a clinical nurse educator
- 4. The RUSON role was above standard nurse to patient/client ratios.

RUSONs will work at all times under the delegation and supervision of a registered nurse and they will have access to clinical support nurses and/or a clinical nurse educator





Following the closing date for applications to conduct the RUSON pilot two applications were successful. Table one and two indicates the sites, lead agencies, RUSON numbers and proposed hours.

**Table 1: Loddon Mallee Region Pilot Sites** 

**Loddon Mallee region RUSON numbers** Agency Lead agency Echuca Regional 3 - 16 Health hours per week **Rochester and Elmore District** 1 - 16 **Health Service** hours per week Cohuna District Health 1 - 16 Service hours per week **Boort District Health Service** 1 - 16 hours per week **Kyabram District Health** 1 - 16 Service hours per week **Kerang District Health Service** 1 - 16 hours per week **Total** 8

**Table 2: Grampians Region Pilot Sites** 

Grampians region		
Agency	RUSON numbers	
Lead agency Ballarat Health Services	7 - 7.5 hours per week	
East Grampians Health Service	1 - 7.5 hours per week	
Otway Health (Barwon South Western region)	1 - 8 hours per week	
Rural Northwest Health	1 - 20 hours per week	
Stawell Regional Health Service	1 - 7.5 hours per week	
Lorne Community Health	2 <sup>2</sup> - 8 hours per week	
Total	13	

The role of the evaluators was to:

- 1. Provide an independent evaluation of the rural RUSON pilot that addresses DHHS objectives.
- 2. Work with the agencies in each region to support the collection of data.
- 3. Work with the agencies to formulate a final report to DHHS that addresses pilot objectives.

<sup>&</sup>lt;sup>2</sup> In January 2019 it was noted that one RUSON would finish early.

#### Methodology and design

A rapid review of the evidence on paid employment models was conducted to provide context for the evaluation.

The methodology informing the evaluation was pragmatism (Taskakkori & Teddlie, 2003:21) as it aligned best with the collection of qualitative and quantitative data within the one study, whilst rejecting debates on incompatibility of methods.

The evaluation utilised a mixed method design. Mixed method studies are defined as:

Research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study (Tashakkori & Creswell, 2007).

Data were collected concurrently with no prioritisation of qualitative or quantitative data, so the mixed method approach was partially mixed, concurrent, equal status design (Teddlie & Tashakorri 2003:21).

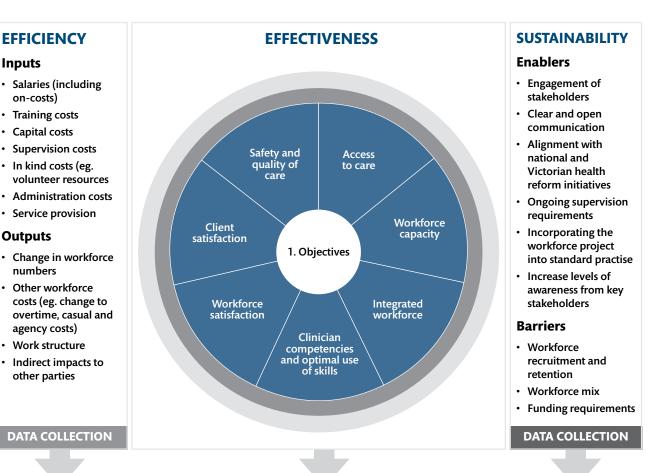


#### Framework that guided data collection

Data collection were informed by the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) and Saunders et al. (2005) process evaluation.

The 2017 evaluation by Pitcher Partners Consulting utilised the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) for data collection (Pitcher Partners Consulting 2017). The Framework is useful as it provides a standardised approach to assessing workforce projects. They key components of the framework were used in this evaluation to ensure some degree of comparison between the findings with the previous metropolitan pilot. Figure one is adapted from the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) and represents relevant key components for this evaluation.

Figure 1: Outline of the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF)



#### **ASSESS APPROPRIATENESS (ON A CASE-BY-CASE BASIS)**

- · Analyse indicators to determine relative gains and significant elements in efficiency, effectiveness and sustainability
- · This may involve balancing big improvements in one dimension against small or no change in others
- · Positive consideration should be given to cases where initial implementation costs can be overcome quickly, where there is strong patient and staff feedback and where sustainability is high
- Determine level of appropriateness

**EFFICIENCY** 

· Salaries (including

on-costs)

· Training costs

· Capital costs

· Supervision costs

· In kind costs (eg.

· Service provision

Other workforce

agency costs)

other parties

Work structure

**Outputs** 

numbers

Inputs

ASSESS FEASIBILITY (ON A CASE-BY-CASE BASIS)			
Replicability	Scalability	Risk	
The impacts if the project is replicated somewhere else	The impacts if the project is implemented many times	The extent of known risks and how these are managed	

- · Analyse enablers and barriers to determine the feasibility of running the project in other settings and on a larger scale
- · Analyse the level of risk associated with wider implementation of the project
- · Consider if challenges highlighted under 'appropriateness' can be overcome if the pilot was extended
- Determine level and bounds of feasibility

The Saunders (2005) evaluative framework is designed to assess whether processes were implemented as planned and is useful as the characteristics of participating organisations and people delivering programs are considered. Saunders (2005) evaluation criterion are outlined in table three.

Table 3: Process evaluation framework

Evaluation criteria	
Recruitment	Approach, attraction, and maintenance of participants
Context	Aspects of environment that influenced outcomes
Fidelity	Extent to which program is implemented as planned
Completeness	Components delivered
Exposure, participation	Extent to which participants engage
Satisfaction	Participant (primary and secondary) satisfaction with the program

#### Summary of data collection methods

Consistent with the mixed method design the following data collection methods were used:

 Online asynchronous focus groups/surveys in each service (knowledge of RUSON role, preparation etc) – Data were collected via two closed blog sites using the program WordPress; one for RUSONs and one for health service staff. The sites were open for the entire study to ensure people could participate at times that suited them. The site was moderated by the La Trobe University team.

#### Staff online asynchronous focus group

- a) Information given/or activities undertaken to prepare for the implementation of the RUSON role
- b) Preparation for the RUSON role
- c) Understanding of the scope of the role
- d) Impact of the RUSON role on service delivery
- e) Impact of the RUSON role in providing quality and safe care
- f) Impact of the RUSON role on staff workloads
- g) Impact of the RUSON role on the patient/client experience
- h) The benefits of the role
- i) Challenges in implementing the role in the service

#### Staff monthly surveys

- a) Rating of preparation of the RUSONs for their role
- b) How prepared staff felt
- c) How prepared they felt other staff were
- d) Added value of the RUSON to the service/service delivery
- e) Understanding of the scope of the RUSON role
- f) Whether RUSONs were working within the scope of their role
- g) Rating of completion of activities by the RUSON

- h) Perceptions of client happiness with the care delivered by the RUSON
- i) Challenges faced with the RUSON role

#### RUSON online asynchronous focus group

- a) Information given/or activities undertaken to prepare for the implementation of the RUSON role
- b) Preparation for the RUSON role
- c) Understanding of the scope of the role
- d) Whether staff were prepared for the role
- e) Whether the position description covers role expectations
- f) Whether staff understood the role
- g) Comfort in completing delegated tasks
- h) Why they applied for the RUSON role
- i) The benefits of the role
- j) Challenges in the role
- k) Difficulties in balancing the role with university
- 1) Usefulness of the role in transition to practice
- m) Whether the RUSON role changed views on rural practice
- n) Intention to work in a rural location following graduation

#### **RUSON** monthly surveys

- a) Clarity of the scope of the RUSON role
- b) Whether the position description covered role expectations
- c) Whether the RUSON felt supported in their role
- d) Confidence in completing tasks delegated
- e) Intention to practice in a rural location

- 2. Health service survey costs
  - a) Number of health services with a strategic workforce plan pre and post RUSON implementation
  - b) Salary costs of registered nurses/RUSONs
  - c) Recruitment costs for registered nurses, enrolled nurses
  - d) Recruitment costs for RUSONs
  - e) Costs of bank and agency staff
  - f) Cost of designated clinical support for RUSON (above normal roster)
  - g) Training costs (RUSONs induction, specialling, workload, acuity etc (hours and dollars)
  - h) Average staff overtime, bank and agency staff hours registered nurses and enrolled nurses (cost inclusive)
  - i) Number of shifts filled by the RUSON proposed and actual
  - j) Number of shifts where RUSON on sick leave
  - k) Total cost of sick leave for the RUSON
  - I) Number of shifts where RUSON on annual leave
  - m) RUSON supervision above normal supervision

- 3. Health service survey client outcomes
  - a) Numbers of client complaints
  - b) Numbers of client compliments
  - c) Average client length of stay
  - d) Patient/client adverse events, falls, pressure ulcers, medication errors, working outside scope, occupational violence, aggression
- 4. Client surveys
  - a) Explanation of the RUSON role
  - b) Rating of care delivered by the RUSON
  - c) Open ended comment
- 5. Interviews/focus groups staff and RUSONs toward completion of study. Focus on experience, benefits and challenges

#### Ethical approval

The study was approved by La Trobe University Human Ethics Committee – HEC18444.





## SUMMARY OF KEY FINDINGS FROM A RAPID REVIEW

Rapid reviews or rapid evidence assessments are useful in synthesising a body of literature in a streamlined way using the principles of a systematic review (Haby et al., 2016). Consistent with approaches to rapid reviews, the aim of this review was to provide a summation of key literature in the field as a basis for this evaluation, without restricting the review to only certain study types (such as randomised controlled trials (RCT). The following is a summary of key findings. The full review is provided on page 47.

## Undergraduate student employment programs

There are a variety of undergraduate student nurse employment models internationally (Olson et al., 2001; Harrison, Stewart, Ball, & Bratt, 2007). Student participants describe improved confidence in psychomotor and advanced nursing skills and an appreciation of 'real world' nursing, teamwork and collegiality required for effective practice (Stinson & Wilkinson, 2004; Cantrell, Browne, & Lupinacci, 2005a; Courney, 2005; Alsup, Emerson, Lindell, Bechtle, & Whitmer, 2006; Durrant, Crooks, & Pietrolungo, 2009; McLachlan, Forster, Ford, & Farrell, 2011; Souder, Beverly, Kitch, & Lubin, 2012; Stout, Short, Aldrich, Cintron, & Provencio-Vasquez, 2015; Mollica & Hyman, 2016). Benefits to participating health services include increased retention rates of existing staff, due to reduced workloads, improved staff and unit morale, job satisfaction and higher quality patient/client care (Gamroth, Budgen, & Lougheed, 2006). Additional impacts have been identified, including strengthened university and healthcare service relationships and cultivation of an organisational learning culture (Durrant et al., 2009; McLachlan et al., 2011; Kenny, Nankervis, Kidd, & Connell, 2012).

## Role clarity and scope of practice

Role confusion, ambiguity and issues of scope of practice have been consistently identified (Stinson & Wilkinson, 2004; Starr & Conley, 2006; Harrison et al., 2007; Durrant et al., 2009; Algoso & Peters, 2012; Kenny et al., 2012). In other studies, undergraduate employees and registered nurses believed that the scope of practice was limiting, with restrictive position descriptions confined to only very basic skills. Authors argue that this might not utilise students full range of university acquired skills and knowledge (Stinson & Wilkinson, 2004; Durrant et al., 2009; Algoso & Peters, 2012). Some authors suggest the introduction of a graded scope of practice that would develop with the students as they progressed through their undergraduate course (Courney, 2005; Hoffart, Diani, Connors, & Moynihan, 2006; Algoso & Peters, 2012; Kenny et al., 2012). However, having a limited scope of practice and responsibilities was also seen as an opportunity to comprehensively learn about the healthcare service environment (Cantrell & Browne, 2005a).

Student participants describe improved confidence in psychomotor and advanced nursing skills and an appreciation of 'real world' nursing, teamwork and collegiality required for effective practice.

#### Preparation

Supporting students, unit managers, clinical educators, staff nurses, preceptors and other employees to understand the expectations of undergraduate employment programs were essential in preparing stakeholders and promoting learning. (Kilpatrick & Frunchak, 2006; Durrant et al., 2009; Happell & Gough, 2007; Paul et al, 2011; Algoso & Peters, 2012; Kenny et al., 2012). Orientation programs play a key part in this preparation and include an introduction to the healthcare service, policy and procedures, specific units and program details (Nelson & Godfrey, 2004; Durrant et al., 2009; Oja, 2013). Orientation needs to include student-preceptor role expectations, scope of practice, competency and other program evaluation tools (Nelson & Godfrey, 2004; Starr & Conley, 2006).

#### Ongoing training and support

Working alongside an experienced, capable registered nurse preceptor with one-to-one support was paramount to support student employee learning and understandings to begin to incorporate basic and advanced nursing skills into practice (Olson et al., 2001; Nelson & Godfrey, 2004; Kilpatrick & Frunchak, 2006; Starr & Conley, 2006; Kenny et al., 2012). Participating in regular, ongoing didactic seminars and lectures, with group discussions, reflection and simulation classes that presented advanced nursing skills (e.g. critical thinking, judgement, leadership and delegation) were described as vital (Redding & Flatley, 2003; Rush, Peel, & McCracken, 2004; Cantrell, Browne, & Lupinacci, 2005b; Mollica & Hyman, 2016). Ongoing education was believed to bridge the theory-practice gap (Tritak, Ross, Feldman, Paregoris, & Setti, 1997; Durrant et al., 2009;) with the best results reported when undergraduate employees were respected as colleagues, so that skills and knowledge could be freely shared (Rush et al., 2004; Starr & Conley, 2006).

## Challenges of employment programs

Issues identified in undergraduate employment programs included difficulties scheduling students to work consistently alongside preceptors (Harrison et al., 2007; Stout et al., 2015) and coordinating work schedules with university commitments (Kee & Ryser, 2001). Algoso and Peters (2012) claimed that inequity in learning experiences occurred depending on undergraduate employee's placements, with the potential for students to be used as an "economical solution" to alleviate nursing shortages, rather than to improve skills (p. 201). This raised further issues of the need for undergraduate employment programs to be structured and standardised for formal student learning (Kenny et al., 2012; Remle, Wittmann-Price, Derrick, McDowell, & Johnson, 2014). The need for individualised programs was reinforced to promote a climate where students are supported to develop advanced skills and growth towards registered nursing status (Starr & Conley, 2006, p. 92). Within the Australian context, Kenny et al. (2012) advised that programs need to be developed as a shared vision between healthcare services and universities, with government support, clear communication strategies, leadership, and ongoing evaluation.

Within the Australian context, programs need to be developed as a shared vision between healthcare services and universities, with government support, clear communication strategies, leadership, and ongoing evaluation.





## KEY EVALUATION FINDINGS AGAINST HYPOTHESES

There is strong evidence that RUSONs provided an effective additional resource to support the provision of high-quality, personalised care for every patient/client.

• The RUSON role provides an effective strategy to improve the working environment for staff while continuing to improve the responsiveness and quality of services.

There is strong evidence that the RUSON role provided an effective strategy to improve the working environment for staff while continuing to improve the responsiveness and quality of services.

To guide the pilot, DHHS developed a series of objective and outcome statements. The proposed outcomes from the pilot were modified as hypotheses. The results/findings from the evaluation are presented against each objective.

There is strong evidence that the RUSON role provided an effective strategy to improve the working environment for staff while continuing to improve the responsiveness and

quality of services.



#### Evaluation against each objective

DHHS Outcome/hypothesis	Evaluation		
The RUSON role will improve access to appropriate and accessible services.  The RUSON role will be valued by staff who will see the potential of the role in workforce strategic planning, worker health, wellbeing, safety and engagement.  The RUSON model will provide a cost effective and sustainable workforce model for rural health.	<ul> <li>Data indicated that the RUSON role was a 'value add' position that improved patient/client experience of healthcare. Staff and patients/clients reported that quality of care was improved with the addition of an above ratio RUSON.</li> <li>Staff valued the RUSON role highly and expressed strong support for the role, but the issue of a sustainable funding source was consistently highlighted as a major barrier for small health services to continue with the role.</li> </ul>		
RUSONs will be satisfied with their role and will indicate intention to return to regional/rural areas following graduation.	<ul> <li>The issue of limited scope of practice in the RUSON role was seen as a limitation by RUSONs. It was noted that the scope of the role was unchanged across the pilot, and as students progressed through their course, there was no expansion of RUSON scope to match developing skill sets. Further work would need to be considered by Government and by higher education providers regarding scope.</li> <li>There was overwhelming agreement that the RUSON role increased intention to practice in regional/rural areas following graduation.</li> </ul>		
The RUSON role will lead to greater satisfaction of the rural workforce.	<ul> <li>Qualitative data collected via focus groups and interviews indicated improved staff morale, more organised wards, improved patient/client flow, and more time for breaks.</li> <li>For some of the staff the value of the RUSON centred on risk management in relation to falls, patient/client deterioration and de-escalation. Many of the staff interviewed referred to the RUSONs as "an extra pair of hands" or "extra pair of eyes" highlighting the impact that the RUSON had on patient/client safety within the ward.</li> </ul>		
The RUSON role will result in improvements to patient/client outcomes and experience.	<ul> <li>From the qualitative data collected, there was overwhelming support for the role in improving patient/client outcomes.</li> <li>There were no significant impacts of the role on quantifiable patient/client outcomes.</li> </ul>		
The RUSON role will improve access to quality health services for patients/clients in regional/rural Victoria.	<ul> <li>All data collected indicated major value of the RUSON role in improving access to quality services.</li> </ul>		

Data indicated that the RUSON role was a 'value add' position that improved client experience of healthcare. Staff and clients reported that quality of care was improved with the addition of an above ratio RUSON.



# FINDINGS AGAINST THE VICTORIAN INNOVATION AND REFORM IMPACT ASSESSMENT FRAMEWORK (VIRIAF)

#### Efficiency

Efficiency is defined within this framework as the balance between inputs (salary and training costs) and the outputs of the project.

The findings of the UHAN pilot demonstrated no significant trends related to salary costs, recruitment costs, costs of bank and agency staff, cost of designated clinical support, or staff overtime. The findings of this evaluation are similar.

The RUSON model provides a workforce that is above current nurse – patient/client ratios. There was no significant trend evident in registered nurse workforce recruitment costs, cost of bank and agency staff, average staff overtime, average sick leave absence, nurse workforce retention rates, or intention to leave rates. Within a small number of services, average staff overtime appeared to be lower in latter months of this pilot. Any changes in the cost of bank and agency staff appeared to be seasonal and increased and

decreased across different months of the pilot without any trend evident. There was no significant change in average sick leave absence. Data on intention to leave rates was not available for most services and for those services where data were provided, there was no significant trend.

Services were surveyed on whether they had a strategic workforce plan. There were indications that strategic workforce plans were more common in larger services, however, there was no significant change in services reporting strategic workforce plans across this pilot.

This pilot was conducted across a period of ten months. A longitudinal study might demonstrate different results, however, the direct impact of the RUSON on broader workforce trends may be difficult to correlate because of the multiple variables that might impact.

The RUSON model provides a workforce that is above current nurse – patient/client ratios.



#### Effectiveness

As outlined in the UHAN evaluation report (Pitcher Partners Consulting, 2017) commentary on the effectiveness of the role on patient/client experience/outcomes was largely anecdotal. This RUSON pilot has provided more concrete evidence on the effectiveness of the role.

From all data collected there was strong support for the effectiveness of the RUSON role. Staff indicated that the RUSON role could be key in ensuring a sustainable rural workforce. They highlighted the benefits of RUSONs becoming part of the team and seeing the full range of services and experiences that could be offered in the rural setting. Overwhelmingly, RUSONs indicated that their roles had increased their interest in rural practice and their likelihood of applying for a graduate position in the service where they worked. The RUSONs described major advantages in the opportunities that were provided to develop their teamwork, leadership, and communication skills. They all reported high levels of confidence in working in a health service because of the extended time spent within the service. They believed that the RUSON role had enabled them to be very comfortable in the rural health service environment and all believed that the role had prepared them well for their transition to professional practice.

80 client surveys were returned. 91% of clients indicated that the RUSON role was explained to them (n=73). Of the remainder, clients indicated unsure or the field were blank. 86% (n=69) indicated care delivered by the RUSON was excellent. The remaining 14% indicated care was very good. Open ended data provided on client surveys was overwhelmingly positive with comments including efficient, polite, caring, helpful, sincere, professional, and dedicated stated across all surveys. Comments on the value add of the role were common eg. 'she did my hair', 'she took her time to help older people', 'personalised care', 'the RUSON program adds the extra support in a warm, friendly and respectful way', 'I loved the extra care she provided', 'a real boost for the morale', 'good to see these initiatives being offered', 'RUSON system sounds a great idea', 'I'd like to see the RUSON to be an ongoing thing'.

Of 281 staff responses received, 100% of staff indicated that the patients/clients were happy with the care delivered by the RUSON.

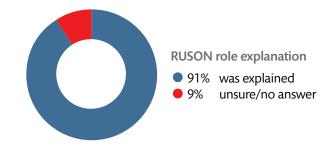
From the health service survey data collected, there were no significant trends evident in complaint or compliment data. Whilst data were collected across multiple months, numbers of complaints/compliments changed across months with no upward or downward trend evident.

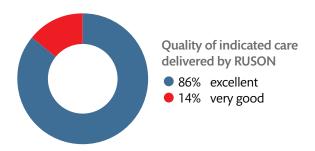
No trends were evident in data provided on patient/client length of stay.

There were no significant trends in client outcome data. Pressure ulcer, falls, medication errors, working outside scope, occupational violence and aggression data showed no identifiable pattern. In some services falls increased, however, these data cannot be correlated with the RUSON role. These findings are consistent with the UHAN evaluation report (Pitcher Partners Consulting, 2017) where clinical incident data showed no clear impact of the pilot UHAN project.

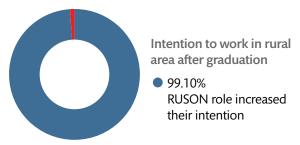
Of all RUSON survey responses received (n=111) 99.10% indicated that the RUSON role had increased their intention to work in a rural area following graduation. 100% of staff survey respondents (n=284) indicated that the RUSONs added value to the service/service delivery.

Staff were asked to rate the completion of tasks by the RUSONs. Of 285 responses received, 67.02% rated task completion as excellent (n=191), 28.07% as very good (n=80), 5.61% (n=16) as good, 0.35% as average. Whilst data were collected each month there was little discernible change across months.

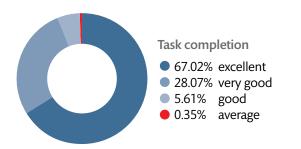












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#### Sustainability

There is good evidence of the enablers that made the pilot successful. These are summarised below:

#### 1. Clarity of the scope of the RUSON role

Across all months of the pilot 95.5% of responses to the RUSON survey indicated that the scope of the RUSON role was clear (n=106). Qualitative data indicated that having key information available to all staff and the use of cards that outlined the scope of the role was a major enabler.

Of 283 responses to this question, 95.05% of staff indicated that they had a good understanding of the RUSON role (n=269).

#### 2. A clear position description

Of all survey responses collected from the RUSONs, 100% (n=111) reported that the position description covered the expectations of the role. Of 281 responses received to this question, 99.64% (n=281) indicated that RUSONs worked within the scope of their role.

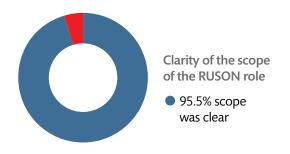
#### 3. Good preparation of the RUSONs for their role

From staff survey data collected across months, 40.35% of staff indicated that the RUSONs were well prepared (n=205), 24.05% somewhat prepared (n=57), 24.78% prepared (n=16) and 15% (n=3) not prepared. There were negligible differences in responses across months.

#### 4. A strongly supportive environment

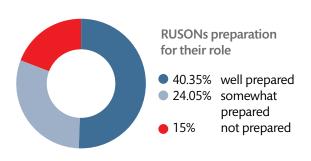
A total of 94.59% of RUSON responses indicated that they felt well supported in their role (n=105).

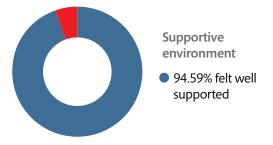
Whilst data were collected across months, given the high number of positive responses received, there is negligible differences in responses across months.



100%

of RUSON's surveyed reported the position description covered the expectations of the role





#### Feasibility of the role

- Health services viewed participation in the pilot as integral to supporting a sustainable rural workforce.
- There was a strong emphasis on growing your own workforce within the rural context and how the RUSON role could be key to achieving this as it provided a student to have prolonged engagement with the service.
- Recruitment of RUSONs was largely a smooth process, with RUSONs reporting significant professional development value in participating in formal recruitment processes.
- Some RUSONs were recruited through placement within the service or because they already had roles within the service.
- The prolonged nature of a RUSON position versus clinical placement was seen as a major advantage in skill development and confidence.

- RUSONs indicated that they believed they gained a major advantage for their graduate position.
- The RUSON role was seen as more advantageous than other forms of employment where they could financially support themselves while gaining valuable experience in the health field.
- The RUSONs reported a good understanding of what the scope of the role would be and felt well prepared.
- A comprehensive health service orientation was viewed as central to the success of the pilot.
- The importance of a strong governance structure to oversee the RUSON pilot was consistently reinforced.
- Participants highlighted the ability of RUSONs to identify patient/client deterioration when the nurses were busy.

#### Scalability

All participants that were involved in the pilot were interested in the role to support their future workforce. In smaller health services, significant recruitment and retention challenges associated with geographic location were noted and the RUSON role was viewed as a key strategy that would enable services to 'grow their own'.

The major concern expressed regarding scalability of the pilot to a continuing role was lack of designated funding. Whilst the 'value add' of the RUSON role was overwhelmingly identified, financing the role within fiscally tight rural health service budgets was viewed as a major challenge.

In some cases, there were major challenges associated with inflexible university timetabling. Strong university/ health service relationships were needed. Because of the limited number of RUSONs involved, there was resistance by some universities to develop a different approach to class scheduling for a very small number of students. If this pilot was scaled up for wider implementation, engaging universities in the development of sustainable models is key.

Of all survey responses collected across the entire pilot, 95.50% of RUSONs indicated that they were confident completing all tasks assigned to them. There was no variation across sites and minimal variation between months. The positive impact on patients/clients (timely care for meals, toileting, showering) was strongly evidenced by both quantitative and qualitative data. There were many instances of RUSONs being able to sit with patients/clients to de-escalate complex situations, terms such as more patient/ client centred care were used, and whilst there were no significant changes in quantitative data collected related to patient/client outcomes (such as falls data), staff believed that the RUSON role had a positive impact on falls due to increased staff presence and greater assistance with activities such as showering. There is clear evidence that the role would add significant value to rural health service delivery and quality of care, although much longer time periods of evaluation and a longitudinal study would be needed for definitive statements on the impact of the role on patient/ client outcomes.

#### Risk

Staff were surveyed about any challenges they faced with the role. Of 286 responses received, 78.67% (n=225) indicated that they faced no challenges. Qualitative data that were collected assisted with the identification of risks/challenges that were identified. Staff training was viewed as integral but long-time lags between training and implementation was problematic. High staff turnover and a high use of casual staff did impact on broad staff understanding. No specific incidences were reported across the pilot, but strong understanding of the role is integral to its success.

The major risk is related to the sustainability of the RUSON model from two major perspectives a) ongoing funding for the role and b) the impact of university commitments and clinical placements that for the service often made rostering of the RUSONs complex and for the RUSON, exhaustion and missing of university classes was identified as a risk.

The rural context added a degree of risk related to geographic distance that was not reported in the metropolitan pilot. Questions were posed by staff and RUSONs about RUSON safety because of long travel times between university campuses, RUSON employment location and other multiple responsibilities.

There is clear evidence that the role would add significant value to rural health service delivery and quality of care, although much longer time periods of evaluation and a longitudinal study would be needed for definitive statements on the impact of the role on patient/client outcomes.





As outlined, Saunders (2005) evaluative framework was used for the process evaluation. There are six major components of the framework: recruitment – approach, attraction and maintenance of participants, context – aspects of environment that influenced outcomes, fidelity – extent to which the pilot was implemented as planned, completeness – the components delivered, exposure, participation – extent to which participants engaged, and satisfaction – participant (primary and secondary) satisfaction with the program.

There was good engagement from the staff and RUSONs in the evaluation. Table 4 and 5 outline responses to data collection methods.

**Table 4: RUSON participation** 

Data collection method	Time	Number n=
Online surveys	Monthly	111
Interviews	End of pilot	16*
Blog posts	Throughout pilot	39

#### **Table 5: STAFF participation**

Data collection method	Time	Number n=
Online survey	Monthly	286
Focus groups	End of pilot	61
Blog posts	Throughout pilot	56

\*There were 16 RUSONS in total (2 participated in focus groups that included staff, 3 in a RUSON only focus group and 11 single interviews). The following provides key findings of the process evaluation. Supporting data is presented in the detailed findings section.

#### Recruitment

Data indicates that the approach, attraction and maintenance of participants was primarily consistent with planned implementation. One RUSON resigned from the role (related primarily to travel difficulties) and one finished the role early. The RUSON that resigned was replaced.

- Health services viewed participation in the pilot as integral to supporting a sustainable rural workforce.
- There was a strong emphasis on growing your own workforce within the rural context and how the RUSON role could be key to achieving this as it provided a student to have prolonged engagement with the service.
- Recruitment of RUSONs was largely a smooth process with RUSONs reporting significant professional development value in participating in formal recruitment processes.
- Some RUSONs were recruited through placement within the service or because they already had roles within the service.
- The prolonged nature of a RUSON position versus clinical placement was seen as a major advantage in skill development and confidence.
- RUSONs indicated that they believed they gained a major advantage for their graduate position that would enable them to be much more competitive through the application process than students who had not had a RUSON experience.
- The RUSON role was seen as more advantageous than other forms of employment (such as hospitality and retail) as students could financially support themselves while gaining valuable experience in the health field.
- The RUSONs reported a good understanding of what the scope of the role would be and felt well prepared.
- A comprehensive health service orientation was viewed as central to the success of the pilot.
- The importance of a strong governance structure to oversee the RUSON pilot was consistently reinforced by staff.

#### Context

- The RUSON role was implemented differently across the pilot sites. RUSONs worked on a rotating roster within assigned wards with shift lengths ranging from 4 hours to 8 hours.
- Sites that had staff information and training well before implementation reported feeling well prepared for the RUSON role, however, long lag times between staff training and implementation was problematic for others.
- Most services had some training before the RUSONs started within the wards, but high staff turnover and use of casual staff meant that many staff members did not understand the role. This was a source of frustration for some RUSONs:
- Rostering of the RUSONs was challenging for many of the health services as they juggled the RUSON roster with placement and university commitments.

- Some of the RUSONs reported missing university classes whilst working as a RUSON as the juggling was a challenge.
- For some RUSONs significant travel times combined with placements and university commitments left them feeling exhausted and there were questions posed about RUSON safety because of long travel times and multiple responsibilities.
- For those RUSONs that were employed closer to home the feeling of being connected to their community was seen as an enabler.

#### Fidelity and completeness

Data indicates that largely the pilot was implemented as planned.

- There were some delays in some of the health services with implementing the program which impacted on the staff preparation. Staff were given the training and resources before they needed them which resulted in some staff not feeling prepared for the role.
- The RUSONs and staff highlighted the importance of the RUSON being confident in their own scope of practice and not being afraid to say no when they were asked to do something outside of scope.
- The importance of good preparation for staff and ensuring ongoing support throughout the pilot program was vital.
- Some of the organisations reported challenges in regard to student supervision which highlighted that some might have considered the RUSON role a training model rather than an employment model.
- Staff preparation was important to the ongoing success of the RUSON pilot program.
- Both the staff and RUSONs found the small cards and posters around the wards that outlined the RUSON scope invaluable.

- The length of the RUSON program was seen as a major strength for both the RUSONs and the staff. Many of the RUSONs described very positive development of relationships with staff and patients/clients and outlined the major advantages in regular employment and opportunities to consolidate their skills versus time limited placements where they often did not feel part of the organisational culture.
- The role of the support nurse was seen by some as invaluable to the success of the pilot.
- A key to the success of the RUSON pilot program was the flexibility of the pilot sites in relation to rostering.
- Despite clear communication, some of the pilot sites had major difficulties in managing the process of rostering around university timetables.
- Some of the RUSONs reported that inflexibility of universities was a major problem and they struggled to work around the timetables resulting in them having to use annual leave days to study or go on placement. There was some indication that a small number of students missed university classes to complete the RUSON responsibilities.

Many of the RUSONs described very positive development of relationships with staff and patients/clients and outlined the major advantages in regular employment and opportunities to consolidate their skills versus time limited placements where they often did not feel part of the organisational culture.

#### Exposure, participation and satisfaction

Table 6 provides a summary of the extent to which participants engaged and participant (primary and secondary) satisfaction with the program.

#### Table 6 Engagement and satisfaction with program

Patient/Client	RUSON	Staff
<ul> <li>The RUSON role can improve patient/client satisfaction as they are able to:</li> <li>Spend more time with patients/ clients in the provision of person-centred care.</li> <li>Assist with providing care in a timely manner (for example feeding which may result in better nutrition as food will be more palatable whilst still warm).</li> <li>Focus on basic care needs that can be overlooked on a busy ward.</li> <li>Ensure that patients/clients are assisted with toileting when required which may result in reduced falls.</li> <li>Alert nursing staff of deteriorating patients/clients.</li> <li>Advocate for patients/clients and their families.</li> <li>Support the psychosocial needs of patents by spending time talking to patients/clients and family members.</li> </ul>	<ul> <li>RUSONs valued:</li> <li>Being part of the team on the ward.</li> <li>Being supported in their learning and provided opportunities to consolidate their skills.</li> <li>Opportunities to build confidence in their day to day skills, time management and communication.</li> <li>Being exposed to the intricacies of running a ward (paperwork, policies etc).</li> <li>Completing the role supported the RUSON to feel well prepared to transition to a graduate nurse.</li> <li>Being able to work in paid employment close to home in their field of choice.</li> <li>Orientation and support throughout the program.</li> <li>Having a clear scope of practice.</li> </ul>	RUSONs can improve job satisfaction of staff as staff reported that the role allowed them to:  • Focus more time on more complex nursing tasks.  • Alleviate feelings of guilt regarding not having enough time to complete all tasks.  • Have a reduced workload across the shift which alleviated some stress and improved the staff morale on the wards.  • Ensure more patient/client safety (there is more time for equipment checks etc).  • Have more tidy wards with timely completion of tasks.  • Take scheduled breaks without impacting on the ward or patients/clients.



Qualitative data collected during this evaluation added significant insight into the way the pilot was implemented.

#### Recruitment

Health service staff reported differing reasons for participating in the pilot, but most indicated a desire to offer pathways for students interested in practicing in rural communities.

• For us I think it was about pathways. I was particularly interested in pathways for nursing students. One thing that we have seen at [Health Service] with our grads is that they progress from third and fourth year students on placement through to a grad and the organisation is committed to supporting them. What we have seen, and what I see more and more with our smaller rurals is varying levels of engagement at the clinical placement level, therefore, struggling to attract a grad and if they do attract a grad they never retain them. What is it that we can do to support them so that if we can encourage them to give these RUSONs a magnificent experience? (Staff FG 2).

Staff discussed the importance of growing their own to ensure service sustainability and the RUSON model was identified as a strategy to address some of the workforce recruitment challenges of rural practice.

- In the rural context, we don't have the luxury of attracting large numbers of people here unless they're going to move here permanently, so I think the RUSONS are a workforce strategy, as much as clinical placements are as well, because that's how we sell ourselves, and it gives them an opportunity to get a taste of what our health service is about. In [RUSON]'s case, she is a local so that's attractive to us (Staff FG 9).
- That is a huge part of what we're about, is growing our own, so for me it is a smart workforce strategy, both for the RUSONS themselves and in meeting the demands of rural practice (Staff FG 10).

Data indicates that the approach, attraction and maintenance of participants was consistent with implementation planning. The vast majority of RUSONs responded to recruitment emails from university clinical placement coordinators. A small number were informed about the pilot whilst on clinical placement at one of the participating sites. A small number of RUSONs recruited were working as ward assistants or personal care assistants within the services and were alerted to the pilot by other staff within the health services.

I was actually on placement at [Health Service] at the time which was probably quite fortunate. I thought it was a really good opportunity to get placement-like experience in a more consistent and ongoing environment (RUSON 2).

#### **Travel**

Time to travel to work as a RUSON varied across the pilot sites. For some RUSONs significant travel times combined with placements and university commitments left them feeling exhausted.

- But I did have placement and I had to take I had a two week and three week placement, three weeks up at the hospital and two weeks in the hospital. And I had placement the week before and the week after I'd have to do four shifts in that week, rather than the two shifts. So that made it really difficult in the sense that I was exhausted. I was so, so tired because I was travelling an hour there and an hour back. So when I did it, would be an eleven hour shift, four days of that. And then three weeks, or two weeks straight of placement, plus with travel, it was just absolutely exhausting (RUSON 1).
- And to travel an hour and a half one way to do a late after you have lectures on Tuesday and to do the rounds, it's pretty hard going (RUSON 11).
- There has been one student who has missed shifts and she's been rostered on shifts and she's not been overly reliable; and that student I know lives an hour away from where she is currently employed as a RUSON (Staff FG 10).
- I think trying to work my days so that I can fit it all in especially because travelling, it's a three hour round trip, so you've got to add that into the work and the classes (RUSON 9).
- Well I felt like I, because I had to travel it made it really hard, so I
  feel like they should definitely take into consideration how far the
  applicants live away. Because it's all to say I'll do it, but then when you
  have an eleven hour day and you have to do an assignment that night
  you're just like no, it's too much (RUSON 1).
- But I feel like they shouldn't really accept people for the position if they're more than half an hour's travel. Because even though they say it's going to be fine and they can manage it, it's too much to expect someone to do a longer hour kind of day (RUSON 3).
- She (RUSON) ended up driving back and forth to Bendigo to log onto the system or whatever she had to do. So the little machinations of a country RUSON did play a part and, as we indicate, her motor vehicle, you know modes of transport to get to shifts that had to be by motor vehicle. And, when that failed, she was in dire straits and she knew it. And I know she felt she was letting us down a little in that (Staff FG 4).

For those RUSONs that were placed closer to home the feeling of being connected to their community was seen as an enabler.

- With the smaller communities, being a part of the community, it would more likely if she lived in that community to be a lot more reliable and not just because of the proximity, but because of being a part of the community, being well known (Staff FG 9).
- And being a small community I think you'll probably find that in most small communities, that we're familiar with a lot of the patients that we do admit to the ward. There's some kind of connection (Staff FG 8).

"... trying to work my days so that I can fit it all in especially because travelling, it's a three hour round trip, so you've got to add that into the work and the classes."

The RUSON role was seen as an opportunity to engage in the day to day running of a ward over an extended period of time. RUSONs consistently indicted that this was in stark contrast to short term placements and they saw this as a major advantage.

- I thought it was a really good opportunity to get placement-like experience in a more consistent and ongoing environment (RUSON 2).
- Just being on a ward when you're not on placement because there is such a big gap between placements sometimes. So, the consistency of documentation, patient communication and everything like that (RUSON 1).

RUSONs interviewed outlined that their main reason for applying for the RUSON role related to having the opportunity to extend their nursing skills, learn more about the profession and gain some advantage for their graduate positions.

- It was about making me that bit further advanced for my graduate year (RUSON 4).
- I thought it'd be really good just because you can work in the course you want to instead of working in a café or anything (RUSON 11).
- I wanted to get my foot in the door of that hospital as well as being buddied up with an RN and getting to consolidate all the skills we were learning at uni. I knew it would be silly for me not to apply, it was such a good opportunity (RUSON 7).

The process of recruitment was designed to mirror the experience of applying for graduate positions. This was seen as advantageous for the RUSONs as they gained interview process experience.

When we were interviewed for the RUSON program I was interviewed by X [number removed to protect anonymity], and that will probably be similar to grad interviews. I think it's prepared me in what to expect, in that sense, as well, which is really good (RUSON 8).

Many of the RUSONs indicated the value in extended experience in the health field to support themselves whilst studying rather than having to work in other jobs.

• I thought it'd be really good just because you can work in the course you want to instead of working in a café or anything (RUSON 11).

The RUSONs reported a good understanding of what the scope of the role would be and felt well prepared.

• On applying, we were given the position description with an outline of the scope. When we first started there, as well, we were provided with our own folder that had the scope in it, and we had to complete little competency tasks to show we can do it with supervision first, and then, for example, like sharing something, and then you could go off and do it a bit more independently but still with the supervision. The position description and scope was pinned up in the nurse's station, so other staff are aware of it (RUSON 10).

Health service orientation was viewed as central to the success of the pilot.

- With [Health Service] we were given three days, I think it was, of orientation. So, we went in and they did we had to do our basic life support, and we went through some simulations of things that we would have that would be entailed for us as RUSONs. I think there was about four different stations that we went through and we did those, as well as the [Health Service] orientation. And then when we came on to the ward, we were just given one day of just orientating ourselves, working really closely with the registered nurses, not really taking anything on ourselves. But then after that we were just guiding ourselves through it, because I don't think anyone really knew exactly what was going to happen with it like exactly what we'd be doing, and every ward was different (RUSON 9).
- I thought it was really, really good and appropriate and the people that were doing the orientation were really thorough and encouraging and supportive, so I felt that you had a good team behind you and going on to your ward that you had back up and you didn't feel like you were just being thrown out there left to your own devices (RUSONS FG).

The importance of a strong governance structure to oversee the RUSON pilot was consistently reinforced.

• For it to work properly it was really important to have a number of things in place including the MOU that everyone agreed on first which gave a really good clear structure (Staff FG 2).

#### Context

The RUSON role was implemented differently across the pilot sites. RUSONs worked on a rotating roster within assigned wards with shifts ranging from 4 hours to 8 hours. Sites that had staff information and training well before implementation reported feeling well prepared for the RUSON role, however, long lag times between staff training and implementation was problematic for others. Most services had some training before the RUSONs started within the wards, but high staff turnover and use of casual staff meant that many staff members did not understand the role. This was a source of frustration for some RUSONs.

- I felt like the health service didn't really, the employees, not employees the staff didn't really understand what I was there for. So that made it really, really, really hard for me to be part of the team because I constantly had people questioning me (RUSON 1).
- There were some people that hadn't had the training yet and there
  was in the first say, month or so, I felt there was a lot of explaining
  myself and what I can and can't do. And that was, like, a little bit
  frustrating (RUSONs FG).
- I did have to explain it, at the start, a lot to everybody, what I could do, what I couldn't do, and what it was, and they were all really interested in the role in a way that made me think they probably weren't too familiar with it, I quess, because it is new (RUSON 7).

#### Balancing the RUSON role and university

Rostering of the RUSONs was challenging for many of the health services as they juggled the RUSON roster with placement and university commitments. Flexibility within the service was key to success for the pilot sites.

- We've been allowed to be very flexible with our RUSON. So I have said, you let me know what you can do and I've given her annual leave around the times where she needed more study time. So I've been very mindful. As we are with all the staff that are doing RNs like from ENs to RNs. I think you do have to have a degree of flexibility around that (Staff FG 1).
- So, the nursing award says that you need to have a roster six weeks in advance. And it's good I think that they work under the nursing award because we know that and I'm glad that we don't have to learn another one. Having said that, when you have a registered nurse that that is their job and they put their requests in, it's all plain sailing because that's their main job RUSONs are not like that. They have university as their main and they're balancing work around that. On reflection I think we're asking them for permanent dates in six weeks which they can't always give me (Staff FG 7).

Some of the RUSONs reported missing university classes whilst working as a RUSON as the juggling was a challenge.

I missed out on a class last semester because uni cancelled it at the last minute and I had already preorganised my days and in the end, it was just too hard. And like, you have to respect our NUM has a job to do and we get treated like everyone else, so we're on a roster, I put that first before the uni class and missed out on a lot of uni (RUSON FG).

"... I did have to explain it (the RUSON), at the start, a lot to everybody, what I could do, what I couldn't do, and what it was, and they were all really interested in the role in a way that made me think they probably weren't too familiar with it, I guess, because it is new."

#### Fidelity and completeness

Data indicates that largely the pilot was implemented as planned. There were some delays in some of the health services with implementing the program which impacted on the staff preparation. Staff were given the training and resources before they needed them which resulted in some staff not feeling prepared for the role.

And I think pushing the date meant that it delayed the people's
necessity to grasp the information they need so it sort of moved it
back and then well I don't really need to know just yet (Staff FG 3).

The RUSONs and staff highlighted the importance of the RUSON being confident in their own scope and not being afraid to say no when they were asked to do something outside of scope or to explain to someone who did not fully understand the role. The importance of good preparation for staff and ensuring ongoing support throughout the pilot program was vital.

- Really key at the beginning. I think because the nursing staff know that they're an undergrad nursing student, they know they can do more. And I think that them both expecting what a RUSON can do and them understanding the reasons why the task list is what it is and also then empowering the RUSON to be able to ensure that they don't breach that, especially when they're asked to do things by people who may not have had the education. So, I think that is something that is really important that everybody really understands it, not just at the start but in an ongoing fashion (Staff FG 3).
- When I first started, there were several staff who didn't know what my role was and it was quite frustrating having to explain myself many times over. There were several staff education days and this made working a shift sometimes disheartening. As more staff have attended the information sessions and I have worked alongside more nurses they know what my role is which makes working a lot easier and enjoyable (RUSON Blog).

Some of the organisations reported challenges in regard to student supervision which highlighted that some might have considered the RUSON role a training model rather than an employment model.

I don't think the concept of an employment model was really taken
on by the organisations. I think they were still thinking of them as
students under supervision with a limited scope of practice, not as
another member of the team that can just do and I think that's a
key point (Staff FG 2).

Staff preparation was important to the ongoing success of the RUSON pilot program. Staff reported that they often had to be reminded about the scope of practice in daily interactions with the RUSON. Both the staff and RUSONs found the small cards and posters around the wards that outlined the RUSON scope invaluable.

• So, we knew that was our scope, but having those cards really helped. Because they were always a point of reference (RUSON 5).

The length of the RUSON program was seen as a major strength for both the RUSONs and the staff. Many of the RUSONs described the development of relationships with staff and patients/clients and outlined the major advantages in regular employment versus placement and opportunities to consolidate their skills.

• And so being here for eight months, rather than two weeks for a placement, you have a longer time to build that rapport and so you really develop your communication skills. And you can really see how they're all so different, and how you have to change the way you're communicating for each patient, or resident. And so being here for a longer time you get that chance to build that rapport (RUSON 6).

"... being here for eight months, rather than two weeks for a placement, you have a longer time to build that rapport and so you really develop your communication skills."

#### The role of the RUSON support nurse

The role of the support nurse was seen by some as invaluable to the success of the pilot.

- I think it's really good to have the RUSON support nurse. If this personnel was not available as part of the program, I would feel heavily unsupported. Specially on days when I get buddied up with RNs that are rude, or when there is a practice that is unsafe, or that some RNs are stressed out that they forget that there are certain aspects that RUSONs can't do and hence require their time etc. Even though as a RUSON I am part of the team, many times I feel the RNs doesn't understand the difficulty that RUSONs go through because essentially the role is different from theirs. I find that the RUSON support nurse is very good to have as a company while working on the ward while at the same time being able to debrief about great aspects and areas of concerns (RUSON blog).
- It is great to have [RUSON support nurse] as I am able to vent out but for me I find that handover is the most frustrating aspect, and especially when you get for handover one day after another and even within the shift, it just really drags you down because I feel like I'm not being supported. But I can talk to her (RUSONs FG).

"... Even though as a RUSON I am part of the team, many times I feel the RN doesn't understand the difficulty that RUSONs go through, because essentially the role is different from theirs. I find that the RUSON support nurse is very good to have as a company while working on the ward – while at the same time being able to debrief about great aspects and areas of concerns"



#### The challenges of rostering

A key to the success of the RUSON pilot program was the flexibility of the pilot sites in relation to rostering. RUSONs within the pilot came from three different universities (La Trobe, ACU and Federation University) who all have different timetables for classes and placements. Whilst this was challenging for those responsible for rostering the RUSONs, within the ward mostly they managed to work around it. Clear communication between the RUSON, the university and the ward staff were vital.

- We've been allowed to be very flexible with our RUSON. So I have said, you let me know what you can do and I've given her annual leave around the times where she needed more study time. So I've been very mindful. As we are with all the staff that are doing RNs like from ENs to RNs. I think you do have to have a degree of flexibility around that (Staff FG1).
- See [University] were actually very helpful about that. See I had to send out a couple of emails and initiate that myself, but when I did that they were very accommodating and they said 'yes, we can help with that'. They sort of arranged my university classes to fit in with RUSON and so that really helped. And so I've just had to catch up on a couple of shifts, but [health service] have been really comfortable with that, but I've just done three shifts a week instead of two, a couple of times (RUSON 6).
- I quite often will email her, I say, "I've got placement, I'm not sure exactly when." And she's quite happy and sits and adjust the roster. I go and chat with her and she'll adjust it and make it work for both of us. We will quite often email, so I've got the start of a new semester coming up and I won't know when my classes are (RUSON FG).

Ward rosters are often completed weeks in advance to allow for planning which was challenging for some of the RUSONs who did not get university or placement timetables in a timely manner.

- So, the nursing award says that you need to have a roster six weeks in advance. And it's good I think that they work under the nursing award because we know that and I'm glad that we don't have to learn another one. Having said that, when you have a registered nurse that that is their job and they put their requests in, it's all plain sailing because that's their main RUSONs are not like that. They have university as their main and they're balancing work around that. On reflection I think we're asking them for permanent dates in six weeks which they can't always give me (Staff FG 7).
- I guess the roster, obviously, comes out further in advance so I couldn't, necessarily, put in roster requests because I didn't know when placement was until the timetable came out. But the staff were really understanding so I could, literally, just send them an email of when I was available, and they'd just pop me on and update it. I guess, for me, I felt a bit like I wasn't doing the right thing by putting in my roster request, but I couldn't, so I guess that was a challenge (RUSON 7).
- One challenge we have faced is being able to provide rosters within the EBA time frame, as RUSONs don't always know their clinical placement and timetabled classes at this time of the year. As such, we have both agreed to be as flexible as possible and we roster the minimum hours initial but change them when more information about other commitments is known (Staff Blog).

Despite clear communication some of the pilot sites had major difficulties in managing the process of rostering around university timetables. • And we did contact the university and we were told that they can't change timetables for 11 students and we just needed to deal with it...but they expected that she'll drive from 100km to do a late on a Tuesday and drive back to be in class Wednesday morning and then drive back Friday to do a late which is problematic. And to travel an hour and a half one way to do a late after you have lectures on Tuesday and to do the rounds, it's pretty hard going (Staff FG 11).

Some of the RUSONs reported that inflexibility of universities was a major problem and they struggled to work around the timetables resulting in them having to use annual leave days to study or go on placement.

• But definitely working around timetables and preparation for when we are on placement. I mean I know I had them to use, but I didn't really want to have to use my annual leave days as well -I ran out of annual leave days and I didn't get paid (RUSON 2).

#### Exposure, participation and satisfaction

#### Benefits from the RUSON perspective - being part of the team

Many of the RUSONs reported that key to their positive experiences/ enjoyment with the program was the feeling of being part of a team within the workplace. • They treated me as if I was another one of the staff in terms of, come with me today and do this or do you want to have a go at taking care of these two patients today. They said, 'Alright so it's time to get everyone showers and bed, you know who need what, go ahead, go for it'. But that was after I'd been buddied up with people for weeks. So I felt really confident and I was like I'm part of a team, I'm doing my own thing, I was starting to really feel like I have a patient load (RUSON 1).

Some health services chose to have RUSONs wear the same uniform as the nurses and others had chosen to have the RUSONs wear different uniforms to differentiate them from other staff in the ward. For some, having a uniform facilitated their transition to the workplace but for others, wearing a different colour uniform isolated them from the team.

- Yes I wear the same uniform that all the other nurses are wearing, which certainly makes you feel a lot better than you do on placement (RUSON 11).
- And we all agreed that we would feel less a part of the team if we wore a
  different colour. However, we would be more than happy to wear a badge or
  something that identified us as a RUSON or something slightly different. It's
  not about balancing an act between being identified as someone who may
  not be competent enough to do it and differentiating between us and the
  actual nurses (RUSON FG).
- It's hard because the uniform was really good for me because it made me feel
  included and it didn't make me stand out, but at the same time, it could, for
  example, if there was something exciting happening on the ward, and they'd
  go grab students to watch, they might forget to grab me because I'm in the
  uniform (RUSON 12).

Being included as part of the team was seen as integral to the success of the role. Being invited to attend PD days and participate in other ward based activities strengthened this.

• So I've had the training sessions and everything – I have to go to all those as well. And so I'm treated as an RN as much as I can, which has been really good, and so you don't feel in the background – you do feel like you're a part of it; so I am definitely included in everything (RUSON 4).

"So I've had the training sessions and everything – I have to go to all those as well.

And so I'm treated as an RN as much as I can, which has been really good,
and so you don't feel in the background – you do feel like you're a part of it;
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#### Benefits from the RUSON perspective - confidence and skill development

Many of the RUSONs interviewed outlined how the RUSON role had improved their confidence. This sense of confidence assisted them to further develop key nursing skills like time management, communication and gave them a good sense of the day to day running of the wards.

- I've been on aged care placement, I've been to theatre, I've been on wards, I've been all that, I know how to do everything. So, it was good to consolidate that because I became really comfortable in it. And I became really comfortable in doing stuff independently, which when you go on placement and you have to do a patient transfer with someone who's on a four-wheel frame you can be like, I haven't done this in a while and feel really nervous. But then because I was doing that twice a week, I felt really confident and independent with it. So, then I had to do makeup placement and I was fine with it, I was yeah let's go, I had all that down pat (RUSON 1).
- I've loved it overall. I've really enjoyed it. It's given me a good understanding of what the future nursing for me will be like. I suppose I didn't really understand what a normal shift would entail, and now I've got a good understanding of what each day would be like, well in this type of hospital anyway. And when I have gone on placement, I've obviously been able to adapt quicker (RUSON 11).
- The chance to learn the system, to learn the little things that you can't learn at uni, about talking to doctors and having to communicate with the, even just to communicate better with patients and your colleagues and to answer phones and all those little things that you don't get in uni. Just the experience of it all really because now I can understand the inner workings of the hospital; just the things that you don't see. And especially on placement only being there for a couple of weeks you don't see everything. And so to have that bigger experience and to be trusted to do all these things, it's definitely invaluable hands-on experience (RUSON 6).
- Definitely so now I go on placements and I'm still nervous, as you would be but I feel more capable because I just feel like it's the same thing that I've been doing, I'm just going from the same job to just another hospital and so it definitely makes you feel more capable (RUSON 7).
- On placement people have complimented me on my initiative to go and get someone ready for the day and have their bed made, just simple things but I don't need as much prompting as I would have if I didn't do the RUSON program (RUSON 7).
- I think, again, confidence, understanding how a ward is run, routines, the basic skillsets, I guess are still going to be daunting either way, but having that exposure and the confidence, I can't even describe how much it's benefited and will benefit. I'd recommend it to all of the second years (RUSON 6).
- Yeah, my time management skills, confidence, knowing the routine of the ward. From beginning this program and going on to the placements that I have, in the meanwhile, I just notice so much more confidence in myself. So many people give me feedback that I look like I am confident in what I'm doing, things like that (RUSON 8).
- I think confidence is one of the biggest things. I think working so closely with the nurses, you get like on placement, you can ask questions and question and questions, but once you have a rapport with those nurses I find it so easy to ask "I read on the hand-over sheet this morning this condition, and I know what it is, but can you explain it to me?" And that happens to me all the time, and sitting there, and hand-over I think that's been so beneficial. Because hand-over was like the most daunting thing to me before I started (RUSON 9).

#### Theory/Practice gap

The theory-practice gap has been reported as a key challenge for new graduate nurses. The RUSONs interviewed highlighted how their role assisted them to bridge this gap providing examples from their experiences within the ward.

- It'd be amazing to go to class and not have all these case scenarios be well, you'd have no idea how that'd actually work in the real world. Like you could go to class and you could yes, I've seen examples. And know all these different things that actually happen on the ward (RUSON 4).
- Oh immensely, like I can easily talk the language, and just seeing theory to practice. You will hear these little things, and when it come to my exam last year, it was like ooh, I've seen this, I know this. It's not just from the textbook and you can put in little extra things that you've seen the other nurses do, and you're like oh (RUSON 5).
- I would say that it has helped me personally, immensely, going from a nonclinical role in to a clinical role, and observing how a facility is run and all those little underlying things that textbooks can't teach you, you're actually getting exposed to. So how to comfort a patient when they're in distress is not in a textbook. How to make them feel valued is not in a textbook. Just along those lines, patients, when they're so vulnerable, they need to feel secure (RUSON 6).
- But I think it's starting to click in and it's not just a matter of knowing it on paper and seeing it on paper, I can see it, picture it (RUSON 5).
- I feel like with the theory side of the study I don't really get a holistic grasp of what I'm learning about, whereas here when I can actually see someone with a condition I can understand what their observations mean, like why they would have the high blood pressure or why they're tachycardia etc (RUSON 12).

"... I would say that it has helped me personally, immensely, going from a non-clinical role in to a clinical role, and observing how a facility is run and all those little underlying things that textbooks can't teach you, you're actually getting exposed to."



#### Transition to RN

One of the most common themes within the RUSON and staff interviews and focus groups related to how the RUSON role supported transition to practice. Many of the RUSONs reported that they felt much more confident about making the transition to RNs as a result of their RUSON role and that they were work ready.

- It's given me a good understanding of what the future nursing for me will be like. I suppose I didn't really understand what a normal shift would entail, and now I've got a good understanding of what each day would be like, well in this type of hospital anyway (RUSON 12).
- Hitting the ground running, that's right and already know the layout of the hospital, how you order your lunch, how the payroll works, all that sort of stuff that takes the first couple of months for the grads to figure out (RUSON 3).
- Oh, well I know the staff, I know the facility, it will make a great smooth transition, just I think I'll just have to remind them that I'm not the RUSON anymore (RUSON 5).
- I can certainly admit that I was feeling okay about going into a grad year, but I wasn't super confident. Because I hadn't had a lot of that hands on experience and I'm a learn by doing sort of person and so to have this I feel really confident now that I will just be able to just right into a graduate role and I owe that to this position, definitely (RUSON 6).
- So how to comfort a patient when they're in distress is not in a textbook. How to make them feel valued is not in a textbook (RUSON 9).
- It's the simple things like knowing where to park your car, knowing where to get something to eat, where your bag goes. Before I'd even met the team they could walk into [Health Service] as graduates and they've got it. They know where pathology is, they know where recovery is. They know the place. People have talked to them, they know who they are in the red shirts. It will be interesting when they have to take their identifying shirt off and put a different colour on (Staff FG 6).
- So if I walked into a room, and someone was short of breath or something, I think that I would be able to [snap fingers] "What's going on? How are you feeling? What's happening?" You know, I'll go get a nurse, and I feel as though I'd be confident to just sit there and comfort them, and talk to them, whereas I guess also developing in my years as a nursing student, that comes with it, but before starting the RUSON, I would have been like "Oh, my gosh. What do I do?" I would just go straight to the nurse, whereas I think after being able to watch how they handle their situations, it makes me feel as though I could do those things (RUSON 9).

Staff were also positive about how the RUSON experience would assist in the transition to graduate nurses and were hoping that the RUSONs they had as part of the pilot program would go on to work as RNs within the service.

- Yeah. She knows us, she knows the system, she knows where the things are, she knows what happens, and she will transition from a student to grad a hell of a lot more easily than someone that we've just plucked out of, I don't know, Melbourne, who doesn't know us (Staff FG 8).
- Our RUSON has been such an asset and I feel confident that she will be exceptionally work ready when she completes her degree (Staff Blog).

"... It's given me a good understanding of what the future nursing for me will be like. I suppose I didn't really understand what a normal shift would entail, and now I've got a good understanding of what each day would be like, well in this type of hospital anyway."

#### Intention to stay in rural practice after RUSON

Many of the RUSONs highlighted how their role as a RUSON had strengthened their intention to stay in rural practice. Some were surprised at the exposure that they got to different wards and experiences within the rural health services.

- So keen to stay rural, yes, because while I want to move away from home, I do like to stay close; and I like the familiarity of the rural towns. I certainly wouldn't want to live in a place like Melbourne; it's too busy (RUSON 6).
- But it definitely has made me think positively about rural hospitals (RUSON 4).
- You think of a little country hospital, just being a little country hospital, like a
  country practice type of show. But they actually have from A to Z, you've got
  limited doctors out here, and you've got limited health facilities. So, you get
  exposed to lots out here (RUSON 11).
- It kind of makes me want to be here more. The staff I've had interactions with have all been so lovely, and I really enjoy it here, it just feels really homely, I guess (RUSON 5).
- I wasn't 100% sure about rural compared to in big cities, I wasn't 100% sure and I've just seen the standards of care and the level of care and stuff and yeah, it's impressed me. And definitely would be keen to work rural (RUSONS FG).

"... I wasn't 100% sure about rural compared to in big cities, I wasn't 100% sure and I've just seen the standards of care and the level of care and stuff and yeah, it's impressed me. And definitely would be keen to work rural."



#### Improvements to patient/client care

Many of the staff in the interviews and focus groups reported that they felt the RUSONs had improved patient/client care allowing the services to deliver more patient/client-centred care. They reflected on many instances where the RUSONs had allowed for more timely care and often described the value of 'an extra set of hands'.

- In the nursing sphere where we're so busy on the wards and patients know that. We don't want patients to know that we're so busy. We want patients to know that we're not too busy to safely care for them. But they do know that nurses are busy, and I think that those other tasks that the RUSONs carry out, have a great deal of weight in increasing patient satisfaction (Staff FG 8).
- Yeah, it's about safe patient care, I think at the end of the day. We've got patients that require times two to three assistance. Or transfers and stuff like that. You cannot do that with the amount of staff that they've got on the floor. So safer care meaning reducing falls, recognising delirium, and reduced cognition as well. So there's a huge area where they would fit into (Staff FG 1).
- It definitely benefited the aged care, having that supernumerary pair of hands ensured that we can actually give more care because, so we don't have that rush to get everyone through [RUSON] took off quite a bit of our workload. But also, with (RUSON] around it allowed us to do then extra sort of things that we did actually chat to the residents, attend to their toenails and paint their fingernails and all that sort of stuff (Staff FG 11).
- We can meet deadlines. Patient needs are met. We can deliver better care to our patients and their families. Having a RUSON means that we can spend that time with the patients and the families, and meeting their needs, and meeting their goals. We're not as rushed around because sometimes on the busy ward, the nurses, we just become so task-orientated, 'we've got to do this-this, this-this, this' and we have to have it done. So we probably lose focus on being more patient-centred and having [RUSON] there, enables us to deliver more patient-centred care, I think (Staff FG 8).
- I'd say patient-centred care in our area I work in the sub-acute. We've had multiple patients say how wonderful our RUSON is. And that's improved patient care. She advocates for patients, which she wouldn't I mean, it's not to say that students and grads, but she seems to have got that confidence as well, with the support in the team. Being a part of that multidisciplinary team that she actually had that confidence to actually move forward and advocate for patients. And that's made a huge difference to patient care (Staff FG 1).
- And I think that's very much person-centred care and quite powerful feedback. In the nursing sphere where we're so busy on the wards and patients know that. We don't want patients to know that we're so busy. We want patients to know that we're not too busy to safely care for them. But they do know that nurses are busy, and I think that those other tasks that the RUSONs carry out, have a great deal of weight in increasing patient satisfaction. So, it leaned in, like tying into that standard of person-centred care (Staff FG 3).

"...Having a RUSON means that we can spend that time with the patients and the families, and meeting their needs, and meeting their goals. We're not as rushed around - because sometimes on the busy ward, the nurses, we just become so task-orientated, 'we've got to do this-this, this-this, this' and we have to have it done. So we probably lose focus on being more patient-centred and having [RUSON] there, enables us to deliver more patient-centred care"

The RUSONs reported that they felt that they had impacted on the patient/client's day to day experience within the ward and the quality of care provided.

- Yeah and just making sure they're okay, because we're rural, a lot of them don't get visitors. Just to sit and have a chat with them, make them feel comfortable. See if they're okay (RUSON 5).
- I like the fact that we can spend that time, half an hour with that patient and do their hair and wash their back for an extra two minutes longer (RUSONs FG).
- We can take that patient-centred care approach, that holistic care, the emotional side with the families which is very important (RUSON 10).
- Where I've just had to sit with the person because I saw she was in tears and the staff they knew but they couldn't do anything about it because it was medication time. So, I just went and said, "Do you mind if I sit and chat with you for a while?" And the nurse just stuck her head in and said, "Thank you very much." And just went on with her stuff. Those sorts of things are definitely important (RUSON 10).
- And even today I had four patients that I sat with for at least 10 minutes each and walking away they were just like, you could tell that they were relieved, they were happy, I made them laugh, they were so grateful and one of them was leaving the ward today and she's come up and she's like, "Oh, thank you, I'll remember you. You've been amazing. You've made this really easy." And it's like they just need face just yeah, having that connection with people and having them feel safe that you've got the time and they can tell you what's wrong (RUSONs FG).



### Challenges of the program

One of the biggest challenges reported consistently across the interviews, blogs and focus groups with staff and RUSONs related to the scope of practice. For many this was a source of daily frustration on the ward.

- It was terrible, because they'd ask you just to do a simple thing like weigh a urinal, sorry I can't do that. They were a bit disheartened, like well everything we need you to help with, because I was is there anything I can help with. Everything I need you to help with, you can't help, and it's not in your scope. I felt, I think they felt a little disheartened as well that I couldn't perform what they needed me to perform (RUSON 5).
- The only thing I think, with the RUSON we've got is amazing. Like she's so good that she I think some of her tasks are probably holding her back. I think she's a bit restricted too much in some of the things and there's simple things that she can't do. And there has been times I have said to her, you'd be better off at a nursing home (Staff FG 1).
- The staff should not put pressure on for us to do something we're not meant to do (RUSON FG).

For some RUSONs the interpretation of the scope by different RNs was challenging.

• Yeah, and some patients, and one patient in particular, one day I'll be able to shower her, the next day a different RN will say no, I don't think that's - I think that one's beyond your scope. She'll say but why? It confuses the patient as well. Yeah, as the RUSON, it does come down to RNs delegation. If they say no, sorry you can't do that, and you go and explain that to the patient, they get a little frustrated as well (RUSON 6).

There were a number of specific skills mentioned by staff and RUSONs throughout the project that they thought should be included within the scope moving forward. Things like shaving, administering topical medication, basic wound care (dressings), blood sugar levels, urine analysis, fluid balance charts, measuring outputs, observations (including BP) and many others. Staff felt that broadening the scope to include some of these basic nursing skills would alleviate some of the workload on the ward.

- The difficulty we faced was the RUSON was unable to complete simple paperwork such as obs and hygiene charts which mean she had to chase staff to fill in paperwork for her (Staff Blog).
- ...going forward, RUSONs should be able to shave with a safety razor. This is an important skill to master, and is best done as a RUSON as they have more time than an RN (Staff Blog).
- The duty list can be restrictive. They have been working in recovery, day surg and just observing theatre. It would be great if they could double scrub and be more hands on (Staff Blog).
- Can I also mention, with the RUSON role and what they're limited and what they can and can't do, we are diploma of nurses, nurses' training, once they do their first placement in aged care they can then get work as PCAs, so they can do your analysis testing and they can do blood sugars, but we're saying to our RUSONS that they can't. So maybe if they wanted to sort of industry standardise it, maybe have a look and see what PC workers can do because they can do automatic obs as well. It just seems really strange that you've got someone that's gone through six months of diploma training can do all these things after they're first out, on their first placement, and yet we've got a nearly qualified RN who can't (Staff FG 10).

"... Everything I need you to help with, you can't help, and it's not in your scope. I felt, I think they felt a little disheartened as well that I couldn't perform what they needed me to perform."

Many of the staff outlined that they thought a graduated scope of practice that grew with the RUSON over the period they were employed would be a better way to address some of the shortfalls experienced by staff within the participating health services. Some felt that the RUSON role was not utilising the skills that the students had developed over time.

- Yes to reap what their training has actually achieved already because it is saying, 'Well, you have done 12 months or 18 months but now we are going to put you back down to a level to say that you haven't. You have to prove that you can do that.' So that also puts it hard for them. It is also hard for staff to know, can they do this, can't they do this? (Staff FG 4).
- The scoping for RUSONs needs to be addressed. While supervised they should
  be able to work within the same scope as would be acceptable if they were on
  placement. I feel the scope limitations are a complete under-utilisation of the
  learning experience that could be supported through this project (Staff Blog).
- So the duties list was comprehensive but there was one thing in there that it was like you can arrange flower vases, and I felt that was a little bit condescending. That doesn't really need to be put in there. I felt like it put my scope of practice in really clear limits of what I could and couldn't do, it was really clear you can't do this because you're not an RN yet. And you're a student, you couldn't do that anyway. But you could go work as a PCA so therefore you can do this and you can do this under supervision of a RN. It was really clear, it had everything on there. There wasn't really much confusion about what I could and couldn't do (RUSON 1).
- As my scope expanded at university, I thought maybe I know it's hard with being partly registered and everything that maybe it could increase here and I'd be allowed to do more things. Because obviously there's some things that I'm allowed to do on placement, but I'm not allowed to do here, like, say, medications and I know that that was a difficult thing (RUSON 11).

Some staff reported that it was frustrating and time consuming to have to be explaining the role and scope to other staff on a daily basis. Many of the wards have high staff turnover and casual staff coming and going that were not involved in the training. This meant that the RUSONs had to have a good understanding of their own scope and be confident enough to decline tasks that were outside of their scope.

- But probably that scope of practice for [RUSON] I found the hardest explaining because she's not always going to be buddied up with the same staff member each day to explain what the RUSON role is and then what [RUSON]'s scope of practice is and then how much supervision she needs and what she's allowed to do and not allowed to do with those sorts of things. So from a day to day basis it was that's probably the most difficult thing (Staff FG 11).
- When a new casual comes on, they'll say well do you have a phone? Do you have a key? I'll just have to reiterate that no, I can't give I can answer the phones, but I can't give clinical advice, and I can't take the drug keys, because I'm not allowed to do drugs, so I'm not allowed (RUSON 5).
- I did have to explain it, at the start, a lot to everybody, what I could do, what I couldn't do, and what it was, and they were all really interested in the role in a way that made me think they probably weren't too familiar with it, I guess, because it is new. I think some were, but some weren't, because you have nurses come up from different wards sometimes, as well (RUSON 3).

Some of the RUSONs highlighted the difficulty of stepping back in relation to scope when they came back into their RUSON role after being on placement.

- Well I came back from a placement where obviously that was the end of second year. So, I was very I was allowed to perform a lot of things, and then you go back to work, which I was so happy to be back at work. But yeah, just having to step back and go alright, you have to step back and go, oh that's right, I'm not allowed to do that, okay, bummer. Is there anything else I can do? (RUSON 4).
- I felt good about it at the start and I still feel really comfortable with it, but that was probably the thing I could say could be improved. As my scope expanded at university, I thought maybe I know it's hard with being partly registered and everything that maybe it could increase here and I'd be allowed to do more things. Because obviously there's some things that I'm allowed to do on placement, but I'm not allowed to do here, like, say, medications and I know that that was a difficult thing (RUSON 8).
- I think, it would be beneficial for, maybe, future possible programs to go along with the scope of where we're up to outside of the job, so where we're up to in placement would be good (RUSON 7).

Not all RUSONs were frustrated with the limited scope. One took a different perspective highlighting that the limited scope was not that important to her as she approached every interaction whilst employed as a RUSON as an opportunity to learn.

• I really believe that there is something to learn in every experience if you're willing to just look at it at a different angle. And I know that you can get hung up on the fact that you can't do meds or you can't do wounds or whatever. It's going to be the same, you go out and next year and we will be RNs, but that doesn't mean we can cannulate. Are we going to sit there and complain about the fact that we can't cannulate or can do everything else? Let's go, okay this is not an opportunity for me to practice my skin assessment of a patient while we're in the shower. Okay there's a skin tear what are we going to do about that. We are going to inform our nurse and we're going to discuss a plan to go – and I'm part of that with them. Because they took that all on board, the nurses I worked with, they took that on board. So, I said, no I can't do that wound for you but let me be there, let me scribe for you and if you're happy with what I've written, sign it off for me. You know what I mean. They're all learning experiences (RUSON 5).

Some of the RUSONs reported feeling disappointed in the role and the exposure that they were given on the ward. They felt that they missed opportunities to learn new things or to consolidate key nursing skills as they were there to work and to make the workload lighter for the nursing staff.

- Because I think it gets a bit repetitive, and especially like, some days I would work there in the morning, and do placement in the afternoon. When I'm on placement, and I'm just like so tired after doing four hours I could do an eight-hour shift as a third-year student, and I wouldn't do that many washes. No way I would do that much hygiene and feel as tired after a shift as I do when I do a RUSON shift (RUSON 1).
- And at the most of the things that we do now is really hygiene and making beds and stuff like that. I mean, I don't mind them, but I guess it's more of just making that clear that while it is a learning opportunity it is an actual job and you have roles to do and if you were to be shown procedures that's an addition (RUSON FG).
- That's probably disappointed me the most about the role. You turn up and you're in the bathroom alone with the patient and you're not learning other things and you're not able to stand around and have a look at things and learn because there is washing to do, there's other jobs to do (RUSON 10).

"...That's probably disappointed me the most about the role. You turn up and you're in the bathroom alone with the patient and you're not learning other things and you're not able to stand around and have a look at things and learn because there is washing to do, there's other jobs to do."



### Impact on staff

Staff participating in the focus groups and monthly blog reported some of the impacts that having RUSONs on shift made to their daily work role within the ward. The staff reported many benefits including, improved staff morale, more organised wards, improved patient/client flow, and more time for breaks.

- Very useful to have an extra pair of eyes and hands on shift to assist with
  patient needs and answer buzzers and sensor mats. Helps reduce the risk
  of falls. It's reassuring to know that patients have been given showers etc,
  especially as the RUSON does not have to rush and can spend the one on one
  time with the patient (Staff Blog).
- I find that I go home and I'm not as stressed or I don't feel so frazzled about the day (Staff FG 4).
- I think for me it is about less burnout for the staff, mental, emotional and physical, less burnout because they take some of the pressure off (Staff FG 4).
- I think you get better patient flow through the hospital as well because we've got patients waiting to go to rehab or something and we can ask the RUSONs, "Can you just help organise this person, pack up their things," so it just saves the RN having to do that. So then you're discharging faster, getting people from theatre, from ED (Staff FG 2).
- It's just like those little things, like you walk past that room three times and the bed's still not made and you're like, "I need to go and do that," and it just looks messy, and sometimes the RUSON, you just turn around and they're just in there doing things or they'll deliver towels to the entire ward, so just like those little things that you notice when they're not there (Staff FG 3).
- I honestly see how much happier the staff are just to have that other person. Their workload is just that little bit easier for them. Not easier but manageable I suppose. Achievable. They are so happy with their RUSONs. But even the small stuff like watching and helping one of the RUSONs spend an hour and 20 minutes detangling someone's matted hair (Staff FG 5).

For some of the staff the value of the RUSON centred on risk management in relation to falls, patient/client deterioration and de-escalation. Many of the staff interviewed referred to the RUSONs as "an extra pair of hands" or "extra pair of eyes" highlighting the impact that the RUSON had on patient/client safety within the ward.

- It's pretty physical work trying to move someone in the bed or get them up onto a chair or in the shower. Even just taking someone to the toilet sometimes can be quite a physical job. If you've got that extra set of hands to help you it's less strain on the back (Staff FG 6).
- So I suppose in regard to risk management and things, having her sitting in there with him, we know he's not going to fall at that time, so there's a falls risk. We know that if someone's there with him he's less likely to get aggressive and wander out of his room and then start whatever he gets up to, which was approaching other patients, other staff and sort of getting angry because no-one's paying him attention. So all of those things help, yeah. And even having [RUSON] on the ward, she might see a bell ringing and go and answer it when the other nurse is busy doing something else. So you go to that patient straight away, they're less likely to get out of bed on their own and fall, they're less likely to do things that are high risk. So having someone there to sort of go to their bells quicker, it makes a difference (Staff FG 9).
- Because often you'll say they know they're not to they're to ring the bell if they want to go but they will just take themselves off because we were busy with other patients or residents. But [RUSON] was there to guide them in there and keep an eye on them so they didn't have the falls. Saw that happen quite a bit (Staff FG 3).

"... I honestly see how much happier the staff are just to have that other person. Their workload is just that little bit easier for them. Not easier but manageable I suppose. Achievable. They are so happy with their RUSONs."

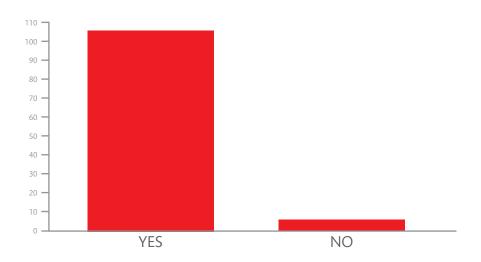


# DETAILED STAFF AND RUSON SURVEY DATA

Online monthly surveys were completed by staff and RUSONS throughout the pilot. The results of those surveys are detailed below.

Figure 2: RUSON Survey Q1

Q1 - The scope of the RUSON role is clear



**Table 8: RUSON Survey Descriptive Statistics Q1** 

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The scope of the RUSON role is clear	1.00	2.00	1.05	0.21	0.04	111

Table 9: RUSON Survey Q1: Responses

#	Answer	%	Count
1	Yes	95.50%	106
2	No	4.50%	5
	Total	100%	111

Figure 3: RUSON Survey Q2

Q2 - The position description covers the expectations of the role.

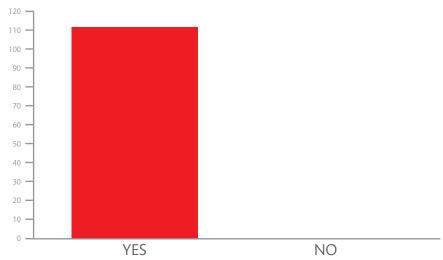


Table 10: RUSON Survey Descriptive Statistics Q2

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The position description covers the expectations of the role	1.00	1.00	1.00	0.00	0.00	111

Table 11: RUSON Survey Q2: Responses

#	Answer	%	Count
1	Yes	100%	111
2	No	0.00%	0
	Total	100%	111

Figure 4: RUSON Survey Q3

Q3 - I am well supported in my role.

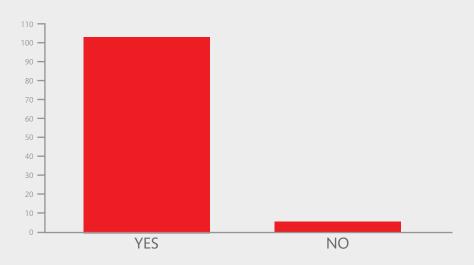


Table 12: RUSON Survey Descriptive Statistics Q3

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I am well supported in my role.	1.00	2.00	1.05	0.23	0.05	111

Table 13: RUSON Survey Q3: Responses

#	Answer	%	Count
1	Yes	94.59%	105
2	No	5.41%	6
	Total	100%	111

Figure 5: RUSON Survey Q4

Q4 - I am confident completing everything delegated to me.

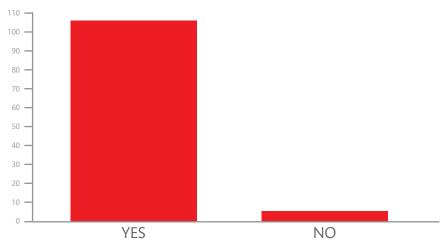


Table 14: RUSON Survey Descriptive Statistics Q4

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I am confident completing everything	1.00	2.00	1.05	0.21	0.04	111
	delegated to me.						

Table 15: RUSON Survey Q4: Responses

#	Answer	%	Count
1	Yes	95.50%	106
2	No	4.50%	5
	Total	100%	111

Figure 6: RUSON Survey Q5

Q5 - The RUSON role is increasing my intention to practice in a rural location.

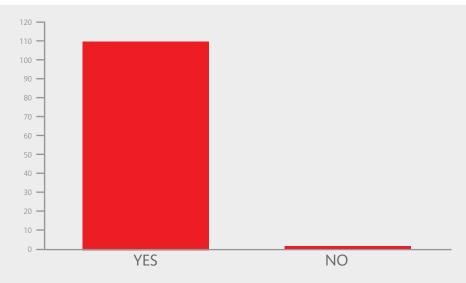


Table 16: RUSON Survey Descriptive Statistics Q5

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The RUSON role is increasing my intention	1.00	2.00	1.01	0.09	0.01	111
	to practice in a rural location.						

Table 17: RUSON Survey Q5: Responses

#	Answer	%	Count
1	Yes	99.10%	110
2	No	0.90%	1
	Total	100%	111



### STAFF SURVEY RESULTS

Figure 7: Staff Survey Results Q1

Q1 - Please indicate below your responses to the following statements about the preparation of the RUSONs.

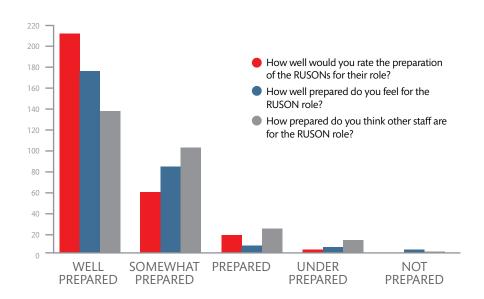


Table 18: Staff Survey Descriptive Statistics Q1

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How would you rate the preparation of the RUSONs for their role?	6.00	9.00	6.35	0.64	0.41	281
2	How well prepared do you feel for the RUSON role?	6.00	10.00	6.46	0.74	0.55	266
3	How prepared do you think other staff are for the RUSON role?	6.00	10.00	6.69	0.84	0.70	268

#### Table 19: Staff Survey Q1: Responses

#	Question	Well pre	pared	Somewha prepared		Prepared	d	Under prepared		Not prepare	ed
1	How would you rate the preparation of the RUSONs for their role?	40.35%	205	24.05%	57	34.78%	16	15.00%	3	0.00%	0
2	How well prepared do you feel for the RUSON role?	33.46%	170	34.18%	81	15.22%	7	25.00%	5	75.00%	3
3	How prepared do you think other staff are for the RUSON role?	26.18%	133	41.77%	99	50.00%	23	60.00%	12	25.00%	1
	Total	Total	508	Total	237	Total	46	Total	20	Total	4

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Figure 8: Staff Survey Results Q2

Q2 - Are the RUSONs adding value to the service/service delivery?

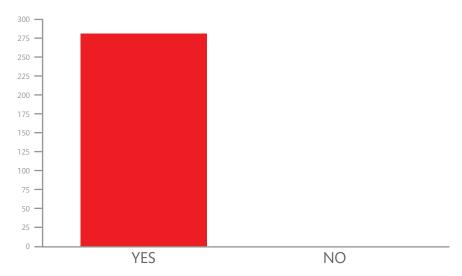


Table 20: Staff Survey Descriptive Statistics Q2

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are the RUSONs adding value to the service/service delivery?	1.00	1.00	1.00	0.00	0.00	284

Table 21: Staff Survey Q2: Responses

#	Answer	%	Count
1	Yes	100.00%	284
2	No	0.00%	0
	Total	100%	284

Figure 9: Staff Survey Results Q3

Q3 - Do you have a good understanding of the scope of the RUSON role?



Table 22: Staff Survey Descriptive Statistics Q3

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have a good understanding of the scope of the RUSON role?	1.00	2.00	1.05	0.22	0.05	283

Table 23: Staff Survey Q3: Responses

#	Answer	%	Count
1	Yes	95.05%	269
2	No	4.95%	14
	Total	100%	283

Figure 10: Staff Survey Results Q4

Q4 - Are the RUSONs working within the scope of their role?

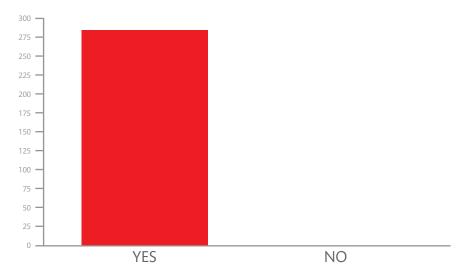


Table 24: Staff Survey Descriptive Statistics Q4

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are the RUSONs working within the scope	1.00	2.00	1.00	0.06	0.00	281
	of their role?						

Table 25: Staff Survey Q4: Responses

#	Answer	%	Count
1	Yes	99.64%	280
2	No	0.36%	1
	Total	100%	281

Figure 11: Staff Survey Results Q5

Q5 - How would you rate the completion of the activities by the RUSONs?

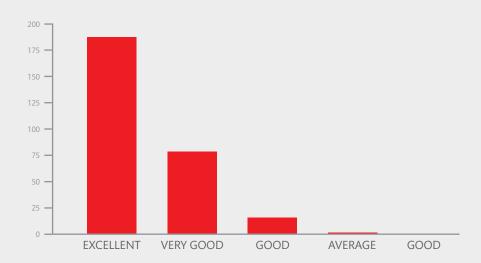


Table 26: Staff Survey Descriptive Statistics Q5

#	Answer	%	Count
1	Excellent	67.02%	191
2	Very good	28.07%	80
3	Good	5.61%	16
4	Average	0.35%	1
5	Poor	0.00%	0
	Total	100%	285

Figure 12: Staff Survey Results Q6

Q6 - Do you think the patients/clients are happy with the care delivered by the RUSONs?

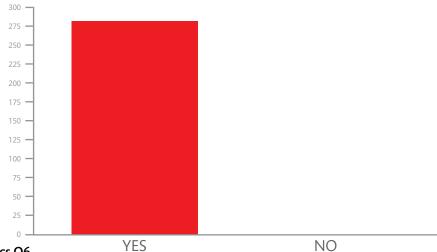


Table 27: Staff Survey Descriptive Statistics Q6

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you think the patients/clients are happy with the care delivered by the RUSONs?	1.00	1.00	1.00	0.00	0.00	281

Table 28: Staff Survey Descriptive Statistics Q6

#	Answer	%	Count
1	Yes	100.00%	281
2	No	0.00%	0
	Total	100%	281

Figure 13: Staff Survey Results Q7

Q7 - Have you faced any challenges with the RUSON role?



**Table 29: Staff Survey Descriptive Statistics Q7** 

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The second and the second are second as the second are second are second as the second are second as the second are second as the second are secon	1.00	2.00	1.79	0.41	0.17	286
	RUSON role?						

Table 30: Staff Survey Descriptive Statistics Q7

#	Answer	%	Count
1	Yes	21.33%	61
2	No	78.67%	225
	Total	100%	286



Concurrent employment while completing undergraduate studies is common across most countries, with students working to support themselves financially (Devlin, James & Grigg, 2008; Hall, Brajtman, Weaver et al., 2010; Robotham, 2012). In 2018, approximately 19% (4 706 000) of Australia's population between the ages of 15-64 were engaged in secondary or tertiary education, and of these, 90% simultaneously engaged with paid employment (4 235 670) (ABS 2018).

Undergraduate nursing students work most commonly within service industries such as hospitality and retail, with smaller numbers working as assistants in nursing (McLachlan et al., 2011; Algoso and Peters, 2012; Browne et al., 2013; Phillips, Esterman, Smith & Kenny, 2013; Phillips, Kenny & Esterman, 2016) or health care attendants (Hasson et al., 2013) in a variety of clinical settings, usually in residential aged care homes.

For more than two decades authors have reported benefits of nursing students working in healthcare settings whilst completing their studies, with increased exposure to health settings enhancing their confidence and clinical practice competence through skill acquisition and knowledge development (Happell and Gough, 2007; Hasson et al., 2013). However, concerns have been expressed about role confusion and lack of clarity, particularly when students work as health care assistants in the same facility where they complete their university placement hours (Hasson et al., 2013). Major issues of quality and safety have been highlighted with some authors arguing that students who work as unregulated health care assistants often receive minimal or inadequate support from other staff, particularly in specialist or high acuity clinical areas, putting both themselves and patients/clients at risk (Browne et al., 2013; Hasson et al., 2013).

In Australia, like many countries, there has been an underlying disquiet about the work readiness of new graduates and impact of the perceived theory/practice gap (Phillips, Esterman, Smith & Kenny, 2013; Phillips, Kenny & Esterman, 2016). The literature is replete with studies that highlight the difficulties that new graduates face in their transition to practice (Ralph, Birks, Chapman et al., 2013; Phillips, Esterman & Kenny, 2013; Phillips, Esterman & Kenny, 2015). In 2002 the Australian Senate Affairs Committee

recommended that all Australian undergraduate student nurses should seek employment within health care whilst completing their university studies (Australian Government Senate Community Affairs Committee, 2002) but formalised models of undergraduate employment, particularly those that involve university/health service partnerships have been slow to develop. There is a relatively small evidence base on specifically designed undergraduate student nurse employment programs where students work in a designated role within a health service whilst completing their university studies. This review directly addresses this gap.

Most of the paid employment models reflected in the literature emerged from the United States. Several studies (Redding and Flatley, 2003; Rush et al., 2004; Carney, 2005; Cantrell et al., 2005a; Cantrell et al., 2006a; Cantrell and Browne, 2006b) reflect externships where undergraduate nursing students apply to a health service, for employment that is facilitated around their studies, either in a summer break, vocational times, or the period of time between graduation and commencing an employment position as a registered nurse. There is little evidence of university involvement in these programs. Largely they are used as part of a recruitment strategy by health services to encourage students to work in the service following graduation (Rush et al., 2004; Stinson and Wilkinson, 2004; Starr and Conley, 2006, Ruth-Sahd et al., 2010; Souder et al., 2012).

Cooperative partnerships (Alsup et al., 2006; Hoffart et al., 2006; Hoffart et al., 2015), and internships (Kee and Ryser, 2006; Steen et al., 2011) are where undergraduate nursing students work in a health service for a set number of hours or days a week, or designated block placements, where students work multiple weeks over the course of a semester or summer break (Barger and Das, 2004; Harrison et al., 2007; Horns et al., 2007). The focus of these programs is to support students during their university studies, with opportunities for increased clinical experiences and as a recruitment and retention strategy for health services. In the only study that assessed undergraduate student competence in practice (Olsson et al., 2001), nursing students were assessed during their cooperative partnership on three occasions, over the completion of 900 hours of paid employment, with the employment hours affording academic credit toward their university studies.

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The seminal work of Gamroth et al. (2006) highlighted an intensive program supported by the Health Ministry in British Columbia, Canada. Two universities partnered with four health services to develop a program for third and fourth (final) year undergraduate nursing students, with two paid employment options. Undergraduate nursing students could either elect to work one to two shifts per week across the academic year or elect to complete a series of block placements. Students were employed in the capacity of student fellows, where they were allocated patients/clients according to the level of direct experience associated with their university studies and were continually supported by health service staff. In addition, all student fellows attended regular study days and in-service sessions as a component of this program. Following the successful pilot of this program, (Gamroth et al., 2006), all six Health Authorities within British Columbia adopted the model, with a designated employed student nurse (ESN) position created. Any undergraduate student in British Columbia who wished to apply for an ESN position, was required to register with the College of Registered Nurses in British Columbia. Outcomes of this model were reported as increased 'work readiness' and ease of transition for new registered nurses.

Coakley and Ghiloni (2009) reported on a study where final year undergraduate nurses were employed as student fellows in a ten-week intensive program focusing on oncology nursing, with a view to working in the same health service upon graduation. Nelson et al., (2004) describe a partnership model, where in the final two semesters of study, undergraduate nursing students were employed in a one-to-one mentoring program. Each shift, students debriefed with their mentor regarding their clinical progression. Outcomes of this program suggested increased knowledge and skill development, to assist with future transition to registered nurse practice.

Kenny et al., (2012) in one of the few Australia studies identified a partnership program with undergraduate nursing students at a regional university and a local health service. Undergraduate nursing students were employed as student fellows in a supernumerary capacity. During the period of employment, they were continually supervised. The intention was that students involved in this partnership would then go onto future employment as a beginning registered nurse at the same health service.

A more recent study by Draper et al., (2014) describes a unique externship model, which partnered a university in the United Kingdom and local health services associated with the National Health Service, where undergraduate nursing students were employed by a health service through sponsorship, for the duration of their four-year program of study. Rather than being employed as student fellows, students are employed as healthcare support workers, however, there is recognition that these persons are also student nurses, and accordingly receive ongoing support with educational needs. The majority of student nurses once graduated accepted a position at the same health service where they were previously employed.

In a recent US study, Grimm (2018) explored programs across five higher education institutions (colleges and universities) and local health services from one North American state. Outcomes measures included self-efficacy, through

exposure to work, and impact on transition to practice. No significant association was noted between undergraduate nurse employment and self-efficacy in practice. Within the literature there is a perception that paid employment models that are aligned with an educative focus and prioritise student learning opportunities are more successful than employment models that are service orientated (Devlin, James & Grigg, 2008; Kenny et al., 2012; Draper et al., 2014; Craft et al., 2017; Grimm, 2018;).

### Costs of undergraduate student employment programs

The costs of undergraduate student nursing programs includes payment of students, teaching and supervision, administration and advertisement (Alsup et al., 2006). Programs within the USA were often funded by local healthcare services (Tritak et al., 1997; Barger & Das, 2004; Alsup et al., 2006; Horns et al., 2007), or external sources that do not impact on healthcare service budgets (Redding & Flatley, 2003; Souder et al., 2012). Students in undergraduate employment programs were paid a percentage of new graduate or registered nurse's pay (Olson et al., 2001; Harrison et al., 2007), or a stipend (Rush et al., 2004; Souder et al., 2012; Stout et al., 2015). Students sometimes have to reimburse the stipend via a compulsory postgraduate employment year (Nelson & Godfrey, 2004; Stout et al., 2015). Paying student nurses to work as undergraduate employees supported them financially and reduced poverty (Gamroth et al., 2006; Kenny et al., 2012; McLachlan et al., 2011), and students appreciated the opportunity to earn and learn in a clinical setting (Gamroth et al., 2006; Harrison et al., 2007). Australian researchers reported that key stakeholders from government, industry, professional, educational and student bodies advised that student nurses should be paid a standardised wage with government financial support for programs (Kenny et al., 2012). The Ministry of Health has funded Canadian programs (Gamroth et al., 2006).

The high costs of employing undergraduate student nurses were described as an investment because of the reduced costs in orientation time and adjustment period of new graduates, turnover and hiring rates, and recruitment and retention of skilled professional nurses (Tritak et al., 1997; Olson et al., 2001; Barger & Das, 2004; Nelson & Godfrey, 2004; Carney, 2005; Happell & Gough, 2007; Harrison et al., 2007; Kee & Ryser, 2001; Kenny et al., 2012; Oja, 2013). Some researchers reported that orientation times could be halved because students had gained the required skills, knowledge and competencies during their undergraduate employment (Olson et al., 2001; Gamroth et al., 2006; Harrison et al., 2007). Stout et al. (2015) reported that further savings could result from employing fewer undergraduate students into healthcare areas with nursing shortages and the funding to support them. Costs were also reduced from employing fewer agency nurses to cover graduate nurse orientation (Carney, 2005; Stout et al., 2015). Authors claimed that undergraduate employment programs were cost effective, particularly when new graduates were retained over several years (Kee & Ryser, 2001; Harrison et al., 2007; Oja, 2013; Stout et al., 2015). However, a wide variation in turnover and level of employment rates was reported in one study, with data only marginally higher for previously employed graduate nurses compared with the institutional average over a six year period (Cantrell & Browne, 2006a).

### Benefits of undergraduate student employment programs

Students nurses report a range of benefits from participating in undergraduate paid employment programs including improved confidence in psychomotor and advanced nursing skills, and an appreciation of 'real world' nursing, teamwork and collegiality required for effective practice and patient/ client outcomes. Starr and Conley (2006) suggested that student nurses were anxious about their limited exposure to clinical practice in university courses and wanted more hands-on experiences. Students were often employed across a variety of clinical areas to increase their exposure to broad experiences and reduce their misconceptions about a nursing speciality (Harrison et al., 2007). These areas included intensive and coronary care units, emergency departments, anaesthesia, oncology, operating theatre, paediatrics and post-natal units, with opportunities for clinical, research, leadership and education in gerontology (Stinson & Wilkinson, 2004; Cantrell et al., 2005a; Courney, 2005; Alsup et al., 2006; Durrant et al., 2009; McLachlan et al., 2011; Mollica & Hyman, 2016; Souder et al., 2012; Stout et al., 2015). Happell and Gough (2007), contend that employment in mental health nursing might support students to consider this as a career option post-graduation as their fears and misconceptions could be lessened.

Working alongside their preceptors in full-time employment, on weekends, across 12-hour and rotating shifts were described as rich intensive, observational and practical, proactive shared learning experiences that were different to and not possible in clinical placements (Rush et al., 2004; Coakley & Ghiloni, 2009; Oja, 2013). Undergraduate employees did not feel encumbered by student role limitations to be graded with fear of failure (Remle et al., 2014), and strict clinical teacher supervision of performance (Algoso & Peters, 2012). Rush et al. (2004) identified that students in clinical placements often felt intrusive, burdensome and unwelcome outsiders to units and staff nurses. As undergraduate employees without full responsibility for nursing care, students had the time to learn about the service and unit design and environment, cultural terms, communication styles, routines, policy and procedures that made them feel welcomed into the healthcare team, which was essential in progressing their learning of practical nursing skills (Kee & Ryser, 2001; Rush et al., 2004; Cantrell & Browne, 2005b, p. 252; Hoffart et al., 2006). Admission into the emic, insider experience of professional, registered nursing roles and culture (Rhoads, Sensenig, Ruth-Sahd, & Thompson, 2003; Cantrell & Browne, 2005b;), permitted undergraduate nurse employees to move beyond textbook basics of nursing practice (Olson et al., 2001; Starr & Conley, 2006). Algoso and Peters (2012) proposed that insider experiences enabled undergraduate employees to proactively seek out and create new observational and practical learning experiences alongside their preceptors and unit nurses that complemented and enhanced their university acquired knowledge and skills.

Researchers claimed that mastering (or becoming better at) basic nursing skills in a low stress environment supported undergraduate employees to feel comfortable on units and in their nursing capacity (Coakley & Ghiloni, 2009; Ruth-Sahd, Beck, & McCall, 2010). This cultivated and improved confidence to learn and undertake more advanced nursing practice skills (Gamroth et al., 2006; Remle et al., 2014). These included time management, organisation and prioritising care, nursing assessment and communication, critical thinking and decision making informed by theory and knowledge, delegation and leadership roles (Olson et al., 2001; Rhoads et al., 2003; Alsup et al., 2006; Algoso & Peters, 2012; Ruth-Sahd et al., 2010; Oja, 2013). Undergraduate employees began to value and understand the importance of empathy, advocacy and personal nursing skills in enabling patient/client and family-centred care (Rhoads et al., 2003; Coakley & Ghiloni, 2009; Ruth-Sahd et al., 2010; Steen, Gould, Raingruber, & Hill, 2011; Algoso & Peters, 2012). This improved undergraduate employees ability to effectively nurse high acuity and complex patient/client populations in speciality and general nursing areas (Coakley & Ghiloni, 2009; Steen et al., 2011). As their confidence developed, supervisory staff began to trust their skills and clinical judgement, giving the undergraduate employee more responsibility (Remle et al., 2014), and with greater success, there was a snowballing of increased confidence, earned responsibility and accountability in their practice (Rush et al., 2004; Starr & Conley, 2006). This furthered their sense of belonging in nursing and the unit (Rhoads et al., 200;3Dempsey & McKissick, 2006) to work as active, collegiate, semi-autonomous multidisciplinary team members (Rush et al., 2004; Algoso & Peters, 2012;) with insight into how personal beliefs, attitudes and teamwork can influence patient/client outcomes and job satisfaction (Hoffart et al., 2006, p. 142).

Authors, Ruth-Sahd et al. (2010), contended that undergraduate students employed in a healthcare service were able to develop realistic concepts of 'expert' nursing, which led to the realisation of their limitations and areas where they needed to improve. Algoso and Peters (2012) proposed that employment in a healthcare service as an undergraduate nurse supported the development of a professional nursing identity, which authors Starr and Conley (2006), argued could progress student nurses towards personal career goals. While several other researchers agreed that these protected and nurtured insider, 'real world' nursing experiences enabled a process of becoming socialised into thinking, acting and understanding the complexity of the professional nursing identity (Rush et al., 2004; Alsup et al., 2006; Cantrell & Browne, 2006b; Starr & Conley, 2006), others acknowledged that the growth and changes in undergraduate employees might be minimal (Tritak et al., 1997). More research is needed to determine long-term outcomes for undergraduate nursing employees (Ruth-Sahd et al., 2010; Steen et al., 2011; Mollica & Hyman, 2016).

# Workforce satisfaction and impacts of undergraduate student employment program

Overall, student and registered nurses reported feeling satisfied with undergraduate employment programs. Undergraduate employees in the Stout et al. (2015) study, reported feeling welcomed onto the unit, supported by staff nurses, preceptors and peers, and appreciated the ability to work and learn whilst caring for patients/clients and families. Other researchers suggested that undergraduate employees valued the experiences they gained in professional nursing roles (Redding & Flatley, 2003), which prepared them to work in speciality nursing areas (Harrison et al., 2007). Staff nurses reported feeling satisfied with undergraduate employee's capacity to work in a patient and family centred manner that freed them to do more advanced nursing duties (Durrant et al., 2009). Browne, Cashin, Graham, and Shaw (2013), reiterated that as undergraduate employees spent much of their time developing therapeutic relationships with mental health consumers, registered nurses had the time for more technical and administrative tasks.

Undergraduate employees were seen to be "intelligent, energetic, motivated" staff members (Kee & Ryser, 2001, p. 32) whose enthusiasm for the work and skilled practice improved staff and unit morale (Gamroth et al., 2006; Hoffart et al., 2006). Registered nurses in a study by Gamroth et al. (2006), reported that these student qualities could reduce their workloads. They also indicated that having undergraduate employees on the unit might increase retention rates of existing staff because of reduced workloads, improved staff and unit morale, job satisfaction and better patient/client care (Gamroth et al., 2006). While Kee and Ryser (2001) reported that staff nurses wanted to work with supernumerary undergraduate employees as they reduced overall workloads, they warned that workloads could be increased as some students required more support to complete competencies. Midwives in another study, reported that they felt ill-prepared for receiving undergraduate employees, and the employment model had to be changed to accommodate their need for continued support with a reduced workload until competencies were achieved (McLachlan et al., 2011).

When employing undergraduate students in healthcare there is a need to have a balanced skills mix within units to ensure patient/client safety (Kenny et al., 2012). Browne et

al. (2013), proposed that while mental health nurses might be initially threatened by the use of unskilled undergraduate nurses, they are accepting of the role if workloads are not increased and patient/client care is not compromised. However, they advised that employing undergraduate nurses should complement existing staff ratios and skills mix, as overuse could reduce registered nurse direct contact with consumers and decrease quality of care, because of the extra paperwork and supervision required (Browne et al., 2013). Algoso and Peters (2012) advised that student employees should not be used to fill staff nurse shortages as this limits their ability to learn and increases their potential exposure to negative experiences that might impact on their decision to pursue nursing as a career. There is a need to maintain the "[c]entrality of [l]earning" in undergraduate employment programs (Kenny et al., 2012, p. 603), whilst increasing student exposure to less desirable speciality nursing areas that are currently experiencing an ageing workforce and nursing shortages, to improve enthusiasm for post-graduate employment into these areas (Happell & Gough, 2007; McLachlan et al., 2011).

Precepting and teaching undergraduate employees was believed to improve registered nurse's clinical practice and self-confidence from the need to revise, review and refine contemporary skills, knowledge and evidence based practice in their field (Gamroth et al., 2006; Happell & Gough, 2007; Harrison et al., 2007). Being up-to-date with knowledge and confident to teach, could improve job satisfaction (Nelson & Godfrey, 2004), and develop a pool of expert professionals within the service to support student learning (Alsup et al., 2006). Several authors contended that programs for employing undergraduate nurses could strengthen university and healthcare service relationships to cultivate an organisational learning culture (Durrant et al., 2009; Kenny et al., 2012; McLachlan et al., 2011). However, this could only occur if healthcare services supported programs from "the ground up" (Kenny et al., 2012, p. 603) with clear student employment guidelines, job descriptions and policies, preceptor education in undergraduate course content, facilitation processes, critical judgement and reflective practice, and an acknowledgement of their teaching and practice excellence (Durrant et al., 2009).

"...Undergraduate employees were seen to be "intelligent, energetic, motivated" staff members whose enthusiasm for the work and skilled practice improved staff and unit morale."

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### Retention rates of undergraduate students

Employment in an undergraduate employee program was described as a competitive process, with many programs only accepting high achieving students with above average grades (e.g. Kee & Ryser, 2001; Rush et al., 2004; Alsup et al., 2006; Souder et al., 2012; Stout et al., 2015; Mollica & Hyman, 2016). The expert panel in the Kenny et al. (2012) study, believed that while student employment programs should be non-discriminatory, employment should be based on a competitive process for healthcare services to recruit high quality staff. Possibly because of the highly competitive application process, retention rates for employed undergraduate students were reported as 100%, although actual student numbers were small (Harrison et al., 2007; Stinson & Wilkinson, 2004; Stout et al., 2015). Few issues with undergraduate students employees were reported in the literature. Gamroth et al. (2006) indicated that over a three year period, only five students were unsuccessful in their employment efforts. Redding and Flatley (2003) informed that one student underperformed and was not offered a position post-employment. While several students raised issues with the arduousness of working alongside their preceptors in 12-hour shifts, on weekends and holidays with difficulties adjusting to shift work, most students understood that this 'real world' nursing experience would prepare them for graduate employment (Redding & Flatley, 2003; Barger & Das, 2004;).

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## Role clarity and scope of practice

All stakeholders in undergraduate employment programs need to be aware of student employee job descriptions, scope of practice, and permitted roles and responsibilities. Providing clear program guidelines and policy on aims and objectives, with education of registered nurses on delegation roles, and advertising the undergraduate employee role can increase student ownership, and ensure patient/client, student and registered nurse safety (Happell & Gough, 2007; Kilpatrick & Frunchak, 2006; Durrant et al., 2009; Algoso & Peters, 2012; Kenny et al., 2012;). Researchers identified the potential for students and registered nurses to experience role confusion and ambiguity between differing roles and scope of practice between students on clinical placements and in undergraduate employment (Stinson & Wilkinson, 2004; Kenny et al., 2012;), which was confirmed in several studies (Starr & Conley, 2006; Harrison et al., 2007; Algoso & Peters, 2012; Durrant et al., 2009). These issues were dealt with by re-advertising the undergraduate employee role and scope of practice via online and hard copy job descriptions placed on units (Durrant et al., 2009). However, not all communications were initially successful, and changes were required in future programs to clarify stakeholder roles (Harrison et al., 2007).

Algoso and Peters (2012) recounted that a lack of structured support and role clarity led some undergraduate employees to feel pressured to work outside their role and scope of practice, with reported occasions of unsafe practice with registered nurses bullying them to nurse a full complement of patients/clients and check medications. Paul et al. (2011) reported that a lack of knowledge on policy governing undergraduate employee roles impacted on student learning because of a lack of support in specific units with staff shortages, with limited access to busy nursing staff. Further, they indicated that successful learning occurred in units that created a safe and welcoming space bounded by guidelines on undergraduate employees professional conduct and scope of practice, so that students could work independently with registered nurse supervision and faculty oversight (Paul et al., 2011). Both research teams argued that these issues could deter undergraduate employees from choosing careers in nursing and impact on future recruitment and retention rates (Paul et al., 2011; Algoso & Peters, 2012).

Several researchers reported that undergraduate employees and registered nurses believed that the scope of practice was limiting, with usually only basic nursing care allowed, and might not utilise their university acquired skills and knowledge (Stinson & Wilkinson, 2004; Durrant et al., 2009; Algoso & Peters, 2012). It was suggested that as students' progressed through their undergraduate course and employment that their scope of practice and supervision requirements could be reviewed and extended upon to improve learning (Courney, 2005; Hoffart et al., 2006; Kenny et al., 2012 Algoso & Peters, 2012;). However, having a limited scope of practice and responsibilities was also seen as an opportunity to comprehensively learn about the healthcare service environment (Cantrell & Browne, 2005b).

### Support

Supporting students, unit managers, clinical educators, staff nurses, preceptors and other employees to understand the expectations of undergraduate employment programs were essential in preparing stakeholders and promoting learning. Researchers outlined the need for undergraduate employees to attend orientation to the healthcare service, policy and procedures, specific units and program details (Nelson & Godfrey, 2004; Durrant et al., 2009; Oja, 2013). Orientation often included an introduction to the program, student-preceptor role expectations, scope of practice, competency and other program evaluation tools (Nelson & Godfrey, 2004; Starr & Conley, 2006), with a refresher course on basic nursing skills (Alsup et al., 2006; Starr & Conley, 2006). Participating in regular, ongoing didactic seminars and lectures, with group discussions, reflection and simulation classes that presented advanced nursing skills (e.g. critical thinking, judgement, leadership and delegation) were described as vital details for learning (Redding & Flatley, 2003; Rush et al., 2004; Cantrell et al., 2005a; Mollica & Hyman, 2016;). Ongoing education was believed to broach the theory-practice gap (Durrant et al., 2009; Tritak et al., 1997). However, this was best achieved when university and service education were linked with practical clinical experiences (Harrison et al., 2007; Durrant et al., 2009, p. E5; Remle et al., 2014), with coordination of education provided by faculty in some programs (Rush et al., 2004; Paul et al., 2011; Souder et al., 2012).

Working alongside an experienced, capable registered nurse preceptor with one-to-one support was paramount in undergraduate employee's ability to learn, understand and begin to incorporate basic and advanced nursing skills into practice (Olson et al., 2001; Nelson & Godfrey, 2004; Kilpatrick & Frunchak, 2006; Starr & Conley, 2006; Kenny et al., 2012). Choosing preceptors for their clinical experience, knowledge, education and leadership skills (Rush et al., 2004; Harrison et al., 2007), as well as their enthusiasm and ability to be supportive, sensitive to student needs, and structure learning accordingly (Redding & Flatley, 2003; Kilpatrick & Frunchak, 2006;) communicated organisational support for undergraduate employees (Harrison et al., 2007). Preceptors acted as role models for excellence in clinical practice (Hoffart et al., 2006), and working alongside them encouraged active undergraduate employee team

membership in planning patient/client and family care (Kilpatrick & Frunchak, 2006). However, best results occurred when undergraduate employees were respected as colleagues, so that skills and knowledge could be shared freely (Rush et al., 2004; Starr & Conley, 2006). Rush et al. (2004) reported that undergraduate employees felt valued when preceptors were committed, provided timely feedback, advocacy, encouraged independent and self-directed learning, and shared "thinking-in-practice" skills (p. 290). Learning was also enhanced when preceptors developed individual learning plans with undergraduate employees (Alsup et al., 2006; Harrison et al., 2007; Souder et al., 2012). To facilitate preceptor support and understanding of undergraduate employment programs, Stout et al. (2015) advised that they attend early paid orientation courses on program aims and objectives, their role, with education on how to teach adults and complete competency evaluations. Ongoing support for preceptors was also needed (Nelson & Godfrey, 2004).

Issues identified in undergraduate employment programs included difficulties scheduling students to work consistently alongside preceptors (Harrison et al., 2007; Stout et al., 2015) and coordinating work schedules with university commitments (Kee & Ryser, 2001). To reduce undergraduate employee anxiety and improve job satisfaction, Happell and Gough (2007) advised that students need to be supported to accomplish clinical nursing skills akin to their level of university skills and knowledge. Algoso and Peters (2012) claimed that inequity in learning experiences occurred depending on undergraduate employees placements, with the potential for students to be used as an "economical solution" to alleviate nursing shortages rather than to improve skills (p. 201). This raised further issues of the need for undergraduate employment programs to be structured and standardised for formal student learning (Kenny et al., 2012; Remle et al., 2014), with individualised programs that promote a climate where students could be supported to develop advanced skills and growth towards registered nursing status (Starr & Conley, 2006, p. 92). Within the Australian context, Kenny et al. (2012) advised that programs need to be developed as a shared vision between healthcare services and universities, with government support, clear communication strategies, leadership, and ongoing evaluation.

Working alongside an experienced, capable registered nurse preceptor with one-to-one support was paramount in undergraduate employee's ability to learn, understand and begin to incorporate basic and advanced nursing skills into practice.

### Confidence to practice nursing

The notion that university educated students might not be job ready post-graduation, prompted Australian interest in paid undergraduate employment programs, as more practical clinical hours might promote greater confidence and preparedness to work as registered nurses (Kenny et al., 2012). Undergraduate employee programs were described as promoting job readiness by incorporating the early construction of personal career goals with structured learning towards achieving them (Hoffart et al., 2006). Authors claimed that exposing students early on in their education to challenging clinical learning experiences as undergraduate employees can support their formative development into the registered nursing role (Remle et al., 2014). Confidence to practice and job readiness were seen to be enhanced by knowing the healthcare service and unit environment, including staff, unit culture, documentation requirements, and local policies and procedures (Cantrell & Browne, 2005a; Steen et al., 2011). Other factors included developing confidence in and understanding of personal nursing skills, teamwork and collegiality (Algoso & Peters, 2012), as well as independence in practice, and an informed choice of where students wanted to work post-graduation (Harrison et al., 2007).

Authors reported that senior nursing staff believed that undergraduate employees were more job ready and efficient, with improved organisational and teamwork skills, who required less time and guidance to orientate to the workplace, and had an easier transition into the registered nursing role and speciality areas, although these ideas were based on small participant numbers (Nelson & Godfrey, 2004; Gamroth et al., 2006; Harrison et al., 2007). Browne et al. (2013) identified that undergraduate employees in mental health settings were likely to benefit from a realistic exposure to the culture and environment, develop an understanding of the limits of psychiatry, with the ability to model themselves on expert mental health nurses and advance their job readiness by improving communication and therapeutic relationships skills. However, there was a need for organisations to support students and registered nurses such that anxiety and role stress did not increase and potentially lead to high turnovers in the mental health nursing workforce (Happell & Gough, 2007).

The timing of undergraduate employment programs was described by Rush et al. (2004) as crucial as undergraduate employees mourned the loss and believed that they lost momentum post-employment. Many students felt that they became stuck or regressed in their confidence, clinical skills, critical thinking and independent learning abilities in clinical placements when prior learning was not acknowledged (Rush et al., 2004). Learning only progressed when clinical teachers supported them to be independent and proactive learners with control over their clinical experiences (Rush et al., 2004). With early experiences in the registered nursing role, it was also possible for students to have greater anxiety and an early transition shock as they recognised the responsibilities and lack of skills that they had for post-graduate registered nursing role (Cantrell & Browne, 2006a). Further, Mollica and Hyman (2016), reported that undergraduate student employees had no statistically significant differences in socialisation to the registered nursing role, sense of belonging or professionalism. They claimed that while learning experiences in undergraduate employment programs provided an understanding of the registered nurse's role, it did not spare post-graduate nurses from transition shock (Mollica & Hyman, 2016). While undergraduate employees believed that developing knowledge about the healthcare service routines improved job readiness, they also reported that remaining on the same unit as post-graduate nurses increased their transition stress as unit managers and staff nurses had higher expectations of them (Steen et al., 2011). In an undergraduate employment program in Hong Kong, which did not include formal education and preceptor support, researchers reported that post-graduate nurses were often recruited to unwanted areas of practice, with little support and guidance, and expectations of performance from unit managers and staff nurses beyond their capabilities (Law & Chan, 2016). These factors led to a very stressful transition period for postgraduate nurses, who reported feeling less than job ready for the responsibilities of working as a registered nurse (Law & Chan, 2016).

While undergraduate employees believed that developing knowledge about the healthcare service routines improved job readiness, they also reported that remaining on the same unit as post-graduate nurses increased their transition stress as unit managers and staff nurses had higher expectations of them.

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#### Impact on retention rates post-graduation

While there is potential to improve recruitment and retention rates of undergraduate employees from offering them positions post-graduate, there is mixed reporting in the literature on the success of this strategy. Researchers reporting on a rural undergraduate employment program, claimed that recruitment of previously employed students into post-graduate registered nursing positions was 60-70%, however, no comparative data was provided (Horns et al., 2007). Alsup et al. (2006) indicated that the retention rate of undergraduate employees was 89%, with all post-graduate nurses remaining in the position at the time of publication, which was a significant reduction in nursing turnover rates from prior years. Post-graduate nurses from the program had also accepted positions in challenging nursing areas, including intensive care units, not previously filled by new nurses (Alsup et al., 2006). Other researchers also reported that retention rates could be improved significantly and maintained over several years (Kee & Ryser, 2001; Nelson & Godfrey, 2004; Harrison et al., 2007;). However, the possibility of being employed locally was dependent on the availability of permanent positions for some post-graduate nurses (Gamroth et al., 2006). It was also reported that retention rates of undergraduate employees into postgraduate positions were less than non-employed graduates over a two year period, and that undergraduate employment programs were not cost effective methods of ensuring adequate future staffing levels (Friday, Zoller, Hollerbach, Jones, & Knofczynski, 2015).

Several researchers reported that the benefits of undergraduate employment programs on retention rates should be examined on a more broad basis, with many claiming that undergraduate nurses were able to commit (or not) to a future career in nursing during paid undergraduate experiences (Hoffart et al., 2006; Starr & Conley, 2006; Mollica & Hyman, 2016;). There was also seen to be the capacity for undergraduate students to make an informed decision as to the area of nursing that was right for them in choosing an appropriate career path post-graduation, with early advancement in career and leadership possible (Rhoads et al., 2003; Alsup et al., 2006; Dempsey & McKissick, 2006; Harrison et al., 2007; Coakley & Ghiloni, 2009; Steen et al., 2011). The development of close relationships between undergraduate employees, healthcare services, unit managers, preceptors and staff members were the main reasons for students returning to post-graduate positions within the same unit (Redding & Flatley, 2003; Cantrell & Browne, 2005b; Starr & Conley, 2006), with loyalty and trust cited as motivating factors (Olson et al., 2001; McLachlan et al., 2011;). Further, healthcare services and unit managers were able to capitalise on relationships formed during undergraduate employment, as they could readily identify students with potential for post-graduate positions (Kenny et al., 2012). Employees could evaluate and screen high achieving student's skills, knowledge and fit with the service and specific unit area whilst in undergraduate employment (Kee & Ryser, 2001; Redding & Flatley, 2003; Nelson & Godfrey, 2004; Alsup et al., 2006; Happell & Gough, 2007; Harrison et al., 2007). Authors stated that preceptors and managers actively recruited students during undergraduate employment (Kee & Ryser, 2001; Coakley & Ghiloni, 2009; Steen et al., 2011). Hoffart et al. (2006) also reported that anecdotal evidence suggested that undergraduate nursing employees from their program were highly sought by other healthcare services in the country.

## Improvements in patient/client outcomes, experiences, and quality of care

As undergraduate employees progressed in their comfort and confidence with basic nursing skills, they felt more prepared to care for patients/clients (Tritak et al., 1997) and were able to focus more on providing quality care (Hoffart et al., 2006; Starr & Conley, 2006). This extended to being more comfortable with nursing acutely unwell and complex patients/clients that included caring for their families (Steen et al., 2011). Undergraduate employees were able to spend more therapeutic time with their patients/clients (Hoffart et al., 2006), which developed greater empathy for and understanding of the differences in individual patient/client needs (Mollica & Hyman, 2016, p. 191). Registered nurses in one study believed that undergraduate employees were able to meet the developmental, psychosocial and physical needs of paediatric patients/clients and families, and alert nurses to more advanced care needs (Durrant et al., 2009, p. E5). Mental health consumers identified that the counselling provided within therapeutic relationships developed with undergraduate employees benefited them, however, the researchers questioned whether students were qualified to provide safe patient/client care (Browne et al., 2013). For patient/client safety, it was advised that employment programs be well structured, with healthcare services, nurse managers and registered nurses aware of guidelines and policies governing student roles and responsibilities to avoid delegating outside of scope of practice and to protect students, registered nurses and organisations legally (Algoso & Peters, 2012). No issues with patient/client safety were reported in the literature, however, post-graduate nurses in Hong Kong reported a lack of support because of assumptions made by managers and registered nurses about their acquired knowledge and skills in an unstructured undergraduate employment program that did lead to unsafe nursing practices (Law & Chan, 2016).

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