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## REACHING THEIR POTENTIAL: PERCEIVED IMPACT OF A COLLABORATIVE ACADEMIC-CLINICAL PARTNERSHIP PROGRAMME FOR EARLY CAREER NURSES IN NEW ZEALAND

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### ABSTRACT

**Background:** The dynamic nature of healthcare ensures that early career nurses enter an uncertain and complex world of practice and consequently require support to develop their practice, build confidence and reach their potential. The New Zealand Nurse Entry to Practice programme for registered nurses in their first year of practice has been operating since 2005 to enable safe and confident practice, improve the quality of care, and positively impact on recruitment and retention. This academic and clinical programme was offered as a partnership between a university and a clinical provider with postgraduate academic credits gained.

**Aim:** The aim of this study was to explore the perceived impact of postgraduate university education for early career nurses in one regional health area of New Zealand.

**Methods:** Participants were registered nurses who had completed the early career nurse programme and their clinical preceptors. The research was conducted via an online survey of 248 nurses and three focus groups to explore how the programme was experienced and its impact on knowledge and practice.

**Results:** Early career nurses and their preceptors found that the programme enables improved knowledge and skills of patient assessment, application of critical thinking to clinical practice, perceived improvement in patient care delivery and outcomes, enhanced interprofessional communication and knowledge sharing, and had a positive impact on professional awareness and career planning.

**Conclusions:** This clinical-academic partnership positively impacted on the clinical practice and transition experience of early career nurses and was closely aligned to an organization's strategic plan for nursing workforce development.

## INTRODUCTION

As the context of healthcare increases in uncertainty and complexity, early career nurses require support to develop their practice, build confidence and reach their potential. Therefore they need opportunities and environments to advance their critical thinking, patient assessment skills and clinical reasoning. Recruitment and retention of new graduate nurses have been of enduring concern internationally, not least because of the expected increase in the proportion of nurses likely to retire over the next two decades and the changing health needs of an ageing population (Nana, Stokes, Molano, & Dixon, 2013). This article details the evaluation of a programme of postgraduate study aimed to address the education, socialisation and support needs of registered nurses in their first year of practice. The programme is delivered through a well-established partnership between a district health board and a university in New Zealand.

## BACKGROUND AND LITERATURE REVIEW

The first year of practice is well recognised as a period of transition from student to registered nurse that influences early career nurses' confidence, competence and future career decisions. It is a crucial time for gaining clinical skills, knowledge and experience in a specialty area (Ross & Clifford, 2002) during which early career nurses' diffidence about their own competence may be interpreted as a lack of self-confidence, critical thinking and/or clinical knowledge (Casey, Fink, Krugman, & Propst, 2004). Formal new graduate transition programmes are considered to improve retention, competency, have cost benefits (Rush, Adamack, Gordon, Lilly, & Janke, 2013), and enhance knowledge about common diagnoses, role confidence, and trusting relationships with the leadership team (Cockerham, Figueroa-Altmann, Eyster, Ross, & Salamy, 2011). Programmes resulting in improved practice and retention include specified resource people for new graduates, mentorship, formal education, and peer support opportunities (Rush et al., 2013).

Some nursing residency programmes are conducted in collaboration with a university, such as that described by Kim, Young-Lee, Eudey, Lounsbury, & Wede et al. (2015), but there is a gap in research literature about new graduate programmes that include Masters level academic credits. However, literature does reveal that formal education leading to postgraduate university qualifications supports nurses' personal and professional development (Cooley, 2008; Covell, 2009; Drennan, 2008) and to be the most appropriate preparation for advanced nursing practice roles (Aitken, Currey, Marshall, & Elliott, 2008; Currie & Watterson, 2009; Wilson-Barnett, 2006). Further, postgraduate study is expected to enhance critical thinking and the implementation of evidence into practice (Bennison, 2008; Cragg & Andrusyszyn, 2004; Pelletier, Donoghue, & Duffield, 2003), and to

increase nurses' confidence in their ability (Clark, 2009; Landmark, Wahl, & Bohler, 2004; Tame, 2013; Walker, 2009). Nurses who have completed postgraduate education are more likely to advocate for patients by questioning treatment decisions and options (Pelletier et al., 2003; Wildman, Weale, Rodney, & Pritchard, 1999; Williamson & Horsburgh, 2000). Additionally, a postgraduate nursing qualification has been associated with fewer medication errors, more effective triaging of patients, and overall improved clinical outcomes (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Considine, Ung, & Thomas, 2001; Covell, 2009).

In New Zealand, support and education for newly qualified nurses reached a turning point in 1998 with a comprehensive review of nursing workforce development needs (Ministerial Taskforce on Nursing, 1998) that recommended strategies to enable nurses to provide more responsive, innovative, effective, and accessible nursing care. A key finding of the review was that some employers expected new nursing graduates to immediately take on unrealistic workloads with high levels of responsibility without support. Therefore, the Nursing Entry to Practice programme (NETP) for nurses in their first year of practice was adopted as a national programme in 2006 that required DHBs to support nursing graduates to practise safely, effectively and confidently as registered nurses, improve the quality of care through nursing skills development, and achieve improved recruitment and retention of new graduates (Ministry of Health, 2004).

Changes in healthcare around this time, including shorter length of hospital stay with escalating patient acuity and more community-based, integrated care were drivers of a programme of supported learning for new graduate nurses that advanced their undergraduate learning in patient assessment, critical thinking and clinical decision making. An evaluation of New Zealand NETP programmes recommended that District Health Boards (DHB) partner with an education provider to include a postgraduate (Masters level) academic course in the programme, linked to a Masters level pathway (Haggerty, McEldowney, Wilson, & Holloway, 2009).

Application and selection into a NETP programme is through a national electronic portal where nurses indicate their first three preferred DHB locations and first three preferred clinical specialties. The number of positions available annually in NETP programmes across New Zealand is determined by the New Zealand Ministry of Health via Health Workforce New Zealand. DHBs review the applicants that have opted for their location and select programme participants based on their academic record, including final year clinical placement results. Of 1232 graduates who applied for NETP positions across the 20 DHBs in 2012, 723 (59%) had won a position in a NETP programme

within a month of finishing their nursing degree. Of those, 97 per cent had gained positions in either their first or second choice of DHB location (Ministry of Health, 2015).

This article concerns a NETP programme at Waikato DHB in the North Island of New Zealand that has about 80 applicants for the same number of vacancies annually, 78 applicants for 78 positions in 2012 (Ministry of Health, 2015), with the intention to attract Maori (New Zealand's indigenous population) students in the same proportion as the population being served, 20.8% in 2013 (Waikato District Health Board, 2013). Those offered a contract usually accepted one and drop-outs are very rare. There is one clinical placement for the duration of the NETP programme at an urban tertiary hospital, or several small regional hospitals or clinics, and in one clinical specialty, including acute hospital care for adults and children, primary health care, or older adult residential care. Each nurse has a career plan that guides them to future wider experience rather than encouraging early specialisation. The NETP places are 0.9 proportion of full-time position for the first year of practice with a pro-rata salary. This includes paid study release time with replacement staff in their clinical area, a nominated clinical preceptor, and fully paid university fees. Typically, 85 percent of nurses apply for and win permanent positions on completion of the programme with paid fees and time release for further study.

Since 2010, the University of Auckland and Waikato District Health Board have partnered in the delivery of the NETP programme. The academic course that is embedded in the programme has formal sessions taught by university and DHB staff that focus on patient assessment, clinical reasoning and critical thinking with application into everyday practice supported by a senior staff nurse assigned to each student as clinical preceptor in their work area. University staff liaise with clinical preceptors and students throughout to provide individualised learning support. Assessment of course requirements is made through written assignments and observation of patient assessment skills. Successful completion gains academic credits equivalent to 12.5% of a Master of Nursing.

While support for new graduate nurses is the subject of published literature, the award of academic credits at masters level within a formal programme is not mentioned. Therefore, this study contributes to bridging that gap by aiming to explore the perceived impact of postgraduate education associated with patient assessment and clinical reasoning for early career nurses employed by a New Zealand health board.

## METHODS

A mixed-method, descriptive cohort design, employing a survey and focus groups, was used to explore the impact, processes and experiences associated with postgraduate education for three cohorts of early career nurses having completed the NETP programme and their clinical preceptors. Ethics approval (NTX/12/EXP/103) was gained from the New Zealand Ministry of Health's Health and Disability Ethics Committee and the Waikato District Health Board's research committee. Ethical principles (World Medical Association, 2013) were adhered to throughout; survey respondents remained anonymous by logging onto a web-page with a logon and password that did not link to their identity, and data are reported in aggregated form. Focus group participants participated voluntarily, gave written consent, were assured of anonymity; no identifying details would be reported. They agreed to keep other group members contributions confidential, were informed that they could withdraw from the group if they wished but could not withdraw their contributed data because of the collective nature of focus group discussion. Participants' success in the programme was not at risk as they had all successfully completed the programme. Groups were facilitated by researchers associated with both partnering institutions and participants' potential reluctance to contribute negative impressions is recognized. However, open discussion in a safe environment was encouraged.

### Survey

All nurses (n = 231) who had completed the NETP programme in 2011-2013 and their preceptors (n = 17) were invited to complete a previously validated online survey, using the Survey Gizmo platform, of 46 items about knowledge and understanding, application of knowledge, critical thinking, impact on patient care, professional development, workplace activities, and communication and sharing of knowledge in the workplace. Items were scored on a five-point Likert scale from one (strongly disagree) to five (strongly agree).

### Focus groups

Focus groups were convened to explore the perceptions of participants, two NETP groups and 1 preceptor group, to explore the thoughts and feelings of participants and how understandings had developed (Stalmeijer, McNaughton, & VanMook, 2014). Thirty five nurses who had completed the NETP programme six months previously (during either 2012 or 2013), were invited to participate in one of two focus groups, with eight consenting for each. Eight registered nurses of 17 who had acted as preceptors for nurses during the NETP programme participated in a third group. Focus groups were facilitated by a member of the research team on site, audio-recorded and transcribed. The

focus group topics (Table 1 below) were the basis for open questions and prompts were used to generate further clarification and explanation. The preceptor group took 43 minutes, the 2012 cohort group of early career nurses 45 minutes and the 2013 cohort 25 minutes.

Table 1 Focus Group Topics

Relevance of course content to everyday clinical practice
Readiness to apply patient assessment skills to practice
Opportunities to practice what had been taught
Most valuable supports to putting new learning into practice
Most obvious challenges to putting new learning into practice
Development of clinical decision-making ability and how this was evident/not evident

#### Data analysis

Survey data was imported from Survey Gizmo into IBM SPSS 22 to calculate mean scores.

Aggregated mean scores with standard deviations were calculated separately for NETP nurses and preceptors. The mean difference between NETP nurses' and preceptors' aggregated scores for the seven sections of the survey was calculated using the *t*-test.

Focus group data were analysed thematically using general inductive methods: familiarization with transcripts, identification of text most relevant to the research aim, segments of text noted as categories, reduction of overlap and redundancy between the categories, and aggregating categories for similarity of content to create themes (Thomas, 2006). Using nVivo 10 software, two members of the research team independently coded and categorized data, then conferred to check and re-check analysis of data and to agree on aggregation of categories into themes. Member checking was not conducted because the collective nature of data collection and the higher-order abstraction developed through analysis and interpretation mean that participants are unlikely to recognise their individual contribution to the findings (Cohen & Crabtree, 2008; Morse, Barrett, Mayan, Olson, & Spiers, 2002).

#### RESULTS OF SURVEY

The online survey was completed by 122 (53%) of early career nurses who had completed the NETP programme in 2011-2013 and 14 (82%) of their preceptors. Forty six nurse respondents (17%) were

in their second year of practice, the remainder having just completed the NETP programme. Table 2 below indicates the clinical areas respondents were employed at the time of the survey, the majority (69%) in medical/surgical acute care settings, 9% in primary health care and smaller numbers across various settings.

Table 2 Clinical settings in which respondents were employed

	Early Career Nurses	Preceptors
Medical /Surgical	85	11
Community Care	2	
Primary Health Care	11	1
Emergency Dept	6	1
Outpatients	5	
Rural Hospital	2	
Intensive Care/CCU/NICU	4	1
OT/PACU	3	
Other	4	
Total	122 (53%)	14 (82%)

The remainder of the survey comprised of responses to statements scored on a five-point Likert scale from one (strongly disagree) to five (strongly agree) across seven content areas. Table 3 below details mean scores for nurses and preceptors for each survey item. In the Knowledge and Understanding section, respondents scored most positively for “Knowledge relevant to patient assessment” (3.95 for early career nurses, 3.87 for preceptors), “Understanding of disease processes” (3.68, 3.6) and “Understanding of the pathophysiology of common conditions” (3.59, 3.93). All scores were above 3.5, indicating positive perceptions of nurses and preceptors for items in this section. The most positive mean scores in the Application of Knowledge section were to the statement that “Clinical skills would improve by undertaking postgraduate education” (4.3, 3.93), followed by “Confidence in carrying out technical procedures” (3.72, 3.2) for early career nurses. “Understanding of the information from diagnostic tests” (3.56, 3.47) was an unexplained difference to “Can interpret diagnostic information” (2.75, 2.93).



Table 3 Perceptions of early career nurses vs preceptors of the impact of the programme

	Mean Score*	
	Early Career Nurses (n=122)	Preceptors (n=14)
<b>Knowledge and Understanding:</b>		
Knowledge base is sufficient for role	3.56	3.73
Understanding of the pathophysiology of common conditions	3.59	3.93
Understanding of disease processes	3.68	3.60
Understanding of biological sciences	3.49	3.79
Knowledge relevant to patient assessment	3.95	3.87
<b>Application of Knowledge:</b>		
Confidence in carrying out technical procedures	3.72	3.20
Understanding of the information from diagnostic tests	3.56	3.47
Order diagnostic tests appropriately for patients	3.47	3.33
Can interpret diagnostic information	2.75	2.93
Use data from diagnostic tests to plan patient care	3.46	3.20
Clinical skills would improve by undertaking postgraduate education	4.30	3.93
<b>Critical Thinking:</b>		
Comprehensive view of my clients/ patients	3.87	3.73
Strong analytical skills	3.63	3.33
Tend to question my own patient care	3.79	3.73
Tend to question the patient care of others	3.45	3.27
Skilled in evaluating research	3.56	3.53
Skilled at evaluating my practice	3.14	3.40
Consider the evidence behind practice frequently	3.69	3.33
Clinical decision making skills are obvious to self	3.70	3.47
Able to implement change in a clinical context	3.36	3.29
<b>Impact on Patient Care:</b>		
Belief that education has positively impacted in patient outcomes	4.17	4.00
Better able to explain to patients about their care	4.15	3.93
More confident talking to patients and families about their care	4.08	4.20
Pick up on patients' problems sooner	3.79	3.60
Better at evaluating underlying causes for patient problems	3.60	3.80
**Not had the opportunity to apply postgraduate learning in workplace	2.49	2.40
<b>Communication and Sharing Knowledge in the Workplace:</b>		
Confidence in communicating with medical staff	4.02	3.53
Requested often to fulfil a teaching role	2.71	3.33
Teach juniors effectively	3.10	3.67
Confident speaking at team meetings	3.28	3.43
Confident discussing research with colleagues	3.19	3.33
Comfortable having others observe my clinical skills	3.58	3.47
Likely to share knowledge with other colleagues in workplace	3.88	3.80
Other staff members come for advice	3.14	3.40
<b>Workplace Activities:</b>		
Patient notes are focussed and informative	3.94	3.93
Confident in coping with emergency situations	3.13	3.47
Innovative in my practice	3.51	3.53
**Colleagues feel threatened due to qualifications	1.94	2.67

Respected in the workplace	3.81	3.93
Confident advocating for patients	4.14	3.93
<b>Professional Development:</b>		
Keen to further study	4.33	4.07
Further study would have a positive impact on career	4.40	4.20
Further study would extend career options	4.37	4.40
Further study would increase eligibility for promotion	4.23	4.07
Further study would increase satisfaction with work	3.98	3.53
Further study would increase clinical responsibility	4.17	3.80
Qualifications are valued in workplace	3.76	4.00

(\*items scored on a scale of 1-5 in which 1 = strongly disagree, 5 = strongly agree; \*\*items worded negatively so that a lower score would indicate a positive response )

The third section surveyed perceptions about Critical Thinking for which the most positive responses were for “Comprehensive view of my clients/ patients” (3.87, 3.73) and “Tend to question my own patient care” (3.79, 3.73). Given the early stage of their careers, it is not surprising that respondents scored slightly lower for “Able to implement change in a clinical context” (3.36, 3.39) and “Skilled at evaluating my practice” (3.14, 3.4). Positive perceptions about Impact on Patient Care, were more favourable than the previous sections, including “ Belief that education has positively impacted in patient outcomes” (4.17, 4.0), “Better able to explain to patients about their care” (4.15, 3.93) and “Not had the opportunity to apply postgraduate learning in workplace” (2.49, 2.4 – worded in the negative frame so that a low score was favourable). Although the scores are not intended to measure the impact of the programme on patient outcomes, the impressions of a positive impact of the programme on patient care are clear in this section. In the following table (Table 4), the mean aggregated scores per section indicate a positive view of the impact of the programme, with more positive scores for Impact on Patient Care and Professional Development.

Table 4 Comparison of Aggregated Scores for NETP Nurses and Preceptors for Each Grouping of Questions

	Total Aggregated Mean NETP nurses (SD)	Aggregated Mean Preceptors (SD)	Mean difference between Early Career Nurses' scores vs Preceptors' scores	Significance p= (t-test)
Knowledge and Understanding – maximum possible score = 30 (5 questions)	18.26 (2.79)	18.85 (2.47)	-0.59	0.44
Application of Knowledge - maximum possible score = 30 (6 questions)	21.25 (3.15)	20.07 (4.09)	1.19	0.18
Critical Thinking – maximum possible score = 45 (9 questions)	32.38 (3.81)	31.14 (6.02)	1.24	0.29
Impact on Patient Care - maximum possible score = 30 (6 questions)	23.32 (3.4)	23.13 (3.33)	0.19	0.84
Communication and Sharing Knowledge in the Workplace - maximum possible score = 40 (8 questions)	26.95 (4.77)	28.21 (5.59)	-1.26	0.36
Workplace Activities maximum possible score = 30 (6 questions)	22.56 (2.27)	22.13 (2.79)	0.43	0.50
Professional Development – maximum possible score = 35 (7 questions)	29.4 (3.94)	28.06 (3.15)	1.34	0.21

When the aggregated mean total scores for early career nurses for each of the groupings of question in the survey were tested for difference using the t-test, no significant difference was found between the two sub-groups of respondents for any of the sections (p = minimum 0.18 to maximum 0.50). This indicates that the nurses' perceptions of their own abilities were similar overall to those of their preceptors. This is an important indication of the congruence of early career nurses' views of their abilities with those of their preceptors.

#### RESULTS OF FOCUS GROUPS

There were three focus groups each with eight participants, two of early career nurses, and one of preceptors. Analysis of transcribed data from the focus groups using nVivo 10 software resulted in the generation of four themes: *Thinking outside the box*, *Advancing clinical learning*, *Developing professional awareness* and *Growing as a learner*. Each theme was supported with text references from each of the focus groups (see Table 5 below).

Table 5 Number of References from Focus Groups for Themes

Theme	Focus Group	Number of references coded to theme
Thinking outside the box		
	1	9
	2	14
	3	10
Advancing clinical learning		
	1	18
	2	10
	3	44
Developing Professional Awareness		
	1	18
	2	11
	3	29
Growing as a learner		
	1	20
	2	39
	3	10

### Thinking outside the box

Each of the focus groups spoke about how the programme had stimulated new graduates to think broadly about their practice, especially when using the information from patient assessment in reasoning the priorities for patient care in ways that were systematic and also multi-dimensional. One group of new graduates considered that they gained a wide appreciation of patients' health problems, gaining:

*Nurse Focus Group 2 (NFG2)/6 "... more insight into what's going on with the patient. You could click things together a little bit more with their diagnosis."*

*NFG2/7 "Think outside the box."*

Examples of how learning had been guided by the postgraduate course towards a comprehensive perspective of assessment skills in the overall care of patients include:

*NFG1/4 "That's why I find the year 1 course is really helpful to get you ready ...the assessment skill is not just an assessment skill. But it also leads your thinking through a systematic process of assessment. It's the method that's sparking your thinking."*

*Preceptor Focus Group (PFG)/1 "I think it really gets them to think about intricate parts of their practice."*

Thinking outside the box was also about bringing to mind a range of possibilities based on research evidence, clinical data and a scientific knowledge:

- NFG2/2 *“Instead of drawing your thoughts to sort of one mind, you come up with five or six different things that it could be”.*
- NFG1/3 *“Not just the face of the patient, it’s the back of the patient, the side of the patient I have to watch. So suddenly the person becomes 3D, and suddenly the 360 degree view, not just one perspective. Suddenly you understand what holistic care means.”*
- PFG/7 *“That everything they come across isn’t just what they see on face value. And they’ve learnt those skills through that paper, whether they may have focused on central lines or wound assessment, they’ve learnt those skills and then they can take it through to something else that, you know, what I’m seeing is not necessarily just what I’m seeing and I can dig deeper into that.”*

#### Advancing clinical learning

This theme concerned constraints and supports affecting clinical learning. Course assessments supported focussed clinical learning because what was learnt in class was applied to the real world of practice:

- NFG1/7 *“As soon as I learnt those assessment skills I started implementing them into my practice. So, I was in gen surg [general surgery], I would do an abdo [abdominal] assessment. And then in ED you’d do the chest of a young child that comes in with shortness of breath.”*

Not all participants agreed that they were ready or supported to use the skills learnt, even though they were helpful. For some, to use a stethoscope for patient assessment was not considered usual practice, especially in the first year of practice and this was a barrier to clinical learning:

- NFG1/3 *“The assessment skills that we learnt were helpful, but in our ward we didn’t really do much assessment. You wouldn’t get a stethoscope out. I would never see a nurse do that.”*

Another participant found lack of time was a barrier to practising assessment skills:

- NFG1/4 *“At the time of doing this grad paper it almost felt you were doing things above your..., not your skill set, but you’re new grads. Especially when you’re chucked on a busy ward you’re kind of just learning how to time manage and get out on time, and make sure everyone’s looked after and everything’s done.”*

However, this barrier seemed to apply to the period early in the course, perhaps before understanding focussed assessment for specific situations of patient care.

NFG2/2        *“Looking at what I learnt and what I do now I tend to do an abridged version of what I learnt.”*

The preceptor group cautioned that the complexity of patients’ health needs required comprehensive assessment skills, indicating the importance of ongoing development of assessment and clinical reasoning competencies:

PFG/5        *“And the assessment that they do is fantastic, but usually due to the complexity of those patients it’s not just this one thing. Like you could do, say, a respiratory assessment but usually there’ll be something else”.*

#### Developing professional awareness

Adjusting to identity, role, responsibilities and accountability of the new role of registered nurse lasted the whole first year:

NFG1/2        *“I think the hardest part really is the adjustment phase. Trying to adjust from being a student and being a new grad and learning all the things, also studying and doing the assessments. So it’s actually quite hard, yeah. “*

Self-awareness of practice competence and learning needs was illustrated through lack of clarity about decision-making early on grew with experience and knowledge:

NFG1/1        *“My patient’s not looking well. I’m going to call the house surgeon. And that’s what I feel like when you first come out as a new grad. Whereas [now] - what diagnostic tests are we going to do, we’re going to do bloods, and this scan, and why is that scan better than that scan?”*

NFG1/5        *“You’ll start initiating stuff. Even before you’ve rung the house surgeon, you will have done certain diagnostic tests.”*

Preceptors for the programme noticed increasing confidence to speak up about what they didn’t know, especially when concerned about a deteriorating patient:

PFG/4        *“I just think they’re more confident, having done that paper. They’re certainly more confident to say ‘I don’t know what’s going on, I’m worried or I don’t understand what’s happening with this patient’. They’re certainly less likely to sit on a deteriorating patient.”*

PFG/6 *“They have those skills, the words and knowledge to challenge, to say my patient is unwell and I’ve assessed this patient, they require observations half hourly and I can’t do that with six other patients. They might not necessarily have the experience but they’re on the road, not sitting in the car waiting. They’ve started travelling.”*

The preceptors group also commented positively on new graduates’ awareness of their career aspirations, planning ahead and more comprehensive professional self-awareness, generally:

PFG/3 *“Just to see that she had a real idea of her career plan, which I wouldn’t have had at her age, where she was headed and what she wanted to do.”*

### Growing as a learner

Increasing maturity was evident as new graduates accessed learning opportunities, customised their learning and took charge of their own professional development. One new graduate group spoke of:

NFG2/1 *“...actively seeking it, actually making a decision this is what I want to do, therefore I need to look for opportunities to do it.”*

Concern about fully participating as a member of the team with the knowledge and skills required was voiced:

NFG1/3 *“You want to become part of the team. You don’t want to say on handover I can’t do that. You want to have your clinical skills. You want to be able to handle your part of the load.”*

The preceptor group commented on motivation to identify learning needs:

PFG/5 *“They’ve become accustomed to our environment and our culture and what have you, and then they’re identifying, ‘I need to know more about this assessment and what I’m doing’ “.*

Although, new graduates had found adapting to a new role in their first year taxing while also studying a postgraduate course, one group recalled that the content, delivery and course assessments were what was needed:

NFG2/8 *“It was at the right level*

NFG2/2 *And it summarised all those systems quite well*

NFG2/3 *And it wasn’t too much, it wasn’t too in depth. Different learning styles, you know, it accommodates different learning styles.”*

Growing as a learner also included interprofessional communication to set up opportunities for learning from professionals other than nurses, especially medical colleagues:

NFG2/6 *“I had a really good doctor who did really good neuro exams for stroke. And she was great. She’d call me in every time she was doing an assessment because she knew I was interested in it.”*

NFG2/4 *“I worked with one of our anaesthetists quite a bit and if he ever had a patient that he thought had interesting sounds in his lungs he’d call me in and ask me to have a listen and see if I could pick it up.”*

The preceptor group had noticed that learning and support was mutual between the new graduate nurses and junior house officers:

PFG/3 *“One thing I witnessed is the very junior house surgeons and the very junior nurses supporting each other and teaching each other.”*

Finally, growing as a learner over the NETP programme was summed up by one new graduate in terms of gaining the confidence to ask for advice and to weigh that up with what was already known:

NFG2/3 *“I was definitely more confident after completing all those assessments. Towards the end of the year you could still ask senior staff but you could take it or leave it. You sort of got that confidence.”*

## DISCUSSION AND CONCLUSIONS

The findings of this study have clarified the impact of postgraduate education associated with patient assessment and clinical reasoning for early career nurses in one New Zealand setting. This programme provided opportunities and environments for new graduate nurses to advance their critical thinking, patient assessment skills and clinical reasoning while also gaining master’s level academic credits. This study contributes to the research literature regarding the impact of a clinical-academic partnership programme on early career registered nurse practice and also provides unique insight into nurses’ experience of gaining university credits while employed in their first year of practice. A further strength of the study is the perspective gained of experienced nurses supporting new graduate nurses’ practice as clinical preceptors while undertaking postgraduate study.

However, we caution that this exploration of a programme in a particular locality with a self-selected sample is a limitation that precludes generalisation to other settings. A further limitation is that



reluctance to speak negatively of the programme may have been an issue for some even though open conversation was encouraged.

Overall, the responses to the survey items were echoed in the themes generated from the focus groups. Not only were findings from the survey and focus groups compatible generally, but more specifically, Preceptors' survey responses and findings from their focus group were well-aligned with those of early career nurses. This is important because such congruence of the views of participants enhances the validity and integrity of findings in their entirety (Bryman, 2006). Examples of thinking critically, comprehensively and beyond the obvious were indicative of advancing clinical reasoning. Support for the development of confidence and skill in new graduates, especially in relation to patient assessment and clinical reasoning is important because a lack of confidence has been found to negatively impact on competence (Ulrich et al., 2010).

#### Nursing education

The NETP programme central to this study demonstrates attributes that have been found to be effective in new graduate education: clinical skill development, opportunities for peer support, positive work environments, and formal preceptorship (Rush et al., 2013). The findings of this study have implications for those partnering in the delivery of such a programme. Although the inclusion of a postgraduate course in the NETP programme did not surface as a significant source of stress, others have noted this (Howard-Brown & McKinlay, 2014) and the first year of practice is known to be a period of challenging transition (Chernomas, Care, McKenzie, Guse, & Currie, 2010; Cockerham et al., 2011; Rush et al., 2013). Therefore, careful monitoring of workload, and individualised learning support is vital. The model of delivery with formal university teaching and clinical preceptorship in practice settings is not new but its positive impact on systematic patient assessment, clinical reasoning and care decisions reinforces the value of clinical-academic partnerships in education found elsewhere (McKillop, Atherfold, & Lees, 2014). In contrast to studies that have reported new graduates' reluctance to communicate with other health professionals (Dyess & Sherman, 2009; Fink, Krugman, Casey, & Goode, 2008), participants in this study indicated that towards the end of the programme they were confident and articulate with medical and nursing colleagues regarding patient status and safety. The role of nurse educators, especially in workplace settings, in enabling effective interprofessional communication is vital to high quality patient care (Pfaff, Baxter, Jack, & Ploeg, 2014).

### Nursing practice

The congruence of new graduates self-report, in this study, of growing competence in patient assessment, clinical reasoning and critical thinking with preceptors' perceptions are important findings that are in contrast to differences found elsewhere (Numminen et al., 2014). These attributes of nursing practice are well-known to impact on health services resource allocation, health gain and prevention of patient harm (Thompson, Aitken, Doran, & Dowding, 2013). Therefore support of new graduates' clinical work in this respect has the potential to improve decision processes and patient outcomes. The importance of transitional support for new graduate nurses (Edwards, Hawker, Carrier, & Rees, 2015; Parker, Giles, Lantry, & McMillan, 2014) was reinforced in this study through participants' lack of confidence early in the first year that had improved by the end of the programme. The positive impact of providing one to one preceptorship is evident in the findings and is especially important in the setting of the study where recruitment and retention of Maori nurses is a priority (Ministry of Health, 2015). A United States study (Banister, Bowen-Brady, & Winfrey, 2014) found a zero rate of attrition and very low turnover among minority new graduates who had received individual mentorship. Further, the retention of early career staff (Ulrich et al., 2010) has profound implications for the shape of the future nursing workforce as ageing baby-boomers retire.

### Further research

It was not within the scope of this study to evaluate the impact of early career postgraduate learning on patient outcomes but this is an aspect that warrants research in the future, especially the causal effects of such education on patient outcomes and clinical reasoning (Thompson & Stapley, 2011), nurse career development, and future skill-mix. The trends identified are worthy of note but further research in New Zealand and internationally is required also to further investigate educational interventions most suitable to supporting patient assessment and clinical reasoning for early career nurses that advances knowledge and skills from undergraduate study.

In conclusion, this academic/clinical partnership positively influenced the experiences and capabilities of early career nurses who also gained postgraduate credits towards a Masters degree. This first year of practice programme successfully helped nurses transition through a time known to be challenging and difficult. We encourage healthcare providers to consider building relationships and partnering with an academic partner to support new graduates in this way.

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