

# Is our focus right? Workforce development for primary health care nursing

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## ABSTRACT

**INTRODUCTION:** Effective workforce development is a key investment in producing quality health care. Service delivery stakeholders often assume that workforce development is best achieved through short clinical topic training or extended postgraduate courses; however, the views and preferences of primary health care (PHC) nurses have not routinely been sought. This study explores the workforce development needs of experienced PHC nurses in a provincial area of New Zealand.

**METHODS:** In addition to a literature scan, two focus group interviews were held with nurses representing a broad range of PHC subspecialties. Participants also completed a brief survey regarding their own and colleagues' education needs. Nurse leaders in three District Health Boards (DHBs) and one Primary Health Organisation (PHO) were asked for comments on workforce strategies. Datasets were analysed separately then triangulated for overall themes.

**FINDINGS:** Thirty-one PHC nurses attended the two focus groups. Participants noted changes to their roles in the last three years, including new areas of clinical and workforce development. Participants in both focus groups largely focused on structural and organisational barriers to PHC workforce development.

**CONCLUSIONS:** PHC nurses have priorities for workforce development that may differ from stakeholders, and offering clinical education opportunities alone may not be enough. Providing leadership education as well as career mentoring appears to be as important as clinical education and should happen in conjunction with other workforce development opportunities. This research demonstrates a need for a nationally agreed education strategy for the PHC nursing workforce.

**KEYWORDS:** Nursing; workforce development; career mentors; leadership education

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## Introduction and background

The Primary Health Care Strategy<sup>1</sup> and Better, Sooner, More Convenient<sup>2</sup> policies have sought to improve health outcomes, reduce inequalities and provide streamlined, integrated and accessible health care. This, together with an increased focus on health workforce planning, has seen the expansion of roles for primary health care (PHC) nurses,<sup>3</sup> with arguably greater opportunities still to be realised.<sup>2,4</sup> Expansion of postgraduate education opportunities and Health Workforce New Zealand (HWNZ—formerly CTA) funding to PHC nurses has been an initial step in addressing the education needs of this group; however, lim-

ited work has been undertaken to determine what PHC nurses themselves think about workforce development and what delivery approaches are acceptable.

## Workforce development and professional development for PHC nurses

Workforce development includes profiling the current workforce then projecting future role and competency requirements and establishing measures to achieve these. Usual strategies adopted are professional development and postgraduate education.<sup>5</sup>

J PRIM HEALTH CARE  
2012;4(2):141–149.

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PHC nurses are defined as:

Registered nurses with knowledge and expertise in primary health care practice. Primary health care nurses work autonomously and collaboratively to promote, improve and restore health. Primary health care nursing encompasses population health, health promotion, disease prevention, wellness care, first point of contact care and disease management across the lifespan. The setting and the ethnic and cultural grouping of the people determine models of practice.<sup>6</sup>

Given the breadth of this definition and associated subspecialty groups, limited international research has been undertaken that examines workforce development of the entire PHC nurse labour force,<sup>4,7-11</sup> with most studies focusing on single PHC subspecialties, particularly practice nursing.<sup>12-19</sup> Attributes of a competent PHC nurse have been described;<sup>8</sup> however, limited work has been undertaken to develop specific subspecialty frameworks of responsibilities and skills.<sup>20</sup>

New Zealand research tends to focus on practice nurses rather than PHC nurses as a whole, and even then there are gaps in relation to practice nurses' vocational education needs.<sup>34</sup> Changes in models of nursing care are forecast with a need for specialised long-term condition management (particularly technological skills), health promotion and education skills,<sup>21</sup> with some practice nurses believed to have insufficient nursing experience/skills, thus restricting development.<sup>22</sup>

Ideally, mature practice nurses should be offered opportunities to self-identify learning needs<sup>23</sup> and consequently change practice,<sup>24</sup> whereas new graduate practice nurses benefit from a structured theory and skills orientation within and adapted to their employing practice.<sup>25</sup> Professional development should provide access to nursing research and evidence for PHC nursing practice, foster optimal teamwork, facilitate development of the Maori and Pacific workforce<sup>26</sup> and offer options to develop specialty skills and clinical knowledge within the workplace rather than only by postgraduate education.<sup>27</sup>

Some undergraduate programmes are perceived as inadequate with regard to PHC nursing and,

although many PHC postgraduate papers and programmes are on offer, content varies across institutions.<sup>4</sup> Lack of finance, study time and relief staff to cover study leave are significant barriers.<sup>28,29</sup> Because there is no national framework and no required qualifications,<sup>29</sup> practice nurses—although experienced through years of clinical practice—have no formal recognition.<sup>30</sup> It has been proposed that current educational programmes should be reviewed and work undertaken with stakeholders to evolve workforce development, career pathways and support networking opportunities for PHC nurses.<sup>31,29</sup>

This study, undertaken in mid-2010 over a four-month period, sought to explore the views of PHC nurses in one provincial PHO on how best to support workforce development. The following research aims were identified: the identification of the education needs of PHC nurses in the region and how these could be integrated into a locally delivered education programme, and barriers and enablers to the uptake of education and appropriate models of education delivery.

## Methods

PHC nurses are a diverse group with a variety of subspecialty roles and a wide range of employers from DHBs through charitable trusts or non-governmental organisations (NGOs) to GP owners. In this study, in order to understand a broad range of perspectives, the views of all subspecialties were sought. A constrained timeframe common to many externally funded studies presented some challenges and a predominantly qualitative three-part study was designed.<sup>34,35</sup>

Initially a 'scan' of international and national PHC nursing workforce literature was undertaken. This method is used when timeframe and/or funding do not allow a systematic review and highlights relevant scholarly literature drawing attention to main interest areas and facilitates development of a key point summary.<sup>36</sup> A literature search using MeSH headings and keywords produced a dataset of 58 papers relating to professional development, workforce development. The results were then combined with terms referring to PHC subspecialty groups. A grid was used to reference information and the following themes

established: agreed PHC clinical competencies; attributes and skills; overall education needs; preferred educational methods; and barriers and enablers to education uptake. These themes informed development of the participant survey and focus group questions and also results interpretation.

Participants were recruited by personal invitation letter to attend one of two focus groups. A sampling framework was used to purposively select potential participants from a PHO database of PHC nurses according to subspecialty. For the first focus group, nurses were selected from PHC subspecialty management and/or clinical leadership roles where they were responsible for setting and maintaining quality standards of clinical practice and staff professional development. For the second focus group, nurses working as clinicians in subspecialty areas were selected. Between the two groups there was representation from a broad range of possible PHC nurse subspecialty areas (Table 1).

Thirty-one participants attended the two, one-hour-long focus groups, with 13 in the first group and 18 in the second group.

The following methods were applied within the focus groups:

1. As participants arrived at the venue, written consent to participate was gained and, before each focus group began, participants completed an anonymous, but subspecialty-identified, individual qualitative survey of their own and other colleagues' workforce development needs (see Table 2 for questions).
2. Following the survey, audio-recorded focus group discussion centred on the questions listed in Table 3.

## WHAT GAP THIS FILLS

**What we already know:** Workforce development is key to developing primary health care (PHC) nursing as a specialty nursing discipline as well as developing the role and clinical competencies of PHC nurses. There are no agreed education strategy or identified competencies for New Zealand PHC nurses.

**What this study adds:** In order to meet workforce and professional development needs, New Zealand provincial PHC nurses want more than clinical workforce development. Career mentoring and education for leadership are viewed as equally important, but not routinely offered. A PHC education strategy is needed which incorporates all three aspects.

During each focus group individual comments were contemporaneously scribed onto sheets of paper on the wall. At the end of each focus group comments were ranked for personal importance by each participant, using four differently coloured stickers.

Informal email and phone conversations were undertaken with nurse leaders (of other DHBs and a PHO) about workforce development.

Analysis of each dataset was undertaken by EM and SO (both nurses). First, qualitative comments from participant surveys and individual rankings of the key points from each focus group were collated for qualitative themes and the strength of these themes. Second, transcription data were systematically coded using a broad thematic approach according to common and outlying statements and supported by narrative examples, then individually member checked.<sup>37</sup> Third, email/phone conversations were analysed for commonality and difference. Finally, findings from each of the three datasets were considered as a whole and overall themes reported. Rigour

Table 1. Summary of the number of participants by PHC specialty attending focus groups (n=31)

District nursing (3)	Public health nursing (4)	Occupational health (2)
School and youth health nursing (2)	Practice nursing (5)	Non-governmental organisations (3)
Nursing education (1)	Maori health nursing (3)	Aged care (1)
Palliative care (2)	Mental health (2)	Well child (1)
DHB/PHO advisory roles (2)		

was established by the initial analyses being member checked by a nurse working for the local PHO and feedback sought from participants after circulation of a summary report.

Ethical approval was obtained from the Central Region Ethics Committee in May 2010 to undertake the research (URA/10/EXP/016). Particular emphasis was placed on assuring confidentiality, given the small geographical area and potential for identifying participants in the study.

### Findings

Participant survey replies in relation to educational and professional development needs were qualitatively grouped, based on identified differences between subspecialty areas. Themes were uniform between the two groups and across the subspecialty areas and between what participants saw as their own needs and those of their subspecialty colleagues. Key education needs were: leadership skills, computer skills, patient education approaches, advanced assessment, evidence-based practice documentation and report writing, and political/strategic engagement.

These themes were echoed and extended in the thematic analysis of the focus group data with themes common to both focus groups and others

Table 2. Survey questions

1. Please list 5 **personal** key learning needs
2. Please list 5 key learning needs of your **colleagues**.
3. What are the **greatest barriers** to undertaking professional development?
4. List what **modes of education** work best for you (online, workshop, conference, face-to-face teaching etc.)
5. **Speciality area of practice** (e.g. Well Child, public health, general practice etc.)

particular to each group reflecting the different priorities of those with management/leadership roles and those with clinical roles. More subtle differences not able to be picked up through a thematic analysis of the focus group data (which relies on the degree and depth of conversation in the group<sup>32,33</sup>) became more apparent when individuals ranked the points scribed during each focus group. When asked to rank the four most important of the 73 items discussed by the leader/manager nurses in Focus Group 1, the four most frequently noted were:

- the need for and value of leadership
- the need for local availability of courses
- access to, promotion of, and guidance about educational courses and pathways
- the need for career mentoring.

Similarly, when asked to rank the four most important of the 65 items discussed by clinical nurses in Focus Group 2, the four most frequently noted were:

- the cost of courses
- the need for career mentoring
- a desire to access library databases
- attendance at educational courses.

### Themes common to both focus groups

#### Career development

A range of opinions were expressed about education pathways and career progression. Some felt nurses' career pathways were driven by their employers, whereas others thought employers

Table 3. Semi-structured interview questions

1. What do PHC nurses do now that they weren't doing three years ago?
2. What do you think about this change in work patterns?
3. How well prepared are you for the work you are doing?
4. What do you see as the main educational needs of primary health care nurses in the X region?
5. What do you see as the most important of these needs?
6. What barriers do you see to nurses meeting these needs?
7. What things would help nurses achieve these needs?
8. What is being currently offered for you? (By whom?)
9. How well does it meet your needs?
10. What strategies do you suggest XX PHO could implement to assist nurses to achieve these needs?
11. How do you see primary health care nurses best working together under the umbrella of the PHO? e.g. PHNs, DNs, Plunket nurses etc.

supported individual career interests. Employers were often thought to be unaware of the qualifications PHC nurses held or what benefit the qualification might be to the employer.

...my employers probably wouldn't have any idea what my postgraduate certificate meant. (Focus Group 1; Participant 12)

A particular concern was that younger nurses did not know how to gain guidance in planning future PHC careers with worry expressed about the lack of uniform PHC competencies and no national postgraduate pathway for PHC nursing.

The younger nurses who actually want to plan their career out, and in primary care... what's out there, what the opportunities are and how I should prepare myself... they've [often] been in hospital, they have no idea what we do [in the community]. And they have no idea about how they would get the skills to do the things they'd need to know to join us. (Focus Group 2; Participant 2)

Participants talked of wanting mentoring for ongoing career development. Networking with other nurses in similar roles and finding professional supervision was also a challenge.

The one thing I really felt lacking in that position was any support from anywhere, because I didn't have it, I didn't have any support from our Board. ...there was myself and another registered nurse working there, but nobody else..., it was a lack of a mentor... we tried to seek supervision from several places and just kept hitting blank walls. (Focus Group 2, Participant 16)

#### *Education to advance career*

A common concern was difficulty in finding information about education choices and not easily locating other colleagues with similar education needs, particularly those working in subspecialty areas. It was felt being in a small area inhibited the organisation of high quality, locally based subspecialty education, and some employers were not able to fund attendance to courses out of the area.

...there's a really good link and resources in Auckland and, but it's the cost of four [nurses] to

get to Auckland is huge, so... we've never gone to Auckland, 'cause we've often talked about it, loved to go... the cost is just too much, so therefore we don't go. (Focus Group 2; Participant 11)

### **Themes particular to Group 1 —PHC nurses in leadership roles**

#### *Leadership concerns*

In Focus Group 1 participants spoke of the need for leadership skills. They felt leadership education would overcome a sense of powerlessness and, similarly, a lack of professional value.

Participants sought a stronger leadership voice for nursing within existing DHB and PHO structures, with these structures viewed as medically dominated with limited opportunities for nursing input into key decision making. There was a desire for coordinated nursing leadership across the DHB region.

...we have got, like the Nurse Advisory Group and what's this group down at the PHO, which is like a quality group, and then there's another group that look at the aged care sector and all the different managers related to that. But how [do] those groups, interlink with each other and what the membership is and what you know about them and how you feed into them... (Focus Group 1; Participant 9)

#### *Lack of cohesion in strategy and funding for nurse education*

Participants welcomed recent opportunities for PHC nurses to access education, particularly the local courses the PHO arranged, and felt the small relative size of the DHB area could facilitate interaction and reduce competition. However, participants felt a lack of overall workforce development strategy led to a lack of or duplication in training—particularly between primary and secondary care.

And that was highlighted today with one nurse... who works in both sectors, and she said to me, that she'd done this PowerPoint presentation on warfarin management in the primary sector and someone else in her department was doing it from the

Table 4. New work activities for PHC nurses

Focus Group 1: PHC nurse leaders	Focus Group 2: PHC nurses
New programmes in general practice—diabetes, family violence	Increased focus on evidence-based practice
IV therapy	Increased documentation
Anaphylaxis management	Increased clinical tasks
After hours	Rehabilitation
Outreach	Risk assessment
Collaboration with other providers (e.g. Maori Health providers)	Nurse-led clinics
Impact of new work	Impact of new work
Good for patients; increased workload for nurses	Good for patients but hard for nurses to come up to speed
Nurses have been directed to funded activities that they have not been involved in the planning of	Have had to learn 'on the hop'
Need to upskill	Having to do routine work plus add in new work

secondary. I'm like, well, why aren't we getting you together and doing a study day. (Focus Group 1; Participant 5)

Initially, lack of funding was described by participants as a key barrier, but this was noted as 'not the whole story' and nurses were sometimes reluctant to take up educational opportunities. Participants described this as 'lack of interest'. However, concern was noted that funding for education had not been effectively passed on to PHC nurses.

### Themes particular to Group 2 —PHC nurses in clinical roles

#### Accessing funding support

Participants in Focus Group 2 were PHC nurses in clinical roles often working for small organisations in isolation from other colleagues and, consequently, with limited access to information about workforce development. Cost was felt to be a major barrier to undertaking postgraduate education. Some participants had applied for HWNZ funding and been declined. A typical response when asked about eligibility criteria was 'I'm not sure'.

#### Access to evidence

Many participants were concerned they did not have ready access to electronic databases.

I would like access to databases without being... currently enrolled at a university, you can't actually do it and I think we really need continual access to get the right research, important stuff. (Focus Group 2, Participant 13)

#### Need for a primary health care Professional Development and Recognition Programme (PDRP)

In DHBs the PDRP is linked to salary progression. The New Zealand Nurses Organisation has a Primary Health Care Nurse PDRP which has a linked salary progression component for those who are signatories to the employment agreement. Many participants were generally aware of the DHB PDRP process and were enthusiastic about it. However, many were unaware the PDRP was available to PHC nurses.

I think it would be good if [there was] a universal programme that anybody, any nurse isolated in the community could click into and work out. (Focus Group 2, Participant 3)

#### New/emerging work for PHC nurses

New clinical workstreams can signal the need for workforce development and each focus group talked about new activities started in the previous two to three years, including both clinical and professional activity. A range of new activities were mentioned (Table 4).



Nurses described a conflict between wanting education to support this new work and employers' directives to continue undertaking core business; the latter largely governing workforce development priorities.

I don't have time to sit down and do risk assessments and smoking cessation and a lot of those other things that would be nice to do is because, production comes first. So, for me it's, the whole focus for my education... (Focus Group 2; Participant 7)

### Nurse leaders' beliefs about workforce development

Nurse leaders from three DHBs and one PHO were interviewed via email or phone regarding strategies for PHC nursing workforce development. They shared key actions identified to promote PHC workforce development and, although documentation and implementation differed, there were common approaches:

- Recognition and active promotion of the impact and importance of PHC nursing.
- Recognition that PHC nurses are a diverse group without a common employer or uniform employment conditions and who have not all been able to access DHB workforce development opportunities.
- Active promotion of the 'continuum of care' concept<sup>38</sup> which acknowledges that care of patients predominantly occurs in the community with a small portion in hospitals.
- Development of strategies or frameworks for nursing (some with separate documentation for PHC nursing). DHB initiatives have included a PDRP, including PHC nurses; New Entry to Practice (NETP) programme including PHC nurses.

### Discussion

This research was undertaken with PHC nurses representing a broad range of subspecialties in a provincial region in New Zealand. Limitations caused by the focus group method<sup>32,39</sup> were addressed through individuals ranking the key points and individual qualitative surveys; however, theme saturation may not have been reached, especially when subspecialty groups were represented by only one person.

Despite limited research specifically addressing workforce development needs relating to the broad scope of PHC nursing, concerns raised by participants echo points made in the literature, including the need for the development of a national postgraduate PHC education strategy, national competencies for PHC nurses, recognition that PHC nurses have diverse educational and career development needs, and the cost of undertaking courses.

The research funder anticipated the participants would view the research as an opportunity to generate a list of clinical topics which could be addressed by professional development. What was unexpected was, instead, an emphasis by participants on broad organisational factors that impact on workforce development. Both organisational barriers and enablers to PHC workforce development were identified, with an equal focus on discussion on leadership development, career mentoring and clinical education. It appears PHC nurses did not often have the opportunity to meet in mixed PHC subspecialty forums. While the PHC nurses' employment arrangements were very different and regarded positively or negatively in relation to fostering professional development, the nurses valued the opportunity to discuss broad issues and in some cases find common ground.

Participants highlighted several workforce development facilitators which, although readily available to nurses working in secondary care, are not easily available to PHC nurses. These included: local, affordable and where possible interdisciplinary education and when needed access to specialist training out of the area; career advice and mentoring; access to electronic library databases. A recent practice nurse study described the importance of organisational structures in encouraging professional development and to 'provid[e] opportunities to overcome barriers to post-registration education'.<sup>29</sup> Mitchell (2007) similarly recommended the need to 'evolve workforce development, career pathways and support networking opportunities for practice nurses'.<sup>31</sup>

A lack of locally based study opportunities, learning support as well as the cost of post-graduate courses and other study, and similarly

limited travel assistance were noted as significant barriers, especially for clinical nurses often working in small businesses or NGO organisations. The uptake of HWNZ (and formerly CTA) funding for postgraduate study by PHC nurses in the study area has been limited and reasons for this are not clear. This begs the question why cost and funding, which are largely organisational elements of workforce development, have not already been addressed? It seems that PHC nurses are still not well integrated into a DHB-wide workforce planning solution. Further research is required.

In this study a number of particular education needs and skills training were identified, particularly those arising from new workstreams which in themselves are potentially strong drivers to service delivery change.<sup>40,41</sup> For example, recent research supports particular skill acquisition for PHC nurses to deliver primary mental health care.<sup>23,42</sup>

In NZ, access to postgraduate education has been equated to career pathway progression; however, Parker, Keleher and Francis<sup>20</sup> point out that this does not necessarily occur and that a career pathway must be linked to national knowledge and skills competencies and these in turn must be linked to career levels. There have been calls by NZ nurse leaders over many years to develop a national strategy for the PHC nursing workforce, including recognised national competencies for PHC nurses and education to achieve these.<sup>6,43</sup> This call is still unaddressed and initiatives so far have been piecemeal in approach; for example, funding only certain areas of PHC clinical practice such as long-term conditions management.

HWNZ has indicated that all students taking part in HWNZ-funded postgraduate programmes from 2012 will be required to have a career plan that clearly identifies a career pathway that is linked to workforce need. This may go some way towards assisting PHC nurses develop career plans; however, this will not assist those who choose not to undertake postgraduate study or who are not funded, or choose courses ineligible for HWNZ funding, or who wish to take short courses for professional development. Lack of inclination to attend professional development was

stated to be an issue for some PHC nurses, but not elaborated upon. Why PHC nurses are disinclined and how many this may be was not able to be explored further in this study and further research is needed.

While participants in this study clearly articulated the need for leadership training and strong nursing leadership within primary and integrated care, Burns<sup>44</sup> notes that leadership programme attendance does not automatically result in effective leadership and that mentoring and coaching is also necessary. It seems that leadership and workforce development through education should be implemented contiguously.<sup>45</sup>

DHB/PHO nurse leaders affirmed the need to identify strategies for nursing leadership development. Leadership training provided by these DHBs has been actively promoted to PHC nurses and resulted in enhanced networking between nurses in these areas. Establishing PHC places in NETP programmes, ensuring PHC nurses were included in DHB-offered education programmes, and including and promoting DHB PDRPs to PHC nurses all resulted in PHC nurses feeling valued and seen within these DHB nursing communities. Nurse leaders indicated that when these actions have been undertaken, PHC nurses were more likely to take up postgraduate studies in addition to, or instead of, short skills-based courses.

## Conclusion

PHC nurses describe a range of organisational barriers to workforce development with some arguably overcome by national and regional (DHB) facilitation. There is a strong call for a nationally agreed strategy for the PHC nursing workforce, including developing national competencies for PHC nurses. While education has long been recognised as integral to workforce development, this study also points to a need for an equal focus on individual career development mentoring and organisational leadership facilitation. When education, career mentoring and leadership development is simultaneously undertaken within a coordinated workforce development initiative, PHC nurses will be able to optimally use their skills in nursing service provision.



## References

- King A. The primary health care strategy. Wellington: Ministry of Health; Feb 2001.
- Ryall T. Better, sooner, more convenient. Wellington: National Party Health Spokesman Opposition Party; 2008.
- Smith J, Mays N. Primary care organizations in New Zealand and England: tipping the balance of the health system in favour of primary care? *Int J Health Plann Manage*. 2007;22:3–19.
- Finlayson M, Sheridan N, Cumming J. Nursing developments in primary health care 2001–2007. Wellington: Victoria University of Wellington; February 2009.
- Ministry of Health. Health workforce development: an overview. Wellington: Ministry of Health; 2006.
- Expert Advisory Group on Primary Care Nursing. Investing in health: Whakatohutia te Oranga Tangata. Wellington: Ministry of Health; February 2003.
- Howarth M, Holland K, Grant M. Education needs for integrated care: a literature review. *J Adv Nurs*. 2006;56:144–56.
- Strasser S, London L, Kortzenbult E. Developing a competence framework and evaluation tool for primary care nursing in South Africa. *Educ Health*. 2005;18:133–44.
- Hurst K. Primary and community care workforce planning and development. *J Adv Nurs*. 2006;55:757–69.
- McLaren S, Woods L, Boudioni M, Lemma F, Tavabie A. Implementing a strategy to promote lifelong learning in the primary care workforce: an evaluation of leadership roles, change management approaches, interim challenges and achievements. *Qual Prim Care*. 2008;16:147–55.
- Drennan V, Andrews S, Sidhu R, Peacock R. Attracting and retaining nurses in primary care. *Br J Community Nurs*. 2006;11:242–46.
- Girod EA, Rickaby CE. Education for new role development: the Community Matron in England. *J Adv Nurs*. 2008;64:38–48.
- Davidson E. Perceived continuing education needs and job relevance of health education competencies among health education and promotion practitioners in college health settings. *J Amer Coll Health*. 2008;57:197–209.
- Curry C, Middleton H, Brown B. Palliative care training. *Nurs Older People*. 2009;21:18–23.
- Halcomb E, Meadley E, Streeter S. Professional development needs of general practice nurses. *Contemp Nurse*. 2009;32:201–210.
- Alexander G, Chadwick C, Slay M, Peterson D, Pass M. Maternal and child health graduate and continuing education needs: a national assessment. *Matern Child Health J*. 2002;6:141–9.
- Watts I, Foley E, Hutchinson R, Pascoe T, Whitecross L, Snowden T. General practice nursing in Australia. Sydney: Royal Australian College of General Practitioners, Royal College of Nursing Australia; May 2004.
- Swanwick T. The training of general practice nurses: opportunities for collaborative working. *Educ Primary Care*. 2005;16:526–34.
- Secker J, Pidd F, Parham A. Mental health training needs of primary health care nurses. *J Clin Nurs*. 1999;8:643–52.
- Parker R, Keleher H, Francis K, Abdulwadud O. Practice nursing in Australia: A review of education and career pathways. *BMC Nurs*. 2009;8:5. doi:10.1186/1472-6955-8-5.
- Clinical Training Agency. Current status of the national regulated nursing workforce. Future Workforce DHBNZ; 2009.
- Hefford M, Cumming J, Finlayson M, Raymont A, Love T, van Esson E. Practice nurse cost benefit analysis report to the Ministry of Health. Wellington: LECG 2010.
- Prince A, Nelson K. Educational needs of practice nurses in mental health. *J Prim Health Care*. 2011;3:142–9.
- Seaton P, Watson P, Frost S, et al. Learners' needs and practice-based learning informing tertiary teaching. Christchurch: Christchurch Polytechnic Institute of Technology; 2009.
- Haggerty C, McEldowney R, Wilson D, Holloway K. Growing our own: an evaluation of nurse entry to practice programmes in New Zealand 2006–2009. Wellington; 2009.
- WINTEC. The framework for PHC nursing in the Waikato DHB. Hamilton: WINTEC Applied Health and Human Service; No date.
- Brinkman A, Wilson-Salt R. NZNO members favour workplace educational opportunities. *Nurs N Z*. 2008;14:12–3.
- Ministry of Health. Primary health care and community nursing workforce survey—2001. Wellington: Ministry of Health; 2001.
- Richardson A, Gage J. What influences practice nurses to participate in post-registration education? *J Prim Health Care*. 2010;2:142–9.
- Docherty B, Sheridan N, Kenealy T. Painting a new picture for practice nurse in a capitated environment: who holds the brush? *NZ Med J*. 2008;121.
- Mitchell D. Primary health in Nelson Bays: perspectives from a group of practice nurses. Nelson: Nelson Bays Primary Health; May 2007.
- Morgan D. Why things (sometimes) go wrong in focus groups. *Qual Health Res*. 1995;5:516–23.
- Kitzinger J. Introducing focus groups. *BMJ*. 1995;311:299–302.
- de Jong I, Jackson C. An evaluation approach for a new paradigm—health care integration. *J Eval Clin Pract*. 2001;7:71–9.
- Cresswell J, Plano Clark V. Designing and conducting mixed methods research. Thousand Oaks, CA: Sage Publications; 2007.
- Bryant SL, Gray S. Demonstrating the positive impact of information support on patient care in primary care: a rapid literature review. *Health Info Libr J*. 2006;23:118–25.
- Dew K. A health researcher's guide to qualitative methodologies. *Aust NZ J Public Health*. 2007;31:433–7.
- Evashwick CJ. The continuum of long-term care. 3rd edition. Clifton Park New York: Thompson Delmar Learning; 2005.
- Higginbottom H. Focus groups: their use in health promotion research. *Comm Pract*. 1998;71:360–3.
- Gemmell I, Campbell S, Hann M, Sibbald B. Assessing workload in general practice in England before and after the introduction of the pay-for-performance contract. *J Adv Nurs*. 2009;65:509–15.
- Rashid C. Benefits and limitations of nurses taking on aspects of the clinical role of doctors in primary care: integrative literature review. *J Adv Nurs*. 2010;66:1658–70.
- McKinlay E, Garrett S, McBain L, Dowell T, Collings S, Stanley J. New Zealand general practice nurses' roles in mental health care. *Int Nurs Rev*. 2011;58:225–33.
- Carryer J, Blakely J, Hansen C, et al. Investing in health: the continuum of care. Palmerston North: MidCentral Health District Health Board; 2007.
- Burns D. Clinical leadership for general practice nurses, part 1: Perceived needs. *Pract Nurs*. 2009;20:466–9.
- Wilson B. Nurses' knowledge of pain. *J Clin Nurs*. 2007;16:1012–20.

## ACKNOWLEDGEMENTS

The authors warmly thank Fenella Hemm, the nurses who were participants in the study and Rebecca Woods and Ingrid Dainty for preparing this manuscript.

## FUNDING

The study was funded by Nelson Bays Primary Health.

## COMPETING INTERESTS

None declared.