Farewell to the handmaiden? Profile of nurses in Australian general practice in 2007

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KEY WORDS

general practice, practice nursing, primary health care

ABSTRACT

Objective
To describe the characteristics of nurses working in Australian general practice, including their backgrounds, working environments, tasks and duties.

Design
National cross-sectional survey.

Setting
General practices in all regions of Australia.

Subjects
104 registered and enrolled nurses working as practice nurses (PNs).

Results
Participants were predominantly registered nurses (93%); all female; and had been in general practice for an average of 6.2 years. They were generally working part time (average 26.2 hours per week), with pay ranging from $18 to $45 per hour. Registered nurses had higher rates of pay but there was no clear relationship between rate of pay and years in general practice. The majority (86%) had completed one or more short courses, and one in six (16%) held or were undertaking postgraduate studies in practice nursing. PNs in the sample worked in practices where there was an average of one PN for every 2.43 GPs. Almost half (47%) worked in practices which employed allied health professionals, and 90% employed practice managers. All undertook duties relating to direct patient care, coordination of care, and management of the clinical environment. 90% undertook practice management and administration tasks, including 57% who provided some reception or secretarial support.

Conclusions
Although some differentiation of roles within the PN workforce was apparent, there were few discernable differences in nurse or practice characteristics associated with these different profiles, and they were unrelated to experience and remuneration. Findings highlight the need for development of career pathways and better monitoring of the PN workforce.

INTRODUCTION

Nurses have worked in general practice in Australia for many decades, but in recent years there has been significant growth and evolution in this sector of the nursing workforce. A key catalyst for this is the Australian Government's Nursing in General Practice Initiative, which commenced in 2001. This was designed to: address shortages in the general practitioner workforce; improve prevention and management of chronic disease; and improve access to, and the quality and integration of, patient care (Australian Government Department of Health and Ageing 2006). The Australian practice nurse (PN) workforce was estimated to total 7,824 in 2007, with some 58% of general practices employing at least one nurse (AGPN 2008). Past estimates of the size of the PN workforce indicate 59% growth since 2005 (see ADGP 2006); and 140% growth since 2004 (see Hordacre et al 2007). Prior to this there are no reliable estimates of workforce size, although there was an estimated 30% to 40% increase in the number of practices with a PN between 2002 and 2004 (Healthcare Management Advisors 2005).

The characteristics of the Australian PN workforce have been described in a number of reports. They are predominantly registered nurses (usually degree-qualified), with approximately one in five or one in six (15%-18%) holding certificate or diploma level qualifications (enrolled nurses) (AGPN 2008; ADGP 2006; Pascoe et al 2005). The vast majority (98.6%) of PNs are female, and most are aged over forty, with almost half (41%) in their forties and over one third aged 50 years or more (AGPN 2008).

Despite constituting a small proportion of the Australian nursing workforce, PNs comprise a significant and growing proportion of the primary care workforce. The ratio of PNs to GPs was estimated at one PN for every 2.3 GPs in 2007 (AGPN 2008). When working hours are taken into account this drops to one full time equivalent (FTE) PN for every 3.42 FTE GPs , reflecting the fact that the majority of PNs work part time while the majority of GPs do not (AGPN 2008). This is likely to alter as increasing numbers of GPs choose part time work, due to the growing proportion of women in the workforce and the different work/life preferences of younger GPs of both sexes compared to their older colleagues.

In rural areas the ratio of PNs to GPs is likely to be higher. Around 59% of the PN workforce is located in rural areas (AGPN 2008), compared to around 30% of the GP workforce (Australian Government Department of Health and Ageing 2005; AIHW 2008a), which suggests a ratio in rural areas of about one PN for every 1.5 GPs.

The role of nurses in the general practice setting was traditionally a narrow 'handmaiden' role focused on clerical and administrative duties (Pascoe et al 2005). Since the commencement of targeted government support in 2001, the focus of PNs has shifted more on to clinical tasks. Existing research on the PN role has identified that the key areas of practice for PNs include clinical care, clinical organisation, and practice management and administration (Healthcare Management Advisors 2005; Pascoe et al 2005; Watts et al 2004). Direct clinical care includes a wide range of tasks such as immunisations, health assessments, and management of chronic conditions. Clinical organisation functions include management of the clinical environment, recall and reminder systems, and co-ordination of patient services.

While there is an emerging consensus about the broad parameters of the PN role, there continues to be significant diversity in PN roles and functions across Australia (Halcomb et al 2006). The role has been found to vary with contextual factors such as practice characteristics, nurse characteristics and patient profiles. Practice characteristics include the location (rural/urban), business organisation, and employment arrangements (Halcomb et al 2006). Nurse characteristics include qualifications, skills, knowledge and experience. The role is also shaped by the available funding sources, for example those that are specific to particular clinical tasks, such as the PN-specific Medicare items (Jolly 2007).

There is little data currently available on the nature of PNs' clinical work, such as the conditions treated, the services provided, and the type of patients seen

(Keleher et al 2007). The Medicare Benefit Schedule (MBS) includes eight specific items for PNs, covering provision of immunisations, wound care, pap smears and check-ups for women's' health, antenatal care and chronic disease management. In 2007, some 4.3 million MBS practice nurse items were claimed. Of these, the vast majority were for immunisations (2.6 million) and wound care treatments (1.6 million) (Australian Government Department of Health and Ageing 2008a). These statistics do not capture the contribution of practice nurses to other Medicare items such as management plans, health assessments and team care arrangements.

The BEACH (Bettering the Evaluation and Care of Health) surveys provide a more comprehensive picture of the nature of clinical work in general practice, indicating clinical conditions and how they are managed (AIHW 2008b). Although the most recent year of the study provides some data about PN involvement in GP-provided care, the study continues to use GP-patient encounters as the primary unit of analysis. The 2007 report indicated that 5.1% of patient encounters included some practice nurse activity (AIHW 2008b). Notably, for almost two-thirds (63%) of GP-patient encounters involving PNs, no Medicare item was claimable for the practice nurse's activity, confirming that the Medicare data alone excludes the majority of PNs' clinical patient care work.

Additionally, encounters between practice nurses and patients where the GP is not directly involved on the day are not counted in the BEACH data set, and these can be a large part of the practice nurse's work. Finally, neither BEACH nor Medicare captures other aspects of practice nurses' work, such as management of the clinical environment, integration and liaison with other health providers and social and community services, and health promotion activities.

Although a number of studies of the practice nurse workforce in Australia have been conducted, continued monitoring of the role and duties of PNs is vital, given the continuing, rapid expansion and evolution of the workforce, and the high degree of heterogeneity apparent within it. Such monitoring and analysis will assist the continued development of workforce support strategies, education and training frameworks, as well as contributing to the knowledge base about models of care in Australian general practice (Keleher et al 2007). Furthermore, as noted above, to date no studies have provided an in-depth description of the nature of clinical patient care work being done by Australian PNs.

The aims of the Practice Nurse Work Survey were to provide an up to date profile of the characteristics and duties of PNs in Australia; to provide a detailed description of the services currently being provided by PNs; and to investigate any nurse or practice characteristics associated with different service provision profiles. In this paper, we describe the methods of the Practice Nurse Work Survey, and present a profile of the participating nurses, the practices in which they work, and the duties and tasks they undertake.

METHODS

The Practice Nurse Work Survey was a national cross-sectional survey of nurses working in general practice in Australia. Participants were a volunteer sample of Registered (Division 1) and Enrolled (Division 2) nurses working in a general practice or primary health care setting eligible to bill Medicare. 108 PNs were recruited to the study, and of these, 104 (96.3%) returned completed study materials. Recruitment of participants was undertaken by advertisements calling for volunteers. The Call for Participants was distributed to members of the Australian Practice Nurse Association (APNA) and through the divisions of general practice network. The study was also publicised through events, newsletters and websites of relevant organizations, including: West Australian Practice Nurses Association, Royal College of Nursing Australia, Australian Nursing Journal, Australian Rural Nurses and Midwives, and Council of Remote Area Nurses of Australia. Targeted recruitment in particular jurisdictions was also undertaken to ensure a representative national sample, by direct contact with individual divisions of general practice.

Data were collected between May 2007 and May 2008. Two data collection instruments were used: a nurse and practice profile questionnaire, and an 'encounter form'. The questionnaire included 44 items in three sections: background characteristics of the participant; characteristics of the general practice in which the participant works; and duties and functions. The questions were developed based on previous surveys of PNs (ADGP 2006; Watts et al 2004). Background characteristics included: age, gender, membership of professional organisations, training and qualifications, years working in general practice, whether any additional job was held, rate of pay per hour, and hours worked per week. Practice characteristics included: number of PNs, number of GPs, other staff in the practice, postcode, registration for relevant Practice Incentive Program payments, and whether the nurse had their own space for seeing patients and for paperwork. Nurses were also asked to indicate whether they had undertaken any of a list of 25 tasks and duties in the past week (see Results section for detailed information).The questionnaire was piloted with two groups of Practice Nurses (total n=16) from rural and urban settings in Victoria, and took approximately 15-20 minutes to complete.

The encounter form collected data about each contact between a participating PN and a patient, and was modelled on the BEACH encounter forms (AIHW 2008b). The form comprised 17 items describing characteristics of the consultation, including: the reason for the encounter; procedures or services provided; GP involvement (before, during or after the contact between the nurse and the patient); whether a practice nurse Medicare item number applied; duration; location (in practice or elsewhere); whether face-to-face or indirect (e.g., by telephone) and unidentified patient details (age, sex, whether a new patient). Each nurse completed encounter forms for 50 consecutive patient contacts. Each form took approximately one minute to complete.

A reminder email or letter was sent to participants who had not returned study materials after four weeks, and a final reminder two weeks later as needed. Ethical approval was provided by the Monash University Standing Committee on Ethics in Research involving Humans. Participating nurses signed an informed consent form. In addition, a 'Letter for Practice' was signed by a practice principal, practice manager or other authorised delegate of the employer, confirming agreement to the PN's participation. Participating PNs were provided with a laminated patient information notice for their patients to read prior to each consultation. Patients indicated their consent verbally to the participating nurse.

In this paper, we describe the characteristics of the participating nurses, the practices in which they work, and the duties and tasks they undertake. Data are descriptive and were analysed in Microsoft Excel. Findings regarding nurse-patient encounters will be reported separately.

Table 1: Key sample characteristics

	Practice Nurse Work Survey (N=104)	National Practice Nurse Workforce Survey Report 2007 (AGPN 2008)
Age		
<30	2.9%	6%
30-39	13.5%	17%
40-49	45.2%	41%
50-59	34.6%	32%
60+	3.8%	4%
Percent female	100%	99%
Qualifications*		
Registered	92.3%	84%
Enrolled	7.7%	16%
Time in general practice		
0-1 years	16.3%	20%
2-5 years	43.3%	40%
6-10 years	23.1%	20%
11-19 years	12.5%	14%
20+ years	4.8%	6%
Location - State/Territory		
New South Wales & ACT	25.0%	27%
Victoria	32.7%	25%
Queensland	15.4%	22%
South Australia	8.7%	9%
Western Australia	7.8%	12%
Tasmania	7.7%	3%
Northern Territory	1.9%	2%
Percent rural or regional†	45.2%	59%

* Qualifications data for AGPN excluding missing data.
† Rural and regional location defined as zones 3-7 of the Rural, Regional and Metropolitan Areas (RRMA) index. (DPIE and DHSH 1994)

FINDINGS

Profile of participants

A profile of some key characteristics of the sample is presented in Table 1, in comparison with the characteristics of the 2007 National Practice Nurse Workforce Survey (AGPN 2008). Although the study sample was a self-selected one, the profile of participants can be seen to be broadly similar to the Australian practice nurse workforce as a whole with respect to age, gender, qualifications, experience, and location. The main exceptions are an over-representation of registered nurses in the study sample, and some differences in geographic distribution, with an over-representation of nurses from Victoria and from metropolitan locations.

Working conditions

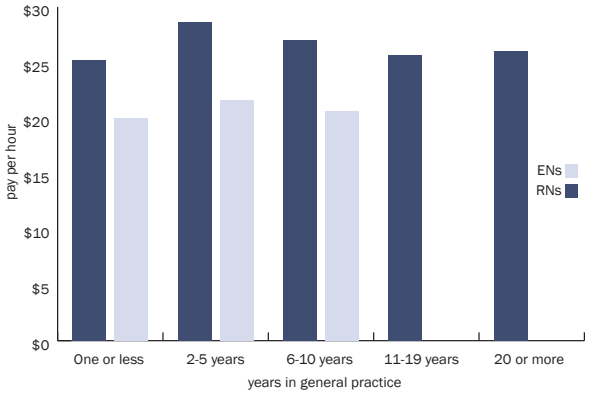
Almost half (44%) of nurses had an additional job as well as their main PN job, with most of these working in hospitals (n=20) or aged care facilities (n=8). The average number of hours worked per week by nurses in their PN job was 26.2, with nurses who had an additional job working slightly fewer hours on average in their PN job, than those for whom this was their sole employment (Table 2). For those working in another job, the average number of hours worked per week in this additional setting was 11.7 (range 1-40).

Table 2: Hours per week worked, by main PN job and additional job

	Hours per week: Mean (Range)		
	Main PN job	Additional job	Total
Work in one General Practice only	28.5 (10-50)	-	28.5 (10-50)
Have additional job as well as main PN job	23.3 (5-38)	11.7 (1-40)	33.7 (21-52)
Total	26.2	11.7	30.8

The mean rate of pay was $27.55 per hour (range $18-$45). This varied by qualification, with an average of $28.05 for registered nurses (range $20-$45) and $20.97 for enrolled nurses (range $18-$26). Those who had worked in general practice for more than ten years were paid less than more recent recruits (Figure 1). RNs with 2-5 years experience were the highest paid.

Figure 1: Hour rate of pay by years in general practice for registered (RNs) and enrolled (ENs) nurses



Training and qualifications

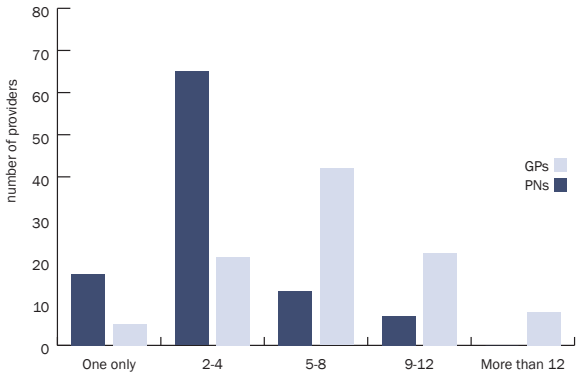
The majority of participating registered nurses (77%) completed their basic training in the hospital setting, consistent with the age profile of the sample. The majority (86%) had completed at least one short course, with up to eight different areas reported. The average number of courses completed by those with at least one was 2.3. The most common areas of study in short courses were: immunisation (59% of participants); wound management (38%); women's health including pap smears and family planning (23%); diabetes management and education (22%); and asthma management and education including spirometry (22%).

Just over half the participants (55%) reported having completed or currently being enrolled in 'postgraduate' qualifications in addition to their basic nursing qualification. The level of these qualifications was not always clearly reported, but there were at least 13 Bachelors' degrees, 16 Graduate Certificates, eight Graduate Diplomas, four Masters and one PhD. 17 participants (16%) were undertaking or had completed postgraduate qualifications in practice nursing, including 12 Graduate Certificates and four Graduate Diplomas. The same number of participants (17) had qualifications in midwifery.

Practice characteristics

The average practice size was 3.5 PNs (range 1-12) and 6.9 GPs (range 1-23). The majority of practice nurses (83%) work with at least one other PN (see Figure 2). Of the eight ENs in the study, five worked with at least one other PN and two were the only nurse in their practice (missing data for one EN). The figures indicate an average ratio of one PN for every 2.43 GPs in the practices of the participating nurses. Four nurses worked in practices where they outnumbered the GPs and ten nurses worked in practices with a one-to-one ratio of PNs to GPs.

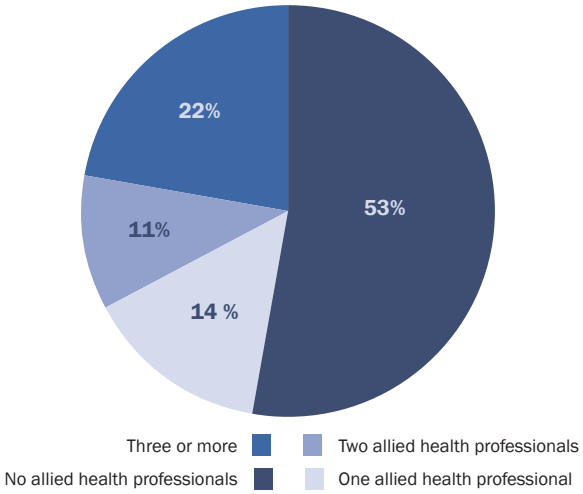
Figure 2: Practice size by number of PNs and number of GPs



Almost two-thirds of nurses (63%) worked in practices with a full time practice manager; 27% worked in practices with a part-time practice manager and the remaining 10% worked in practices where there was no practice manager.

Almost half of the participants (47%) worked in practices where allied health professionals were also working (Figure 3). The most common allied health professionals with whom PNs were co-located were: psychologist (22% of nurses); dietitian (21%); podiatrist (16%), physiotherapist (12%); and diabetes educator (11%). Only 11% of smaller practices (1-2 GPs) employed allied health professionals, compared to 51% of practices with three or more GPs. Rural practices also had a lower proportion, with 38% of rural practices (RRMA 3-7) having on-site allied health professionals in the practice, compared to 55% of metropolitan practices.

Figure 3: Proportion of nurses working in practices with allied health professional staff



All rural practices were registered for the Practice Incentive Payment in Nursing. For metropolitan practices, 42 out of 57 (74%) were registered, four (7%) not registered and 11 (19%) unsure.

Tasks and duties

Practice Nurses in the study reported undertaking a wide range of tasks and duties in their practice on a weekly basis. All were involved in direct patient care, coordination of care, and management of the clinical environment. Detailed data are presented in Table 3, for the sample as a whole and selected sub-groups.

Administrative duties

Almost all (90%) undertook some practice management and administration. Within this, functions such as financial management, staff rostering and information technology support were relatively less common, while more than half provided some reception or secretarial support. There were few differences apparent between PNs who undertook reception and secretarial duties and those who did not. There was no difference with regard to years working in general practice and the proportion working in practices with no practice manager. The proportion of rural practices was similar for PNs undertaking some reception /secretarial duties

compared to those who did not undertake these duties (44% and 46%); and there were only marginal differences in practice size (average of 3.2 PNs and 6.5 GPs for those doing reception/secretarial work; compared with 4.0 PNs and 7.2 GPs for those not) and rate of pay ($27.62 versus $26.03 respectively).

On average, participants reported undertaking 2.6 out of the six practice management and administration duties. The mean number was slightly higher for nurses working in practices with no practice manager (mean=3.0; n=10) and for PNs in rural areas (mean=2.9; n=45).

Table 3: Percentage of Practice Nurses undertaking specific tasks and duties*

	Total sample (n=104)	RNs only (n=96)	Rural Nurses (n=47)†	PN Postgrad (n=17)‡	>10 years in GP (n=18)
Contacts with patients					
Face-to-face contacts with patients	100.0	100.0	100.0	100.0	100.0
Indirect (phone etc) contact with patients	98.0	97.8	97.8	94.1	100.0
Group sessions with patients	10.0	9.8	13.3	0.0	5.6
Coordinating patient care					
Write up patient records - patient not present	94.0	93.5	93.3	100.0	94.4
Liaise with other health professionals - patient not present	77.0	76.1	80.0	76.5	100.0
Liaise with social/community services - patient not present	66.0	66.3	66.7	70.6	72.2
Organising clinics	56.0	56.5	64.4	52.9	44.4
Coordinating patient services - other duties	73.0	75.0	71.1	76.5	83.3
Patient advocacy	66.0	65.6	75.0	70.6	66.7
Management of the clinical environment					
Infection control	96.0	96.7	95.7	100.0	100.0
Cold chain monitoring	93.0	93.5	95.7	100.0	94.4
Order/monitor pharmaceutical supplies	86.0	85.9	93.3	100.0	100.0
Order/monitor other clinical supplies	88.0	88.0	86.7	88.2	83.3
Monitor/maintain doctor's bag / emergency trolley	87.0	87.0	93.3	100.0	88.9
Practice management and administration					
Reception / secretarial support	57.0	55.4	57.8	58.8	55.6
Information technology support	29.0	28.3	31.1	35.5	27.8
Staff orientation and education	71.0	73.9	80.0	82.4	72.2
Financial management	9.0	9.8	11.1	11.8	16.7
Staff rostering	20.0	21.7	28.9	29.4	33.3
Develop/update policy and procedures	70.7	72.5	84.4	82.4	77.8
Other tasks and duties					
Research - own or assisting GP	61.6	61.5	71.1	76.5	77.8
Professional development / CPE	92.0	94.6	93.3	82.4	83.3
Population health: Outreach, needs assessment	20.0	20.7	24.4	23.5	33.3
Travel time for off-site work	34.0	35.9	37.8	35.3	44.4
Other	20.2	20.8	29.8	5.9	27.8

* Percentages exclude missing data
† Rural and regional location defined as RRMA zones 3-7 (DPIE and DHSH 1994).
‡ Nurses holding or currently undertaking postgraduate studies in general practice nursing.

Less common duties undertaken by PNs include group sessions with patients, and population health activities. The characteristics of nurses undertaking these duties are compared with the total sample in Table 4. This indicates few discernable differences between these subgroups of nurses, and the small number render any differences suggestive rather than conclusive.

Table 4: Characteristics of Practice Nurses undertaking selected duties

	Total sample (n=104)	Nurses conducting group sessions (n=10)	Nurses providing population health (n=20)	Nurses travelling off-site (n=34)
Nurse characteristics				
Years in general practice (mean)	6.2	5.2	6.9	6.9
Rate of pay per hour	$27.55	$27.40	$27.45	$27.35
Hours worked per week	26.2	27.9	28.0	26.4
Practice characteristics				
Number of PNs	3.5	2.2	3.2	3.0
Number of GPs	6.9	5.7	6.4	5.7
At least one allied health (%)	47.1	60.0	45.0	50.0
Rural location (RRMA 3-7) (%)	45.2	60.0	55.0	50.0

DISCUSSION

The nurses in this study were predominantly middle-aged, registered nurses working part time in general practice. The majority (60%) had worked in general practice for less than six years, with one in six less than two years. This profile is consistent with previous studies of the Australian PN workforce (AGPN 2008; ADGP 2006; Pascoe et al 2005). The mean rate and range of pay for nurses in our study was almost exactly the same as that found in the 2007 APNA pay and conditions survey. (Mean $27.65; APNA 2007)

Most training undertaken by PNs was short course format rather than formal postgraduate qualifications, which is likely to be heavily influenced by the training requirements associated with provision of Medicare-claimable services. One in six (17%) were undertaking or had completed postgraduate qualifications in general practice nursing, and the same proportion were qualified midwives.

The practice staffing profiles suggest that the typical work environment for PNs is a large, multidisciplinary practice. Nationally, 49% of practices have five or more GPs (AIHW 2008a), compared to 73% of practices in this study. There is currently no national data on the employment or co-location of other health professionals in general practices, and this study provides new information on this characteristic, suggesting that on-site allied health professionals are a common feature of contemporary general practice.

We acknowledge there are limitations arising from the use of a self-selected, non-random sample. At present there is no option in Australia, as there is no national database of practice nurses. Analysis of the representativeness of the final study sample indicated that the sample was similar to the known characteristics of the Australian practice nurse population. The voluntary nature of our sample is likely to have introduced particular biases. First, as noted above, our sample over-represents large group practices and thus may not reflect the experiences of PNs working in solo or small practices. Second, given that perceived relevance and interest is an important factor in the decision to participate in research, it seems likely that nurses in our sample would have more advanced and developed roles compared to nurses whose role is more limited or 'traditional'. As such, our findings may be best interpreted as an indication of what is possible and plausible for PNs, in large, multidisciplinary practice environments that are supportive of more advanced roles.

Our findings are suggestive of some movement away from the traditional role for nurses in the general practice setting, although administrative functions do continue to be a feature of the role for many nurses. Some differentiation between nurses was apparent, but we were unable to ascertain clearly particular nurse or practice characteristics associated with different practice profiles. Our findings confirm that differentiation of PN roles continues to be unrelated to experience and rates of pay.

While remuneration in isolation is a relatively unimportant factor in nurse job satisfaction, recruitment and retention (Cowin and Jacobsson 2003), the lack of correspondence between pay rates and experience or qualifications found in this study is of concern. The fact that some nurses are paid $18 per hour (little more than the minimum wage, which in 2007 was $13.74 per hour (Australian Fair Pay Commission, 2007) is also of concern and seems to indicate that at least some nurses are significantly under-valued in the general practice setting. Pay rates for PNs are highly variable and in the absence of a standardised pay scale, are dependent on individual negotiation with employers.

This pattern, which is frequently found within the nursing workforce, reflects in part the lack of a career pathway or educational standards for Australian PNs. Other countries such as the United Kingdom have well-defined career pathway for practice nurses, with different levels including the opportunity for senior and extended roles such as advanced nurse practitioner (with prescribing rights) and practice partner (NHS 2008). At least five Australian universities now offer post graduate certificates, diplomas and masters' degrees in general practice nursing and this will add further impetus to the momentum to develop a career framework for Australian PNs. Such a framework will ensure that remuneration and roles are commensurate with experience and qualifications. The competencies for general practice nursing that have been developed will provide a useful basis for this (Australian Nursing Federation 2005). Prospects for utilising or developing skills and for being promoted are an identified determinant of nurse recruitment, retention and job satisfaction (Day et al 2006; Cowin and Jacobsson 2003), further underlining the importance of career frameworks in attracting and retaining sufficient nurses in the general practice sector (Keleher et al 2007).

Recruitment and retention of practice nurses will be an ongoing challenge in the context of generalised shortages in the nursing workforce, driven by factors such as the ageing of the workforce, increasing demand for health and aged care services, and poor retention rates. Continued pressure on the general practitioner workforce combined with growing government interest in multidisciplinary-team-based approaches to primary health care (Australian Government Department of Health and Ageing 2008b) will ensure that demand for the PN workforce will continue to be strong.

The findings also highlight significant data gaps in standardised national workforce data collections. Such data sets, describing and monitoring over time the characteristics of the workforce and the services they provide, are essential for informed workforce planning and service planning for both primary health care and the nursing workforce. Although in this paper we have focused on nurse and practice characteristics, and practice profiles, our study has also collected data about the services provided and the patients seen by PNs (which will be reported separately). At present, these data are routinely collected for general practitioners (e.g., in Medicare statistics and the BEACH studies), but not for nurses working in general practice.

The need for improved monitoring of the PN workforce is particularly salient given the current development of a national primary health care strategy, which has a strong focus on non-medical providers and disease prevention (Australian Government Department of Health and Ageing 2008b). Significant increases in the provision of preventive services are likely to require not only increased numbers of primary health care providers, but also new incentives or payment mechanisms and changed roles. Unless we have a clear understanding of the current role

of the PN, for example in activities such as disease prevention and health promotion, the implications of any changes will be unclear. What would be the workforce requirements for both PNs and GPs in the future? Although there has been considerable attention to planning the GP workforce (AMWAC 2005; AMWAC 2000), to date there has been no planning undertaken for the PN workforce. Effective primary health care workforce planning will need to entail improved workforce planning for PNs, which in turn will need to be underpinned by improved data collections. Furthermore, new approaches to workforce planning will be required which incorporate a cross-professional perspective.

The wide variation in PN roles that is evident in this study may also have implications for quality of care and patient outcomes, but at present this is unclear. Data on these aspects is not routinely collected for any providers in the general practice setting, but current developments in national primary health care policy provide an opportunity to also embed routine collection of information about quality of care and patient outcomes. This would seem to be particularly important if new models of care, which may see quite significant changes in PN roles, are being implemented.

Practice Nurses are a key element of the primary health care workforce in Australia, and their numbers have grown markedly during a time of generalised shortages in the Australian nursing workforce. In the context of current interest in strategic approaches to primary health care, PNs have never been more important. This importance should be duly recognised with improved career frameworks, and national monitoring and planning.

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