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**“It’s about fitting in with the organization”: A qualitative study of employers of nurse practitioners**

**Running title: Employers of Nurse Practitioners**

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Stacy Leidel developed the research questions, designed the study, analysed data and wrote the manuscript.

Shirley McGough analysed the data and edited drafts of the manuscript.

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## **Abstract**

**Aims and Objectives:** To explore the views of employers about the value nurse practitioners (NPs) add to health services, enablers and barriers to employing NPs, and intentions to employ NPs or expand NP services in the future.

**Background:** Research on Australian NPs has focused on NPs' experiences or patient-related factors like waiting times. Few studies have explored NP roles from the perspective of employers. Australian NPs employed by the private sector are eligible for reimbursement by the national health insurance scheme (Medicare Australia), potentially generating revenue for employers and broadening their career opportunities. We aimed to explore private sector employers' views on the barriers and facilitators to employing NPs and to identify factors affecting NP employability.

**Design:** A qualitative descriptive exploratory study.

**Method:** Employers of NPs from 23 private and non-profit health services in Western Australia were interviewed. Inductive content analysis was used to explore the data.

**Results:** Enablers to employing an NP included enhanced customer service and improved health outcomes. Barriers to employing an NP included lack of financial benefit and inadequate experience or qualifications. Employers also identified future directions for NP employability, such as filling a gap that added value to the health service.

**Conclusions:** Employers wanted NPs to work toward a shared vision of patient care that aligned with organizational needs.

**Relevance to Clinical Practice:** Findings can inform NP education and workforce planning to optimally meet employer and patient health needs.

**What does this paper add to the wider global community?**

- Research has shown that nurse practitioners (NPs) provide high quality care that results in improved health outcomes and patient satisfaction.
- There is little knowledge about factors affecting NP employment, particularly in the private and non-profit sector. Employer views on NP roles and employability have not been explored separately.
- In this study, employers wanted NPs who were willing to work toward a shared vision of patient care that aligned with organisational needs. Findings form an initial evidence base that can inform NP education and workforce planning to optimally meet patient health needs.

## **Key words:**

- Nurse practitioners
- Nurse practitioner employment
- Nursing workforce issues

## **Introduction**

Nurse practitioners (NPs) have been working in the Australian health care system for nearly two decades (Middleton et al., 2014). To become endorsed to practice as an NP in Australia, a candidate must be a registered nurse in good standing with a minimum of 5000 hours of experience in an advanced practice nursing role. Candidates require a master's degree from an accredited NP program (or equivalent) that includes coursework in health assessment, pharmacology, and diagnostics (Nursing and Midwifery Board of Australia, 2016). Unlike the family, pediatric, or adult nurse practitioner certifications in the US and Canada, Australia does not require NPs to pass nationally standardized certification or registration exams to enter the NP profession, and Australian NP endorsement is not limited to a specific patient population (Canadian Council of Registered Nurse Regulators, 2018; American Nurses Credentialing Center, 2018; American Academy of Nurse Practitioners Certification Board, 2017). Australian NPs develop their own roles and scope of practice in conjunction with their employers (Nursing and Midwifery Board of Australia, 2016). A range of Australian health services now employ NPs, including emergency, aged care, mental health, primary care, and chronic disease management (Middleton et al., 2014).

The development of the Australian NP role and its associated challenges has been well documented (MacLellan, Higgins & Levett-Jones, 2015; Offredy, 2000; Reel, Lauder & Sharkey, 2003). Most Australian NPs are employed in the public sector where they do not receive direct reimbursement for their services (Harvey, Driscoll & Keyzer, 2011). Legislation enacted in 2010 allowed limited private sector NP services to be reimbursed by the Australian public health system (known as Medicare), potentially leading to new employment opportunities for NPs (Commonwealth of Australia, 2010; Willis, 2012).

A substantial body of international research about NPs has emerged since the role began (Horrocks, Anderson & Salisbury, 2002; Lenz, Kane, Hopkins & Lin, 2004; Newhouse et al., 2011; Xue & Tuttle, 2017). Research on the role of Australian NPs has typically focused on patient-related factors like satisfaction or on NPs' experiences with their role (Dinh, Walker, Parameswaran & Enright, 2012; Li et al., 2013; Jennings et al., 2015; Lowe, Plummer & Boyd, 2016). Little is known about Australian employers' views and experiences with NPs (Currie, Chiarella, & Buckley, 2013). Although one survey found that nurse managers viewed NP roles positively, the study did not focus exclusively on the employer perspective (it included NPs' views on their own roles), and it was not clear if the managers were from the public or private sector (Lowe, Plummer & Boyd, 2016). A study of pharmacies providing NP services offered initial insights into private NP employment; however, participants included staff not involved in hiring NPs, and the research did not explore factors affecting NP employability (McMillan & Emmerton, 2013).

It is important to understand employers' views on NP roles because of their influence on NP career opportunities, NP education and NP-related policy. Employers ultimately control demand for NPs; therefore, the extent to which NPs meet organizational needs could determine their employability. Employer needs could influence NP program content or drive development of new NP programs. Employers could advocate for policies providing greater

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financial reimbursement and expanded scope of practice for NPs. To our knowledge, a study of employers' views on these phenomena has not been conducted.

## **Aim**

We aimed to explore Australian private and non-profit sector employers' views about the enablers and barriers to employing NPs and to identify factors relating to NP employability. We sought specifically to examine these phenomena in the private and non-profit sectors because these NP services are eligible for reimbursement from Australian Medicare, potentially affecting their employment prospects.

## **Methods**

### **Design**

We chose a descriptive, exploratory qualitative design as described by Sandelowski (2010) to explore NP employability. Descriptive qualitative exploration is a type of naturalistic inquiry that captures people's perspectives about a phenomenon (Colorafi & Evans, 2016). Themes from exploratory data are integrated into a novel conceptualization of the phenomenon, which can subsequently be used to investigate the themes with other designs and guide theory development (Schneider, Whitehead, LoBiondo-Wood & Haber, 2016).

### **Sampling/participants**

The sample population was all current employers of NPs in the private and non-profit sectors in Western Australia (WA). To recruit employers, we used the list of NP employers from the Nursing and Midwifery Office of the Department of Health (WA). In WA, all health services wishing to employ NPs must obtain "designation" from the Department of

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Health (WA) (Government of Western Australia Department of Health, 2015). We contacted the 48 employers on this list who had hired NPs (as of February 2015) by phone or email and asked for the individual in charge of hiring or supervising NPs. We then invited these individuals to participate in the research by email or phone. All employers received an information sheet about the study and provided informed consent if they chose to participate. If desired, the participants received a copy of the consent form.

The study participants were from a range of private and non-profit health services across WA, including aged care facilities, home health agencies, private GP practices, pharmacies, and private hospitals. Six employers were ineligible because they did not hire or directly supervise NPs. Four employers declined to participate and 15 could not be reached.

### **Data Collection**

After obtaining written consent, a non-NP research assistant collected data through semi-structured interviews with employers. The interview guide was based on gaps in knowledge identified through a literature review on Australian NPs (Table 1). Data was collected between March and October 2015 and ceased when data saturation was reached (Fusch & Ness, 2015). Twenty-one interviews were performed over the telephone and two were conducted in person. Interview duration ranged from 15 to 61 minutes. All interviews were audio-recorded and de-identified by the interviewer and transcribed verbatim by the primary researcher.

### **Ethical considerations**

This project was considered low risk and was approved by the Human Research Ethics Committee from an Australian university and from the ethics committees from two of

the participating organizations. The remaining organizations accepted the university's ethics approval.

## **Data analysis**

We explored the data with inductive content analysis with three researchers analysing the data separately to enhance trustworthiness (Graneheim & Lundman, 2004). First, the primary researcher (an NP) read all transcripts to get an overall sense of the participants' views, then coded each transcript using Braun and Clarke's (2006) six phases of thematic analysis. Two senior qualitative researchers (non-NPs) then coded the data separately, assigning the codes to subthemes and overarching themes. We resolved coding differences and refined the themes through discussion. Data was managed with NVivo software version 11 (QSR International, Melbourne, Victoria, Australia, 2015).

In qualitative studies, validity and reliability are viewed in terms of credibility, confirmability and transferability (Polit & Beck, 2018). To avoid bias during data collection, a non-NP research assistant conducted all interviews. We used non-NP researchers to analyse and interpret the data to enhance trustworthiness (Polit & Beck, 2018). During data analysis in October 2016, a non-NP researcher contacted 11 participants for member checks (a process whereby participants are asked to review and confirm tentative findings to enhance credibility) (Polit & Beck, 2018). Three participants responded and confirmed validity of the findings.

## **Results**

Twenty-three employers (presented below as P1 to P23) participated in the study. Sixteen employers were from private organizations such as pharmacies, hospitals or aged care facilities; seven were from non-profit health organizations such as GP practices and

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home health services. Three major themes emerged from the data: enablers to employing an NP, barriers to employing an NP, and future directions for NP employability.

### **Theme 1: Enablers to employing NPs**

Participants commonly discussed advantages of employing NPs: enhanced customer service, better health outcomes, financial benefits from Medicare reimbursement, NPs' ability to fill a gap in services, and NPs' overall value-add to the multidisciplinary team.

#### ***Enhances customer service***

Employers appreciated NPs' exceptional communication skills and ability to manage challenging interactions with patients and families, as exemplified by this quote: *Family members are quite happy having a yarn [talk] with the NP, because they're better able to explain things than the GP* (P7). Sometimes the enhanced customer service from NPs was worth the decreased Medicare revenue in comparison to GP costs: *We probably lost a bit of money but ... our waiting times are more attractive and acceptable* (P22). This employer summarised the value many participants placed on NPs: *Our [health service] becomes the choice for most customers because they know they're going to get added value...* (P13).

#### ***Improves health outcomes***

Employers often described NPs' positive effect on patient health outcomes, emphasizing their advanced clinical reasoning and decision-making. One employer stated: *Advanced clinical reasoning skills [need to be] applied to management of patients and NPs do that extremely well* (P5). These employers appreciated NPs' ability to monitor and intervene with patients early, potentially reducing hospital transfers: *[NPs are] reducing unplanned transfers, getting to clients early and providing fantastic care quickly* (P11). *Our*

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aim with the NP is to monitor residents who are likely to fall through the gaps. They're being proactive by keeping an eye on these people (P7).

### ***Improves financial outcomes***

Employers sometimes discussed financial benefits of employing NPs, often in comparison to other health professionals. NP salaries were lower than physician salaries, sometimes increasing profit for the employer, as this quote highlights: *The cost of employing a doctor to undertake some of those roles is greater than employing a NP. So they fill that gap* (P5). Another employer stated that NPs generated more financial value than physicians: *It was cheaper for us...medical practitioners expect to be paid an awful lot of money ... the NP brought in more income through Medicare than the GP ever did* (P16). Employers also compared NPs favourably with other nursing personnel in relation to Medicare reimbursement. One employer described the decision to hire an NP instead of an RN: *From a business perspective, Medicare funding was there...the clinics with registered nurses are cost neutral whereas [NPs] add to the bottom line* (P4).

### ***Fills a gap in care***

In this theme, employers hired NPs to fill gaps in care. For example, NPs commonly served communities lacking access to a highly skilled health care provider. *[They] go to smaller communities with marginalised populations where access to GPs is limited or the medical population doesn't have a high skill set* (P9). NPs' advanced skills were instrumental in gaining community support: *In remote areas [the NP service has] been accepted...some don't even have a grocery store...when they see someone that can write scripts and do diagnostic interpretations, they're welcomed with open arms* (P2). The following employer appreciated NPs' flexibility in low-resource areas (as opposed to GPs): *I think they [NPs] are*

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*more flexible than GPs – we work in rural and remote areas with few services and resources. The NPs have a greater understanding of the local clinics (P3).*

### ***Adds value to the multidisciplinary team***

Other employers found that NPs complemented the health care team by addressing minor illnesses, allowing doctors to focus on more complex patients: *It frees up doctors when we are overloaded. She [the NP] can concentrate on coughs and colds... if the doctors don't have time, our NP is available (P12).* Some employers valued hospital experience which filled a gap not covered by medical practice: *In wound care they've been readily accepted because they're seen in the tertiary sector, so doctors can see the merit (P14).* NPs complemented the team by providing a different approach: *Having an NP is a slightly different way of thinking [for] the GPs. My philosophy has been that [NPs] supplement and assist where it's needed but do not take over an area. I find that they complement each other (P2).* The NPs also contributed to health services by developing other nurses' skills: *We had non-NP nurses working in the service and it was a good way of up-skilling those nurses (P5).* Employers particularly valued NPs' ability to teach assessment skills: *They're telling them [other nurses] why things are happening, signs and symptoms to look for. That's been tremendously valuable for our staff. (P7).*

### **Theme 2: Barriers to employing a NP**

Employers of NPs identified five key barriers to employing an NP: no financial benefits, not filling a gap, lack of expected qualifications or experience, resistance from other health professionals and lack of commitment to the health service.

### ***No financial benefits***

Employers noted a lack of financial benefit from employing NPs, exemplified by these comments: *It's a break-even situation* (P1) and *funding is the biggest challenge...it's not a sustainable option* (P6). Employers commonly referred to NPs' inability to cover their costs: *Our gerontologist can pay their own way, we pay them an honorarium. We couldn't do that [with NPs]. NPs have a pay package. You give them a salary, a car, and equipment...you're looking at about 150 to 175,000 dollars a year with on-costs* (P19).

### ***Not filling a gap***

Some health agencies did not identify a gap requiring NP services. This participant highlighted a common view among employers that NP services were unnecessary because of a strong supply of doctors who could generate more income: *They [NPs] can only bill four item numbers, and they're very low rebates. We've got registrar doctors, and there's a high demand for GPs. From a business model, it makes more sense to have a doctor on board* (P12).

### ***Lack of expected qualifications or experience***

Employers often had unmet expectations about NPs' professional experience and qualifications. One example of an employer's negative experience is highlighted in this quote: *We've had extremely bad experiences with some of the NPs we've recruited. Just because they've done the masters [degree] doesn't make them a good NP. They were an average nurse before, and they're going to be a very average NP* (P9). Another participant shared an experience with an NP who lacked the experience or willingness to care for a particular patient population: *At first, she said (and this is a common comment from NPs in remote locations where they provide emergency services): "I don't do older people."*

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Probably 90% of our presentations are chronic disease and the model of care is around that (P20).

### ***Lack of commitment to the health service***

Some employers were frustrated with NPs' lack of commitment to the organization. This employer commented on NPs' unwillingness to commit to a private sector position: *There's no loyalty to the job. That's frustrating...I can give the hours that they want to work. But the [NPs] are still hopeful that the [public sector] organization they're working for will create a position for them* (P8).

### ***Resistance from other health professionals***

Employers frequently had to contend with resistance toward NPs from other health professionals who were concerned about losing income or control over patient care: *Occasionally we get angry GPs who feel like we're moving in on their business, but it is up to the client and who they choose* (P11). This employer expressed a similar concern from doctors in their organization: *In the private sector, they see it as a loss of income.... If [the patient] saw the NP they're potentially avoiding a visit to the doctor, so you are hitting the hip pocket* (P18). One participant characterised these experiences as a struggle for power and territory: *There's been a turf war to get it [employing NPs] to happen* (P10).

Some employers described attempts to promote harmonious working relationships between NP and GPs. One employer stated: *the challenges have been building bridges to get support from the GPs* (P10). Conversely, this employer managed the conflict between NPs and GPs by scheduling them on different clinical sessions: *It's a bit like mixing two chemicals and having an explosion – we don't mix GPs and NPs. We are well aware of the professional tensions* (P3).

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Employers of NPs also dealt with resistance from nurses within their organizations. In some cases, employers portrayed RNs as not willing to learn from NPs. One participant described a common situation: *I never ceased to be amazed at nurses who opposed NPs, particularly more advanced clinical practitioners who felt, “what do they know that I don’t”* (P19).

### **Theme 3: Future Directions for NP employability**

The third theme, Future Directions for NP Employability, consisted of four subthemes: adding value, increasing the public profile of NPs, meeting expectations around qualifications, experience and commitment, and meeting organizational needs.

#### ***Adding value to the health service***

Employers asserted that NPs should provide *evidence on the value-add and sell that, so the community says, we want to work with you if you’ve got a NP on board* (P7). Evidence of value was especially important in the private and non-profit sectors because Medicare reimbursement did not cover the cost of NP positions: *They’ll never pay for themselves. The money from Medicare is not worth employing an NP so they need to tell an employer what value they bring* (P10). Another employer recommended that NPs sell themselves as going beyond their job description: *[NPs should] promote themselves to nursing leaders as doing more than just their role* (P18). Some employers believed NPs should participate in clinical governance to demonstrate value: *[The NP should be] a champion of clinical governance supporting the team, including the doctors* (P15).

### ***Increasing the public profile of NPs***

Employers often expected a positive future for the NP role: *I think they're an important part of the medical workforce going forward* (P17). However, employers often described establishing NP positions as a slow, incremental process that required navigating organizational politics and resistance to change: *It was getting the hospital executives to agree to it. You propose it as a trial... and the positions are now successfully in place* (P18).

Employers reported that their patients or customers sometimes lacked an understanding of the NP role, leading to discussions on the differences between GPs and NPs: *It took explaining that it's not a replacement of the GP. It comes down to how we market it* (P13). One participant shared how staff was educated to describe NPs as nurses with advanced skills: *First the receptionist said, 'they can do everything the doctor can do'. But we changed it to 'nurses with extra training that can order tests and write prescriptions'* (P2).

### ***Meeting expectations around qualifications, experience and commitment***

Employers frequently discussed the qualifications and type of experience NPs should have, although these expectations varied greatly. For example, this employer did not require prior NP experience: *That's the minimum requirement: are you registered and endorsed and do you have a pulse?* (P8). Other employers preferred NPs with experience outside of hospitals: *It comes down to community experience... hospital NPs that have been in some specialty don't have that broad range of experience* (P2). This employer had difficulty recruiting NPs who could manage a broad range of acute and chronic health conditions in remote areas: *The ideal NP has a strong foundation in primary health care and emergency...including mental health and women's health. You don't find them often because*

they tend to specialise (P17). Conversely, this employer did not find primary care skills to be useful: *I haven't found that the NPs from primary care had the relevant skill set* (P14).

### ***Meeting organizational needs***

Employers wanted NPs who were willing to work toward a shared vision of patient care that aligned with organizational needs. *[Hiring an NP] was values driven. It's about fitting in with the organization, not us bending over to accommodate some large egos* (P3).

This participant sought experienced NPs who could function independently: *I don't want a junior nurse practitioner who's learning. I prefer a senior nurse practitioner who is autonomous* (P22). Capturing a common view among employers, this participant said: *They're not a replacement for a doctor...I think they have to be aligned with the gaps and the business needs* (P14).

### **Discussion**

To our knowledge, this is the first study to explore NP roles exclusively from an employer perspective. Participants discussed barriers and facilitators in relation to employing NPs and identified factors affecting NP employability. Findings offer insights about the alignment of NP roles with organizational needs and potential future employer demand for NPs.

Employers in our study generally supported the international evidence that NP-provided care leads to positive health outcomes and patient satisfaction (David, Britting & Dalton, 2015; Saver 2015; Stanik-Hutt et al., 2013). Inclusion of NPs in multidisciplinary teams improved efficiency, which has been reported in previous studies (Blackmore et al., 2013; Kilpatrick et al., 2015). In some cases, NPs filled gaps in health services, consistent



with research highlighting NPs' historic focus on underserved populations (Des Roches et al., 2017).

Our study revealed the financial implications of NP employment in Australia. Some employers reported that NPs provided financial benefits; however, these benefits may have resulted from patients paying a fee above the Medicare rebate. Most employers noted financial barriers to employing NPs, consistent with a study that found potential increased costs and duplication of services by an NP working in a private general practice (Helms, Crookes, & Bailey, 2014).

Participants in our study provided insights into employer advocacy for NP roles. Employers often advocated for NPs within their organizations despite financial challenges, but they did not advocate at the national level for increased reimbursement for NP services or expanded scope of practice. The lack of employer advocacy in our study coupled with lack of support from policy advisers noted by Lowe et al. (2016) suggests that NPs will have to lobby for these professional goals by themselves.

Consistent with findings from other studies, employers noted resistance to NP roles from nursing and medicine (Donelan, Des Roches, Dittus, & Buerhaus, 2013; MacLellan, Higgins, & Levett-Jones, 2015; Middleton et al., 2011). Although they openly discussed the challenges of employing NPs, participants in this study did not express overt opposition to NP roles, contrasting with other evidence suggesting employer resistance to NP roles. A study exploring the experiences of newly endorsed Australian NPs found the NPs often had unsupportive or hostile employers (MacLellan, Levett-Jones, & Higgins, 2016). A self-selection bias may account for these different perceptions; the 19 employers who declined or did not respond to invitations to participate may have had more negative opinions about NPs.

While employers agreed that NPs should focus on meeting their organization's needs, they had differing views about the professional experience NPs should have to fulfil their roles. Disagreement about qualifications has surfaced in international research (Martsolf et al., 2015), but in this study, there was a notable lack of consensus not only about experience, but also about whether NPs should be specialists or generalists. These differences could be problematic for NP education and workforce planning; it would be challenging to design NP programs to meet the wide range of employer expectations and organizational needs identified in this study. Health workforce planners may not find an NP workforce with the needed experience or skill set to meet changing population health needs. Australia's steady supply of doctors (particularly in metropolitan areas) could exacerbate these barriers to NP roles (Moynihan & Birrell, 2016; Murray & Wilson, 2017). If doctors fill gaps in health services more efficiently than NPs (as many employers noted), NPs may struggle to find employment. Further, poor alignment between employer needs and NP roles could make it more difficult to argue in favour of increasing Medicare reimbursement for NPs.

Australian health workforce planning has been criticised for being driven by the supply of health professionals instead of the health needs of the population (Leidel, 2014; Moynihan & Birrell, 2016). Needs assessments by government bodies or universities could identify health service needs best suited to NPs' skill sets. Although there are national standards for NP practice (Nursing and Midwifery Board of Australia, 2015), more employer input about desirable NP skills and experience could improve the match between employer needs and NP preparation. Employers could follow the recommendation by Masso and Thompson (2016) that research about NPs be guided by theoretical frameworks like organizational change theory or implementation science. For example, insights from organizational change theory could diminish the resistance from nursing and medicine that several participants described. The concept of implementation fidelity posited by Masso and Thompson (2016) could also be useful. This article is protected by copyright. All rights reserved.

Thompson could guide ongoing evaluation of NP roles in relation to organizational needs (Masso & Thompson, 2016).

A possible limitation of this study was that employers from only one Australian state participated, potentially affecting transferability of the findings. The employers' disparate and sometimes appositional experiences may have resulted from the fact that they represented a wide variety of agencies with potentially different expectations of NPs. Another limitation was that we did not collect data about NP characteristics that could have shaped employers' opinions, such as full or part time status, type of patients seen, or whether the NP was a solo practitioner or part of a team. Interviewing public sector employers was beyond the scope of this study, but since most Australian NPs are employed in public health services (Middleton et al., 2011), public employers' views on NPs warrant further study.

## **Conclusion**

This study was the first to explore NPs from the unique perspective of private and non-profit sector employers. Since employers ultimately drive future employment prospects for NPs, their experiences and opinions offer valuable insights for NPs, educators and policy makers. Employability was directly related to the value NPs could add (improved access, quality, or financial gain) and their ability to meet employer expectations and organizational needs. Findings form an initial evidence base that can inform NP education, employment and workforce planning to best meet patients' health needs.

## **Relevance to Clinical Practice**

Findings from this study show that the employer perspective is a central factor in determining the clinical skills and experience NPs need to optimize their employability. Employer input could guide development of the clinical content in NP education programs to

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ensure that NPs graduate with the clinical skills their employers expect. For example, some employers required generalist NPs and others required specialist NPs, indicating a possible need for separate clinical programs or tracks. Finally, policy makers and workforce planners could use these employers' views to guide development of clinical NP roles best suited to the health needs of the population.

## References

- American Academy of Nurse Practitioners Certification Board. (2017). FNP and AGNP certification candidate handbook. Retrieved from <http://www.aanpcert.org/resource/documents/AGNP%20FNP%20Candidate%20Handbook.pdf>
- American Nurses Credentialing Center. (2017). Certification: general testing and renewal handbook. Retrieved from <http://nursecredentialing.org/GeneralTestingRenewalHandbook>
- Blackmore, C. C., Edwards, J. W., Searles, C., Wechter, D., Mecklenburg, R., & Kaplan, G. (2013). Nurse practitioner-staffed clinic at Virginia Mason improves care and lowers costs for women with benign breast conditions. *Health Affairs* 32(1), 20. <http://dx.doi.org/10.1377/hlthaff.2012.0006>
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Canadian Council of Registered Nurse Regulators. (2018). Update on exam blueprint for CNPE (Canadian Nurse Practitioner Exam). Retrieved from <http://www.ccrnr.ca/familyall-ages.html>

Colorafi, K. & Evans, B. (2016). Qualitative descriptive methods in health science research.

*Health Environments Research and Design Journal*, 9(4), 16-25.

<http://dx.doi.org/10.1177/1937586715614171>

David, D., Britting, L., & Dalton, J. (2015). Cardiac Acute Care Nurse Practitioner and 30-

Day Readmission. *Journal of Cardiovascular Nursing*, 30(3), 248-255.

<http://dx.doi.org/10.1097/JCN.0000000000000147>

Commonwealth of Australia. Health Legislation Amendment (Midwives and Nurse

Practitioners) Act 2010 (2010).

Currie, J., Chiarella, M., & Buckley, T. (2013). An investigation of the international

literature on nurse practitioner private practice models. *International Nursing Review*,

60(4), 435-447. <http://dx.doi.org/10.1111/inr.12060>

Desroches, C. M., Clarke, S., Perloff, J., O'Reilly-Jacob, M., & Buerhaus, P. (2017). The

quality of primary care provided by nurse practitioners to vulnerable Medicare

beneficiaries. *Nursing Outlook*, <http://dx.doi.org/10.1016/j.outlook.2017.06.007>

Dinh, M., Walker, A., Parameswaran, A., & Enright, N. (2012). Evaluating the quality of care

delivered by an emergency department fast track unit with both nurse practitioners

and doctors. *Australasian Emergency Nursing Journal*, 15(4), 188-194.

<http://dx.doi.org/10.1016/j.aenj.2012.09.001>

Donelan, K., DesRoches, C. M., Dittus, R. S., & Buerhaus, P. (2013). Perspectives of

physicians and nurse practitioners on primary care practice. *The New England Journal*

*of Medicine*, 368(20), 1898-1906. <http://dx.doi.org/10.1056/NEJMs1212938>

Fusch, P. & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. *The*

*Qualitative Report*, 20(0), 1408-1416.

- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112. <http://dx.doi.org/10.1016/j.nedt.2003.10.001>
- Harvey, C., Driscoll, A., & Keyzer, D. (2011). The discursive practices of nurse practitioner legislation in Australia. *Journal of Advanced Nursing*, 67(11), 2478-2487. <http://dx.doi.org/10.1111/j.1365-2648.2011.05650.x>
- Helms, C., Crookes, J., & Bailey, D. (2015). Financial viability, benefits and challenges of employing a nurse practitioner in general practice. *Australian Health Review*, 39(2), 205-210. <http://dx.doi.org/https://doi.org/10.1071/AH13231>
- Horrocks, S., Anderson, E., & Salisbury, C. (2002). Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ*, 324(7341), 819-823. <http://dx.doi.org/10.1136/bmj.324.7341.819>
- Jennings, N., Clifford, S., Fox, A. R., O'Connell, J., & Gardner, G. (2015). The impact of nurse practitioner services on cost, quality of care, satisfaction and waiting times in the emergency department: A systematic review. *International Journal of Nursing Studies*, 52(1), 421-435. <http://dx.doi.org/10.1016/j.ijnurstu.2014.07.006>
- Kilpatrick, K., Reid, K., Carter, N., Donald, F., Bryant-Lukosius, D., Martin-Misener, R., . . . DiCenso, A. (2015). A systematic review of the cost-effectiveness of clinical nurse specialists and nurse practitioners in inpatient roles. *Nursing Leadership* 28(3), 56-76.
- Leidel, S. (2014). Nurse practitioners in Australia: strategic errors and missed opportunities. *Medical Journal of Australia*, 201(2), 85. <http://dx.doi.org/10.5694/mja14.00125doi.org/>

- Accepted Article
- Lenz, E., Kane, R., Hopkins, S., & Lin, S. (2004). Primary care outcomes in patients treated by nurse practitioners or physicians: Two-year follow-up. *Medical Care Research and Review*, 61(3), 332-351. <http://dx.doi.org/10.1177/1077558704266821>
- Li, J., Westbrook, J., Callen, J., Georgiou, A., & Braithwaite, J. (2013). The impact of nurse practitioners on care delivery in the emergency department: a multiple perspectives qualitative study. *BMC Health Services Research*, 13(1), 356. <http://dx.doi.org/10.1186/1472-6963-13-356>
- Lowe, G., Plummer, V., & Boyd, L. (2016). Perceptions of NP roles in Australia: Nurse practitioners, managers, and policy advisors. *The Journal for Nurse Practitioners*, 12(7), e303-e310. <http://dx.doi.org/10.1016/j.nurpra.2016.04.023>
- MacLellan, L., Levett-Jones, T., & Higgins, I. (2016). The enemy within: Power and politics in the transition to nurse practitioner. *Nursing Plus Open*, 2, 1-7. <http://dx.doi.org/10.1016/j.npls.2016.01.003>
- MacLellan, L., Higgins, I., & Levett-Jones, T. (2015). Medical acceptance of the nurse practitioner role in Australia: A decade on. *Journal of the American Association of Nurse Practitioners*, 27(3), 152-159. <http://dx.doi.org/10.1002/2327-6924.12141>
- McMillan, S. S., & Emmerton, L. (2013). Nurse practitioners: An insight into their integration into Australian community pharmacies. *Research in Social and Administrative Pharmacy*, 9(6), 975-980. <https://doi.org/10.1016/j.sapharm.2012.09.001>

- Martsolf, G. R., Auerbach, D. I., Spetz, J., Pearson, M. L., & Muchow, A. N. (2015). Doctor of nursing practice by 2015: An examination of nursing school decisions to offer a doctor of nursing practice degree. *Nursing Outlook*, 63(2), 219-226.  
<http://dx.doi.org/10.1016/j.outlook.2015.01>.
- Masso, M., & Thompson, C. (2016). Australian research investigating the role of nurse practitioners: A view from implementation science. *Collegian*,  
<http://dx.doi.org/10.1016/j.colegn.2016.04.003>
- Middleton, S., Gardner, A., Gardner, G., & Della, P. R. (2011). The status of Australian nurse practitioners: the second national census. *Australian Health Review*, 35(4), 448-454.  
<http://dx.doi.org/10.1071/AH10987>
- Moynihan, M., & Birrell, B. (2016). GP oversupply--ignoring the evidence. Retrieved from <http://tapri.org.au/wp-content/uploads/2016/04/GP-oversupply-ignoring-the-evidence-12-Dec-2016.pdf>
- Moynihan, M., & Birrell, B. (2016). Why the public cost of GP services is rising fast. Retrieved from <http://tapri.org.au/wp-content/uploads/2016/04/The-cost-of-GP-services-2016-May-31-final-Table-1-correction.pdf>
- Murray, R. B., & Wilson, A. (2017). Work-readiness and workforce numbers: the challenges. *Medical Journal of Australia*, 206(10), 433-434.  
<http://dx.doi.org/10.5694/mja17.00226>
- Newhouse, R., Stanik-Hutt, J., White, K., Johantgen, M., Bass, E., Zangaro, G., . . . Weiner, J. (2011). Advanced practice nurse outcomes 1990-2008: A systematic review. *Nursing Economics*, 29(5), 230-250.



Nursing and Midwifery Board of Australia. (2014). Nurse practitioner standards for practice.

Retrieved from <http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/nurse-practitioner-standards-of-practice.aspx>

Nursing and Midwifery Board of Australia. (2016). Guidelines for nurses applying for

endorsement as a nurse practitioner. Retrieved from

[http://www.nursingmidwiferyboard.gov.au/Registration-and-](http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations/Guidelines-on-endorsement-as-a-nurse-practitioner.aspx)

[Endorsement/Endorsements-Notations/Guidelines-on-endorsement-as-a-nurse-practitioner.aspx](http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations/Guidelines-on-endorsement-as-a-nurse-practitioner.aspx)

Nursing and Midwifery Board of Australia. (2016). Safety and quality guidelines for nurse

practitioners. Retrieved from

[http://www.nursingmidwiferyboard.gov.au/Registration-and-](http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations/Safety-and-quality-guidelines-for-nurse-practitioners.aspx)

[Endorsement/Endorsements-Notations/Safety-and-quality-guidelines-for-nurse-practitioners.aspx](http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations/Safety-and-quality-guidelines-for-nurse-practitioners.aspx)

Offredy, M. (2000). Advanced nursing practice: the case of nurse practitioners in three

Australian states. *Journal of Advanced Nursing*, 31(2), 274-281.

<http://dx.doi.org/10.1046/j.1365-2648.2000.01300.x>

QSR International (2015). *NVivo software version 11*. QSR International, Melbourne,

Victoria, Australia.

Reel, S., Lauder, W., & Sharkey, S. (2003). The development of family health nurses and

family nurse practitioners in remote and rural Australia. *Australian Family Physician*, 32(9), 750-752.

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in*

*Nursing and Health*, 33(1), 77-84. <http://dx.doi.org/10.1002/nur.20362>

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Saver, C. (2015). 50 years of NP excellence. *The Nurse Practitioner*, 40(5), 15-21.

<http://dx.doi.org/10.1097/01.NPR.0000463786.21636.47>

Stanik-Hutt, J., Newhouse, R. P., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., ...

Weiner, J. P. (2013). The quality and effectiveness of care provided by nurse practitioners. *The Journal for Nurse Practitioners*, 9(8).

<http://dx.doi.org/10.1016/j.nurpra.2013.07.004>

Willis, E. (2012). *Understanding the Australian health care system* (2nd ed.). Chatswood,

N.S.W.: Chatswood, NSW: Churchill Livingstone.

Xue, Y., & Tuttle, J. (2017). Clinical productivity of primary care nurse practitioners in ambulatory settings. *Nursing Outlook*, 65(2), 162-171.

<https://doi.org/10.1016/j.outlook.2016.09.005>

**Table 1. Interview Guide**

**Interview questions**

1. Basic information about participant and organization
  - a. Position/title
  - b. Is your health service public, private, or NGO?
  - c. What is the context (community or hospital-based health service)?
  - d. Number of employees in organization
  - e. Have you considered hiring an NP?
2. What influenced your decision to hire (or not hire) an NP?
3. Are you planning to hire an NP (or more NPs) in the future? Why or why not?
4. If participant currently employs an NP:
  - a. Tell me about your experience as an NP employer.
  - b. How does the NP role fit within the health service's informal and formal organizational structure?
5. How does the NP benefit the health service?
6. What are your health service's challenges regarding the NP?
7. How could NPs be best prepared to work in your health service?
8. How can NPs improve their employability?