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# The influence of funding models on collaboration in Australian general practice

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## **Abstract**

Despite more nurses working in Australian general practice, there has been limited investigation exploring ways that general practitioners and registered nurses work together to deliver clinical care. However, it has been postulated that the small business structure, common in Australian general practices, might influence collaboration between these two groups of health professionals. This paper presents one theme from a larger qualitative study. Eight general practitioners and fourteen registered nurses working in general practice participated in semistructured face-to-face interviews between February and May 2015. Naturalistic inquiry was adopted to elicit and explore the narrative accounts of participants about working together in general practice. An inductive process of thematic analysis was used to identify, analyse and report patterns and themes. Ancillary costs associated with the employment of registered nurses in general practice and the time registered nurses took to undertake procedural services were a concern for general practitioners. Registered nurses did not always work to their full scope of practice and many felt that their expertise was not appropriately remunerated. Findings suggested that fee for service-funding models can negatively influence collaboration between general practitioners and registered nurses working in general practice.

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## **The influence of funding models on collaboration in Australian general practice**

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### **Abstract**

Despite more nurses working in Australian general practice, there has been limited investigation exploring ways that general practitioners and registered nurses work together to deliver clinical care. It has been postulated, however, that the small business structure, common in Australian general practices, might influence collaboration between these two groups of health professionals. This paper presents one theme from a larger qualitative study. Eight general practitioners and fourteen registered nurses working in general practice participated in semi-structured face-to-face interviews between February and May 2015. Naturalistic inquiry was adopted to elicit and explore the narrative accounts of participants about working together in general practice. An inductive process of thematic analysis was used to identify, analyse and report patterns and themes. Ancillary costs associated with the employment of registered nurses in general practice and the time registered nurses took to undertake procedural services were a concern for general practitioners. Registered nurses did not always work to their full scope of practice and many felt that their expertise was not appropriately remunerated. Findings suggest that fee for service funding models can negatively influence collaboration between general practitioners and registered nurses working in general practice.

### **What is known about this topic?**

- Despite the recognised benefits of collaboration, there has been little attention paid globally to the way general practitioners and registered nurses collaborate in general practice.

### **What does this paper add?**

- This paper provides evidence on ways that funding models impact the way general practitioners and nurses work together in general practice to deliver care.

### **Introduction**

Collaboration involves two or more disciplines working together towards a common goal (D'Amour, Ferrada-Videla et al. 2005). Disciplines collaborate through open communication, sharing responsibilities and decision making, and distributing leadership based on knowledge and expertise (D'Amour, Ferrada-Videla et al. 2005, Putnam, Ikeler et al. 2014). Collaboration in Canadian primary care settings have demonstrated improved client outcomes, increased staff satisfaction and reduced healthcare costs (Barrett, Curran et al. 2007, Jacobson 2012). Despite this, the literature suggests there is limited collaboration between general practitioners (GPs) and registered nurses working in general practice (McInnes 2015). A lack of clarity around the nurses' scope of practice, poor communication and medico-legal concerns have been identified to impact on their relationship (McInnes 2015).

General practice is commonly regarded as the cornerstone of Organisation for Economic Co-operation and Development (OECD) health care systems. The rates of general practice utilisation per capita are steadily growing both in Australia (Britt, Miller et al. 2015) and internationally (OECD 2011, OECD 2013). Most Australian general practices operate as small business enterprises and over 90% of income is generated via a tax payer funded fee-for-service (FFS) arrangement (Medicare). Further revenue is raised via client co-payments and government incentive schemes. Australian clients are free to choose their general practitioner (GP) and may

attend multiple practices or see multiple GPs (Britt, Miller et al. 2015, OECD 2015). Other OECD countries, such as the Netherlands and New Zealand blend FFS with fixed capitation (payment of an annual fee based on the number of client enrolments rather than client visits) (OECD 2015). General practitioners in the United Kingdom (UK) have widely adopted an incentive based Quality Outcomes Framework (QOF) designed to reward achievement of clinical indicators (HSCIC 2015).

In terms of efficiency and teamwork, there are several limitations attributed to FFS. Firstly, FFS encourages increased activity with no reciprocal incentive to promote quality (OECD 2015). Whilst FFS is an effective reimbursement scheme, it is often more appropriate for low complexity episodic care rather than ongoing chronic disease management (OECD 2015). New Zealand research suggests that capitation, rather than FFS, promotes the involvement of nurses in client care (Pullon, McKinlay et al. 2009). Similarly, the QOF has been found to improve teamwork and enhance specialist nursing skills (Gillam, Siriwardena et al. 2012).

Similar to international trends, demand for Australian primary care services are set to exceed GP supply (U.S. Department of Health and Human Services 2013, Britt, Miller et al. 2015). In response, the Australian government introduced a Practice Nurse Incentive Program (PNIP) to strengthen the nurse workforce in general practice (Medicare Australia 2016). While eligible practices can receive up to \$A125,000 per year under the PNIP, procedural based nursing Medicare item numbers have been removed (Medicare Australia 2016). To date, there is limited research that assesses the effectiveness of PNIP. However, it is suggested that GPs struggle to financially absorb the removal of nurse item numbers and have reduced the co-ordination of care with nurses (Bell 2013, Britt, Miller et al. 2015). It is timely therefore, to understand the influence that funding models have had on the way GPs and general practice registered nurses (GPRNs) work together to deliver clinical care. Such findings may be used to inform innovative policies that produce cost effective healthcare whilst maintaining a viable business operation.

## **Methods**

This paper presents one theme from a larger qualitative project exploring collaboration between GPs and GPRNs in Australian general practice. Given the richness of the data, themes have been published separately. Other themes to be presented focus on aspects of collaboration around the nature of collaboration in general practice and the importance of understanding the GPRNs' scope of practice.

### **Approach, setting and sampling strategy**

Naturalistic inquiry was used to elicit the narrative accounts of participants. Participants were purposefully recruited from two Primary Health Networks (PHNs) in New South Wales, Australia. Maximum variation was sought by including city, metropolitan and rural practices and solo through to group practices. Each PHN emailed an information sheet about the study to local practices. Subsequently, a researcher spoke at professional training sessions to further explain the study and seek participation. Electronic advertisements were placed on professional web sites and follow-up phone calls were made four weeks after the initial recruitment to potentially interested practices. General practitioners and GPRNs were eligible to participate if they had worked for at least 12 months in a general practice which employed RNs. The term (GPRN) in this paper will solely describe registered nurse participants who are not registered nurse practitioners.

### **Data collection**

Interviews were conducted by one researcher (###) between February and May 2015. A semi-structured interview guide was developed following an integrative literature review (McInnes 2015) and consultations with relevant medical and nursing experts. Prompts were used in addition to the questions to elaborate and clarify responses (Polit and Beck 2014). Individual face-to-face interviews were audio recorded and transcribed verbatim by a professional transcription company. Field notes documented observations and thoughts after each interview.

### **Data analysis**

All transcripts were de-identified and imported into NVivo 10<sup>TM</sup> (NVivo 2012) and underwent an inductive process of thematic analysis (Braun and Clarke 2006). A rich understanding of the

content was achieved by immersion in the data as transcripts were read and re-read. Potential meanings and patterns were documented and preliminary thematic ‘maps’ helped arrange codes into themes. The data set was coded by one researcher (SM) and reviewed for accuracy and relevance by two others (KP and LH). Discrepancies were discussed between the whole team until consensus was reached.

### **Trustworthiness**

Consistent with naturalistic inquiry, trustworthiness criteria as suggested by Lincoln and Guba (1985) were used to establish truthful and credible findings. Credibility was established through regular peer debriefing and a vigorous process of inductive analysis that ensured interpretations remained truthful to the raw data (Lincoln 1985). Demographic diversity and description of the study settings assists the reader to determine transferability (Lincoln 1985). Dependability and confirmability were addressed through the independent confirmation of codes and researchers reaching consensus around themes (Lincoln 1985).

### **Ethics**

The study was approved by the University of Wollongong and the Illawarra Shoalhaven Local Health District Human Research Ethics Committee (HE14/459). All participants provided written informed consent and verbal approval to audio-record interviews.

### **Results**

Eight GPs and fourteen GPRNs participated in interviews. This paper reports one theme around the influence of funding models on collaboration between GPs and GPRNs working in Australian general practices. Four subthemes emerged from the data. The first subtheme; *The ethos of general practice* describes the shared goal to sustain a benevolent community service. *Diverging priorities* encapsulates diverse perspectives when prioritising care and utilising resources. *The potential for conflict*: presents the perceived limitations of current funding models and the pressure to supplement nursing costs. Finally, *remuneration for expertise* highlights the issues around employer/employee relationships and the difficulty GPRNs have in negotiating salaries in private practice.

**The ethos of general practice: “we're not just about making money”**

All participants shared a vision around the delivery of high quality health care. It was also apparent that GPs and GPRNs were cognisant that as a business, there was a need to balance income generation with service delivery.

“I have to say the focus of our practice is not making money. I mean it is making money but our focus has basically been from when we were first opened is very much about client care. Yes we make money, fantastic. But we're not just about making money” (GP7).

“I do feel like there is an awareness of needing to make money but it's not a pressure and it has to be based around good patient care.” (GPRN8).

**Diverging priorities: “They [GPRNs] don't like the fact that they can't spend that time with a client”**

Several GPs spoke of the fiscal challenges of employing GPRNs and perceived that many did not understand the operational costs associated with their employment. “They [GPRNs] really don't understand the effort and time and cost that it takes to actually have the front door open.” (GP4). There was also a perception amongst GPs that government funding initiatives did not appropriately compensate them for the employment of GPRNs.

“Even taking into account the block funding they [government] give for some of the nurse's time, it doesn't take into account the on costs of infrastructure that you're providing for the nurses. ...they provide as much on cost to the practice as a doctor because they use dressings and resources, they have appointments made, they generate appointments that need to be either billed, or chased up, or followed up. You need administration around them, they have training and HR requirements.” (GP5).

Whilst GPs acknowledged the contribution GPRNs make to client care, several GPs valued GPRNs in terms of increasing their own efficiencies rather than as complimentary health professionals providing quality nursing care.

“.. the only way that you can fund a nurse's time is by hoping that they make the GPs more efficient” (GP5).

From the GPRNs perspective, nurses felt compelled to take time to respond to the needs of their clients rather than to prioritise short consultations that enhance remuneration to the practice. GPRNs were concerned that clients may not return if sensitive or complex issues were not addressed whilst the client was at the practice.

“they [GPs] say, well you need to get good at saying, well we'll deal with this now, you need to come back for this and that. But unfortunately if I don't deal with everything at once then they [client] may give up.” (GPRN7)

“I mean sometimes it's inappropriate to say come back. I mean if someone wants to unload on you, irrespective of what it is, you have to prioritise....Often it's - sometimes it's at a crisis point, so you can't just say; oh look, sorry.” (GPRN11)

This difference in ways of working and prioritising work highlights a need for open communication between professionals to ensure mutual understanding. Unresolved, this type of issue may lead to a degree of frustration.

**The potential for conflict: “*we are so constricted by them [GPs] getting their item number payments*”**

All GPRN participants had some form of post basic clinical training in areas which included midwifery, immunisation, diabetes education, well women’s screening and reproductive and sexual health. Whilst GPs referred to the nurses’ knowledge in these areas and recognised their competence, the majority of GPs felt a need to co-consult and have input in each clients’ care. This GP involvement was clearly driven by the perception of liability and funding to bring remuneration to the practice.

“ultimately the GP is responsible, we're responsible. The buck stops with us if there's a problem or a bad outcome. It's our fault.” (GP3)

“usually we've got to run our eyes over them and say, you know - to say yes, you're okay. That's I guess, partly so that you can charge them a short con [consultation] as much as anything else.” (GP8)

The practice of co-consulting was a consistent source of contention and clearly frustrated GPRNs who perceived this as a duplication of service and an inefficient use of time.

“I mean, to have a doctor come in and tell you how to steri-strip a skin tear, or dress a wound or dress a burn, it's a waste of their time and the nurse could just get on and do it. (GPRN6)

Exacerbating this was the perception by many GPRNs that the removal of nurse item numbers and the introduction of PNIP limited their scope of practice. There was also a broad perception among GPRNs that GPs had limited understanding of the PNIP.

“I think financially - item numbers are a big thing. I don't think general practitioners understand what the PNIP is and what it does, what it gives them.” (GPRN10).

However, a limited number of GPRNs described how the PNIP was promoting nursing autonomy, improving efficiency and enhancing client outcomes.

“So if it's something, like if we genuinely have to call a doctor in, we do. Then we can bill an item against that doctor. I wonder if in other practices if you took away having to do that, it would stop that doubling of services and open up more client appointments.” (GPRN9).

“Okay we receive this nurse incentive payment so let's use it and not waste time for doctors doing things that they don't have to do and use the nurses as much as we can to provide better service, to provide preventative care and also just speed up the job of the GP if we can.” (GPRN8).

**Remuneration for expertise: “We're paid less than the hospital nurses”**

No GPRN participant reported receiving incentive based bonuses. However, three received intermittent Christmas bonuses and four reported being paid above award wages by their GP employer. GPRN participants reported issues around wage negotiations and, for many, remuneration was a source of contention. Historically, hospital-based nurses have not had to negotiate their wage and this was new territory for GPRN participants. As the employer, the GP clearly had a significant role in deciding on appropriate remuneration for the GPRNs.

“Like most nurses I’m not good at that [negotiating wage] and I’m at a point now where I feel I need to try and do something about it.” (GPRN7)

“I just started. There was no talk about wages or anything.... The other nurse was already working here anyway, so what she got, I got.” (GPRN4)

Some GPRNs perceived that their extended clinical skills brought financial benefit to the practice, yet they were not rewarded either financially or professionally for such expertise.

“I've done the immunisation course. I've done the Well Women's, the reproductive and sexual health. I've done wound closure and suturing. I've done IV cannulation, coaching course and a lot of diabetes courses I've done. I've taken part in other research things and been on some committees. But yeah, a lot of that is not really recognised.” (GPRN3)

Several GPs identified that they were aware that many GPRNs were earning less than their acute care nursing colleagues and that this was a source of dissatisfaction amongst some nurses.

“I think there is an issue from the nurses’ end that they're possibly - they feel that they're - they should be paid more. Because I'm not sure the practice nurses are being paid in the same ballpark with the hospital nurses. I can sort of see their point but the awards are different.” (GP7)

However, as a private business there was a general perception that nurses can be a financial burden and increasing remuneration is challenging.

“Something you’ve got to remember in general practices, they're [GPRNs] not paid by a health service. General practice is a private industry. So employing a practice nurse, if you don’t make use of them, can be just an additional cost that can sometimes be a significant cost to a general practice.” (GP4)

One GP compared GPRN wages to those of GP trainees and identified the differences in the potential for both individuals to bring remuneration to the practice, rather than considering the different types of clinical input that each would bring to the practice.

“Yeah I mean the problem is that they're [GPRNs] actually becoming very expensive. If you consider, a GP trainee probably costs about the same amount as a nurse and they have got their own item number. So yeah it's tricky.” (GP5)

Without resolution, employment stressors revealed the potential to increase the turnover of nurses. As one GPRN stated:

“Look, honestly, I'm over it [trying to negotiate]. I'm moving out of practice nursing.... I've spent over seven years now working with GPs and it is a big issue. They don't want to affect their profits. ... I'm going to go now to a position where that's not an issue. It's not a small business.” (GPRN6).

## **Discussion**

The nursing workforce in Australian general practice has grown exponentially in the last decade (Halcomb 2014). Despite the changing dynamic of adding nurses to the general practice setting, there has been limited attention paid to the way in which registered nurses work with the GPs. There are clearly significant differences between acute care and general practice created by the funding model and small business nature of general practice. This study provides insight into how the funding environment impacts on the way in which GPs and GPRNs collaborate to deliver care.

The increase in GPRN workforce in Australia has come about as a result of the positive policy environment and generous government incentives for employing nurses in general practice (Halcomb 2014). This has been a deliberate strategy to enhance primary care services to meet the

growing needs of the community. However, to ensure the sustainability of nurses in this setting and optimisation of their role, consideration needs to be given to the ongoing financing of the nursing in general practice workforce. This may include adopting a blended funding strategy based on clinical indicators similar to those in the UK and proposed in the Australian Health Care Home Pilot scheme (HSCIC 2015).

The introduction of the PNIP has changed the role of the nurse in general practice. No longer are GPRNs encouraged to independently undertake specific activities that receive remuneration by item number (Halcomb 2008). Now the role of the GPRN can be negotiated to match the needs of the individual general practice community. The chronic disease literature highlights the gains in health outcomes offered by collaborative care models, whereby a range of professionals work together to support client care (Wagner 2000, Coleman, Austin et al. 2009). However, this study found little evidence that the dominant FFS funding model in Australian general practice encouraged or rewarded GPs and GPRNs to collaborate (Pullon, McKinlay et al. 2009, Afzali, Karnon et al. 2014). Rather, similar to findings by Pearce et al. (2011), the data highlighted a range of ways in which this funding model impeded working together.

Data from this study revealed that both GPs and GPRNs felt that the best way that they could bring remuneration to the practice was to enhance GP efficiency. Whilst models of substitution have been demonstrated to be safe and have similar health outcomes (Laurant, Reeves et al. 2009), this overlooks the value that registered nurses can bring to general practice. GPRNs have the potential to enhance client education and health literacy, promote lifestyle risk factor reduction, improve client self-management and provide coaching and counselling for health related issues (Phillips, Pearce et al. 2009, McKenna, Halcomb et al. 2015).

Participants highlighted the impact that individual practice policies, such as those requiring the GP to see the client, have on the delivery of care. Many GPRN participants identified that GPs in their workplace would oversee episodes of care that they felt were within their scope of practice, primarily because of the remuneration that would result if the client were seen by the GP. The frustration caused by this perceived duplication of services is not new and has been previously

reported in the literature (Halcomb 2005, Halcomb 2008). The ongoing nature of the issue highlights the urgent need for communication between GPs and GPRNs around issues of role and scope of practice to ensure that role conflict and ambiguity are minimised and a shared understanding is reached.

As registered practitioners with a national accrediting body, GPRNs are responsible for their own clinical practice and do not require the supervision of medical practitioners to perform tasks within their scope of practice (Nursing and Midwifery Board of Australia 2006). However, the private nature of Australian general practice, where the GP is often the employer as well as the clinical colleague, brings additional challenges. GP employers carry the financial risk and vicarious liability for the torts of employees and this is likely to influence collaborative practices in general practice (Phillips, Pearce et al. 2008).

The final issue raised by participants in this study was around remuneration of nurses. Halcomb et al.(2008) identified the issues of poor remuneration for GPRN as a key barrier to role expansion. Despite industrial attempts to achieve gains in wages there have been limited gains in this area. Registered nurses employed in general practice in New South Wales, Australia currently earn approximately \$6/hr less than their acute care colleagues who have similar years of experience (APNA 2014, New South Wales Ministry of Health 2015). Dissatisfaction around employment conditions has the potential to negatively impact on the GP / GPRN relationship. Similar to international experiences, this study found that GPRNs find it challenging to negotiate salaries (Carlowe 2008). An inability to negotiate wages based on experience and expertise is a further indication that GPs and GPRNs do not openly communicate and threatens the practice with additional costs through decreased retention and lost expertise.

### **Limitations**

This study has several limitations. Participants were recruited from thirteen general practices in one Australian State. This meant that several participants were employed at the same practice and indeed some GPRNs were employed by GP participants. The impact this had on responses is

unclear and it is plausible that participants did not wish to disclose information which they deemed could impact their working relationship. To negate this perception, all interviews were conducted individually and participants were ensured that all data would be de-identified, including the location of practices. As a naturalistic inquiry, the onus is also on the reader to determine the transferability of findings to other settings (Lincoln 1985). Finally, the research team comprised a mix of registered nurses and a general practitioner. Whilst disciplines viewed data in different ways consensus on themes was reached.

### **Conclusion**

It is evident that GPs and GPRNs support collaborative care and clearly shared knowledge and expertise. However, a number of issues related to funding negatively impact on collaborative practices and increased conflict between GP employers and GPRNs. Findings from this study suggest that revisions to the existing funding models should be considered to facilitate collaboration in general practice and help resolve tensions created by the GP having the dual role of professional colleague and GPRN employer. Improvements in collaboration have the potential to improve the quality of care delivered and to optimise the work environment.

### **Conflict of Interest**

Nil

## References

- Afzali, H., Karnon, J., Beilby, J., Gray, J., Holton, C. and Banham, D. (2014). "Practice nurse involvement in general practice clinical care: Policy and funding issues need resolution." *Australian Health Review* **38**(3): 301-305.
- APNA (2014). "APNA salary and conditions survey 2014." *Primary Times* **14**(4): 8-9.
- Barrett, J., Curran, V., Glynn, L. and Godwin, M. (2007). "CHSRF Synthesis: Interprofessional Collaboration and Quality Primary Healthcare." [Accessed 18 November 2014] [http://www.cfhi-fcass.ca/Migrated/PDF/ResearchReports/CommissionedResearch/SynthesisReport\\_E\\_rev4\\_FINAL.pdf](http://www.cfhi-fcass.ca/Migrated/PDF/ResearchReports/CommissionedResearch/SynthesisReport_E_rev4_FINAL.pdf)
- Bell, K. (2013). "Eighteen months into the PNIP journey - how are we travelling?" *Primary Times* **13**(2): 2.
- Braun, V. and Clarke, V. (2006). "Using thematic analysis in psychology." *Qualitative Research in Psychology* **3**(2): 77-101.
- Britt, H., Miller, G., Henderson, J., Bayram, C., Harrison, C., Valenti, L., Wong, C., Gordon, J., Pollack, A., Pan, Y. and Charles, J. (2015), "General practice activity in Australia 2014–15. General practice series no. 38." Sydney. Sydney University Press. [purl.library.usyd.edu.au/sup/9781743324523](http://purl.library.usyd.edu.au/sup/9781743324523).
- Carlowe, J. (2008). "Practice nurses deserve more." *Nursing Times* **104**(46): 14-16.
- Coleman, K., Austin, B. T., Brach, C. and Wagner, E. H. (2009). "Evidence On The Chronic Care Model In The New Millennium." *Health Affairs* **28**(1): 75-85.
- D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L. and Beaulieu, M.-D. (2005). "The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks." *Journal of Interprofessional Care* **19**(1): 116-131.
- Gillam, S. J., Siriwardena, A. N. and Steel, N. (2012). "Pay-for-performance in the United Kingdom: Impact of the quality and outcomes framework: A systematic review." *Annals Of Family Medicine* **10**(5): 461-468.
- Halcomb, E., Davidson, P., Griffiths, R., Daly, J. (2008). "Cardiovascular disease management: Time to advance the practice nurse role?" *Australian Health Review* **32**(1): 44-55.
- Halcomb, E., Davidson, P., Salamonson, Y., Ollerton, R., Griffiths, R. (2008). "Nurses in Australian general practice: Implications for chronic disease management." *Journal of Nursing and Healthcare of Chronic Illness in association with Journal of Clinical Nursing* **17**(5A): 6-15.
- Halcomb, E., Salamonson, Y., Davidson, P., Kaur, R., Young, S. (2014). "The evolution of nursing in Australian general practice: A comparative analysis of workforce surveys ten years on." *BMC family practice* **15**(1): 52.

Halcomb, E. J., Davidson, P. M., Daly, J. P., Griffiths, R., Tofler, G., Yallop, J. (2005). "Nursing in Australian general practice: Directions and perspectives." *Australian Health Review* **29**(2): 156.

HSCIC. (2015). "Quality and Outcomes Framework (QOF) - 2014-15." Health and social care information centre [Accessed 21/01/2016] <http://www.hscic.gov.uk/catalogue/PUB18887>

Jacobson, P. (2012), "Evidence Synthesis for the Effectiveness of Interprofessional Teams in Primary Care." Ottawa. Canadian Health Services Research Foundation.

Laurant, M., Reeves, D., Hermens, R., Braspenning, J., Grol, R. and Sibbald, B. (2009), "Substitution of doctors by nurses in primary care (Review)." Issue 4. Art. No.: CD001271 England. The Cochrane database of systematic reviews

Lincoln, Y. S., Guba, E.G (1985). *Naturalistic Inquiry*. California, SAGE.

McInnes, S., Peters, K., Bonney, A., Halcomb, E. (2015). "An integrative review of facilitators and barriers influencing collaboration and teamwork between general practitioners and nurses working in general practice." *Journal of Advanced Nursing* **71**(9): 1973-1985.

McKenna, L., Halcomb, E., Lane, R., Zwar, N. and Russell, G. (2015). "An investigation of barriers and enablers to advanced nursing roles in Australian general practice." *Collegian* **22**(2): 183-189.

Medicare Australia. (2016), "Practice Nurse Incentive Program (PNIP)." Canberra. Medicare Australia. [https://www.humanservices.gov.au/health-professionals/services/medicare/practice-nurse-incentive-programme?utm\\_id=9](https://www.humanservices.gov.au/health-professionals/services/medicare/practice-nurse-incentive-programme?utm_id=9).

New South Wales Ministry of Health. (2015), "Public health system nurses' and midwives (State) award, 2015." Industrial relations commission of New South Wales. <http://www.health.nsw.gov.au/careers/conditions/Awards/nurses.pdf>.

Nursing and Midwifery Board of Australia. (2006), "National competency standards for the registered nurse." Melbourne: Victoria. <http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards.aspx>.

NVivo (2012). Qualitative data analysis software; QSR International Pty Ltd. Version 10.

OECD. (2011), "Health at a Glance 2011 OECD Indicators." [http://dx.doi.org/10.1787/health\\_glance-2011-en](http://dx.doi.org/10.1787/health_glance-2011-en). OECD Publishing.

OECD. (2013), "Health at a Glance 2013 OECD Indicators." OECD Publishing. [http://dx.doi.org/10.1787/health\\_glance-2013-en](http://dx.doi.org/10.1787/health_glance-2013-en).

OECD. (2015). "Modes of payment in primary care." 29/01/2016. [Accessed OECD.org] <http://www.oecd.org/els/health-systems/paying-providers.htm>

OECD. (2015), "OECD Reviews of Health Care Quality: Australia 2015: Raising Standards." Paris. OECD publishing. <http://dx.doi.org/10.1787/9789264233836-en>.

Pearce, C., Phillips, C., Hall, S., Sibbald, B., Porritt, J., Yates, R., Dwan, K. and Kljakovic, M. (2011). "Following the funding trail: Financing, nurses and teamwork in Australian general practice." *BMC Health Services Research* **11**: 38-38.

Phillips, C., Pearce, C., Dwan, K., Hall, S., Porritt, J., Yates, R., Kljakovic, M. and Bonnie Sibbald. (2008), "Charting new roles for Australian general practice nurses: Abridged Report of the Australian general practice nurse study." Canberra. APHCRI,. [http://files.aphcri.anu.edu.au/research/full\\_report\\_47129.pdf](http://files.aphcri.anu.edu.au/research/full_report_47129.pdf).

Phillips, C. B., Pearce, C., Hall, S., Kljakovic, M., Sibbald, B., Dwan, K., Porritt, J. and Yates, R. (2009). "Enhancing care, improving quality: The six roles of the general practice nurse." *Medical Journal of Australia* **191**(2): 92-97.

Polit, D. F. and Beck, C. T. (2014). *Essentials of nursing research: Appraising evidence for nursing practice*. Philadelphia, Lippincott Williams & Wilkins.

Pullon, S., McKinlay, E. and Dew, K. (2009). "Primary health care in New Zealand: The impact of organisational factors on teamwork." *British Journal of General Practice* **59**(560): 191-191.

Putnam, J., Ikeler, S., Raup, G. H. and Cantu, K. (2014). "There's no 'i' in team: Evaluating nurse-physician collaboration." *Nursing Management* **45**(1): 10-13.

U.S. Department of Health and Human Services. (2013), "Projecting the supply and demand for Primary care practitioners through 2020." Rockville, Maryland. <http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/primarycare/projectingprimarycare.pdf>.

Wagner, E. H. (2000). "The role of patient care teams in chronic disease management." *BMJ (Clinical research ed.)* **320**(7234): 569-572.