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# **Australian rural remote registered nurses' experiences of learning to provide antenatal services in general practice: A pilot study**

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## **Abstract**

This article reports on a pilot vocational study program for provision of antenatal services in the general practice environment. The concurrent evaluation study assessed practice nurse' experiences of undertaking the pilot program, the level and applicability of the content, and the mode of delivery. General practitioners' understanding of the role of the nurse in providing antenatal services, and the actual and potential impact of this new role on models of service delivery and care were also investigated. Women receiving care from practice nurses within this new model of service delivery and care were also of interest in this study. Findings showed that the current role of the general practice nurse in caring for pregnant women is restricted to assisting the general practitioner to complete their assessment of clients. Organising clinical placement with a midwife was a major barrier to completing the pilot program.

## **Keywords**

Antenatal, education, general practice, nurse

## **Introduction**

Nursing in general practice is one of Australia's most rapidly developing areas of nurse specialisation. Since 2001 there has been a substantial increase in the numbers of general practice nurses, due in part to an increase in funding provided by the Australian Government. This investment in primary care services has grown to include direct funding for general practice nurses through a range of Medicare Medical Benefit Schedule (MBS) item numbers. The most recent workforce survey carried out by the peak body Australian General Practice Network estimated that there are 7824 nurses employed in general practice in Australia. Although 60% of survey respondents worked in a rural remote area <sup>1</sup>, there is a paucity of research about rural remote general practice nursing <sup>2</sup>.

Over several years a nursing, midwifery and medical workforce shortage <sup>3</sup> has led to a crisis in the delivery of maternity care in rural remote Australia <sup>4-6</sup>. Closure of maternity services and fewer midwives and general practitioners have resulted in alternative models of service delivery and care that aim to maximize women's choices while providing an opportunity to receive safe maternity care in their local area <sup>7-10</sup>. A National Consensus Framework for Rural Maternity Services was

developed by a range of peak professional bodies that endorses the rights of women who live in rural remote Australia to reasonably accessible, culturally safe maternity services <sup>11</sup>.

In November 2006 MBS Item Number 16400 <sup>12</sup> was introduced for registered nurses and registered Aboriginal Health Workers to provide antenatal services to women experiencing a low risk pregnancy under the supervision of a general practitioner. This strategy aimed to increase access to antenatal services for women living in rural remote Australia. To qualify for the use of this number, general practices have to be located in a Rural, Remote, Metropolitan Area that is classified 3+ <sup>13</sup>. The introduction of this MBS item number was not without controversy, with midwifery and obstetrician led groups lobbying against such a move <sup>14</sup>.

Traditionally midwives, general practitioners with an interest in obstetrics, or an obstetrician have provided antenatal care in rural remote Australia. Findings from a Cochrane Collaboration intervention review on patterns of routine antenatal care for low-risk pregnancies found that a midwife/general practitioner led model of care was regarded by women as more satisfactory than an obstetrician/gynaecologist led model of care. There was no difference between the clinical effectiveness of either model of care. In both models women were less satisfied with a reduced number of antenatal visits, even though there was no evidence of adverse outcomes if this was the case. Findings from this systematic review were concerned with midwives rather than registered nurses <sup>15</sup>. Of significance was the value women placed on having access to a shared care model of midwifery/general practice and frequent antenatal visits.

Key recommendations from an evidence summary published by the Joanna Briggs Institute on high quality antenatal care include: provision of evidence based information and support to enable women to make informed choices about their health care, schedules of antenatal appointments that are determined by their function, and the provision of comprehensive early screening for Down Syndrome and multiple pregnancies <sup>16</sup>. There is no research that examines registered nurses' ability to provide antenatal services under the supervision of a general practitioner to assist in meeting these recommendations. A recent study in Canada found registered nurses working in rural remote areas required funded continuing professional development opportunities to ensure their competence in providing maternity care <sup>17</sup>. Canada differs from Australia in that pre-registration nurse training in Canada includes a greater maternity component. A review of the literature that examined

competencies and skills for remote and rural maternity care identified a paucity of information regarding the practice of rural providers <sup>18</sup>.

To support the introduction of MBS item number 16400, Royal College of Nursing Australia (RCNA) was contracted by the Australian Government Department of Health and Ageing to undertake a period of key stakeholder consultation. A Reference Group of key stakeholders in midwifery and general practice was convened in 2006 that worked to gain consensus on a set of competencies <sup>19</sup>. The research team, which included registered nurses and midwives, were sub-contracted by the RCNA to develop, pilot and evaluate a teaching and learning package for registered nurses in general practice to meet the competencies required to provide antenatal services under the supervision of a general practitioner. This report describes the development and piloting of the package including findings from the concurrent evaluation study.

## **Continuing Professional Development Program for Practice Nurses To Deliver Antenatal Services**

The researchers between December and June 2008 developed a professional development program for registered nurses to provide antenatal services in general practice. The aim of this program was not to produce a substitute for a professional midwife, but to expand the role of the practice nurse to enable them to safely deliver antenatal services under the supervision of a general practitioner. Participants in this program were encouraged to utilise available resources to promote the health of women in the general practice setting within the constraints of established practice standards and legislation.

Four modules of study were written in line with the competency standards agreed to by the RCNA Reference Group. These modules were: Professional Practice, Provision of Antenatal Services, Management of Clinical Care Systems, and Collaborative Practice. Equal weighting was not given to each module, rather Module 2, Provision of Antenatal Services, contained the most information as it was identified that concepts in this module would most likely be new to participants. Modules 1, 3 and 4 were designed to reinforce and build upon knowledge and skills that participants would have already acquired through both formal and informal learning. Modalities of instruction included in the teaching and learning package were typical of off-campus education.

Participants were expected to work through a paper-based workbook in conjunction with online teaching and learning support. Online teaching and learning materials were not relied upon solely in this program because of potential access difficulties. The online teaching and learning environment included extra material such as discussion boards, activities, quizzes and readings that promoted learning and provided formative feedback to participants. A prescribed text that focused on maternal and child health <sup>20</sup> was used throughout Modules 1 and 2. A DVD demonstrating abdominal palpation and foetal heartbeat auscultation developed by the midwife academics was also provided.

The project team used a rigorous quality assurance process in the development of the teaching and learning package. Two midwife academics and two nurse academics experienced in the area of curriculum development and continuing professional development activities developed a first draft of the program. A separate nurse academic, with expertise in off campus teaching and learning, internally reviewed this draft. An instructional designer and three members of the original Reference Group in collaboration by the original authors of the curriculum content undertook extensive amendments following subsequent reviews. The online learning company contracted to establish the online teaching and learning environment added a number of additional on line activities during the final review.

It was expected that participants would spend approximately 60 hours working through the four modules of theory followed by 80 hours of supervised clinical practice. Clinical placements were negotiated by participants, with support from the project development team and the reference group. Students were provided with a clinical log that contained resources to support the clinical experience component of this program including opportunities to reflect on their achievement of objectives within the four competency domains.

Summative assessment of participants' knowledge and skill against the competencies required the demonstration of skills in antenatal assessment and abdominal palpation following the performance of at least 20 such assessments under the supervision of a midwife. In addition, students produced a policy for their workplace guiding the role of the registered nurse in the provision of antenatal services. This formed the basis for the introduction of a change in their practice once they had successfully completed the program. Grading of the written assessment tasks was undertaken by midwife academics. A Certificate of Completion was provided to successful participants and RCNA 3LP points were awarded.

## **Methods**

### ***Recruitment***

Registered nurses working in general practice were invited to participate in both the pilot program and associated evaluative study in June 2008. Letters were distributed via the Divisions of General Practice in each State and Territory with the assistance of Australian General Practice Network. Approval was secured from the University's ethics committee prior to commencement of this research.

### ***Participant group***

Eleven registered nurses working in general practice applied to participate in the pilot. Of these, ten were accepted. Four general practitioners who worked with these registered nurses also consented to participate in the evaluation component of the pilot. Overall, the attrition rate of registered nurse participants was extremely high with 70% of the original cohort of ten dropping out of the pilot. Only three participants were able to successfully complete the online learning program, clinical placement and assessment tasks.

### ***Data collection***

The evaluation study of the pilot program used a mixed methods research design that included questionnaires and semi-structured interviews. Pre-course and post-course questionnaires were based on instruments developed by Divisional Project Officers as part of a General Practice Queensland, Nursing in General Practice Project<sup>21</sup>. These questionnaires were judged to have face validity, but have not been psychometrically tested. Data collected from the questionnaires were a combination of descriptive answers and ratings on a Likert Scale measuring 1-5. Interviews were recorded and transcribed for thematic analysis.

## **Findings**

### ***Learning How to Provide Antenatal Services: Participants' experiences***

Overall participants were satisfied with the process of participating in the pilot program, providing they were able to obtain a clinical placement without difficulty. For those who encountered barriers to working with a midwife, the experience of participating in the pilot resulted in high levels of frustration and disappointment.

Three participants had previous midwifery qualifications and viewed participating in the pilot program as a way of recognising their existing knowledge and skills. Those

who were not currently registered as a midwife wanted to shape their current role to capitalise on their prior learning. One participant stated that they hoped they would then be:

*“...not only recognised as the pap smear nurse but a midwife [sic] whose skills are utilised.” (Participant 8)*

For these participants, the opportunity to revisit the knowledge and skills acquired during their initial midwifery education and training was a motivational factor in applying to participate.

*“Biggest expectation is to revisit midwifery domain. Not having recency of practice in midwifery I was thrilled to be accepted.” (Participant 2)*

Unfortunately both of these participants, who were formerly registered midwives, were based in Queensland and were unable to negotiate a clinical placement with a midwife. Feedback provided when notifying the project team that they were unable to continue identified that the participants had enjoyed their time working through the theoretical component and were enthusiastic about completing the program if the barriers to clinical placement could be overcome.

The greatest barrier that participants encountered was negotiating a clinical placement with a midwife. The participants were excluded by health services, jurisdiction policy and by local midwives. The following story typifies many of the participants' experiences.

*“It was a disaster from the beginning. I was unable to get in contact with the Educator at ... Base Hospital, she would not return my emails or phone calls. I then organised a fellow practice nurse... who was the co-coordinator of [the] shared care program through the ... Division of General Practice to get in contact with the Educator. The Educator agreed in an email ... that this would be fine (for me to undertake placement). I then continued to try and contact the Educator for me to start. After a 6 week period in total of trying to get through to this person I finally got through, only to be told I have to get in contact with the CNC for midwifery at ... Health Service. I then got in contact with the CNC who informed me that it was a NSW Health policy that RNs could not provide antenatal care in NSW. I had also rang Royal Women's Hospital Randwick who initially Ok'd placement, but then after initial contact did not return phone calls or emails.” (Participant 3)*

For those who returned the Post-course Questionnaire, it was apparent that they had received a high degree of support in their local workplace. Three of the four who responded worked in general practices that already employed a general practice nurse/midwife.

*“My GP and practice nurse (midwife) have been very supportive. I have been able to access both of them without hesitation. I feel that there is still so much to learn, but now have an excellent basis to start with.” (Participant 4)*



### **General Practitioners: Understanding the potential for increasing access**

The motivating force behind general practitioners' facilitation of registered nurses' participation in the pilot program was the potential for increasing client access to services:

*"There's enormous demand and so we're continually striving to find different ways to... get people seen.... We're trying all sorts of ways to increase our through-put, really the dollars just simply follow from that." (Participant 11)*

New models of antenatal care implemented as a result of the pilot program differed between each general practice. One general practitioner already employed a general practice midwife one day a week. Adding to this service, by one of the registered nurses in the team successfully completing the pilot program, has resulted in:

*"A lot more nurse consulting for routine antenatal care... so it frees me up for different consultations... it's more or less alternative visits that I see them [pregnant women]... if there's an incidental enquiry in between times, they're directed through to her [the registered nurse], which is good for me." (Participant 12)*

In another general practice, the registered nurse was considered to be an assistant, undertaking an initial assessment of the client prior to them being seen by the general practitioner on the same day. Describing the registered nurse's role as being "...to assist us in a more hands on way" (Participant 11), this general practitioner was unaware of the billing arrangement for Item Number 16400, and had not thought through how this could influence the model of service delivery planned. In this interview, the general practitioner discussed how they now saw the registered nurse as a source of evidence for their practice as antenatal care providers.

*"I would like to see the other doctors doing it [antenatal care] as well, but I think they need someone like [the registered nurse] to organise it for them...set up some guidelines of what we do at each visit so that...the doctors have more confidence." (Participant 11)*

General practitioners interviewed told of the communication mechanisms used in their workplace, and how they believed there was ample opportunity for the registered nurse to consult with them if they had any concerns about a client.

*"There's sort of two mechanisms... either she says... I've got so and so in with me now, do you mind having a quick look... [As well] we get together every week and she says... I had so and so in and they're doing fine." (Participant 12)*

All discussed how positive the pilot program had been for the registered nurses' professional development, with one stating that the pilot was a "brilliant concept, more nurse practitioners [sic] as part of a GP team is a very real way of restoring services to rural areas." (Participant 13). Furthermore, one participant made an additional comment about the high level of client satisfaction that the new model of antenatal service delivery was promoting.

“I’d say, the patient satisfaction has been good... its less of a wait to get in for [consultation with the registered nurse], it’s very easily accessible...she’s quite prompt at returning calls... so I think they feel quite secure with her.”(Participant 12)

## Discussion

As adult learners, nurses acquire knowledge through both formal and informal interactions, including that gained via experiential learning, or learning through doing<sup>22</sup>. Our purpose in this study was to evaluate a continuing professional development program that incorporated both a theoretical and a practical component.

Findings showed that participants in this study were satisfied with the theoretical component of the pilot program of study. Participants’ were able to engage with the online learning environment even though many of them had limited previous experience with using information technology. Using the competency standards as a guide, the content that participants progressed through was relevant and sufficiently prepared them theoretically to provide antenatal services in the general practice setting.

A significant issue identified in the findings was the paucity of clinical placements for participants to undertake the applied learning component of the pilot that occurs in the practical environment. Most of the interaction during clinical placements was between participants and their midwife preceptor. There was a formal learning component to this relationship, particularly as the midwife preceptor had to assess the participant’s skills in undertaking an antenatal assessment and abdominal palpation. However, for the most part the style of learning participants experienced was informal and undertaken in the course of the working day. By virtue of being located in a more acute care rural health facility for clinical placement, participants also had the opportunity to learn from other professionals in the workplace.

Midwives’ resistance to providing clinical experience for registered nurses undertaking this course was exhibited at both an organizational and local level. Unsupportive behaviours for example, not returning telephone calls or failing to honor agreements on clinical placements, resulted in participants feeling devalued and worthless. In some instances these behaviours could be discounted as a desire for midwives to guard professional territory. In other circumstances a perceived need to protect women under their care may have been a motivating force in the lack of acceptance of the potential for practice nurses to provide antenatal services. Nurse participants were also seen to be competing with midwifery students for scarce clinical places. Anecdotal evidence would suggest that a lack of understanding by

midwives and midwifery services regarding the goals and substance of this professional development program likely underpins these attitudes.

These behaviours reflect the lack of support that is often evident in nursing as a reaction to oppression and domination by other health care professionals<sup>23</sup>. At worst, such attitudes are characteristic of the phenomenon of horizontal violence between nurses that has long been described in the literature<sup>24</sup>.

The negativity demonstrated by individuals and organizations toward some participants in this study is reflective of the bigger picture. Opposition to a change that allows for general practice registered nurses to undertake what they considered to be part of midwifery practice has been acknowledged previously<sup>14, 25</sup>. Positions such as these reflect little recognition of the context of general practice nurses in relation to the provision of antenatal services, either from the perspective of their rurality, or that they work under the supervision of a general practitioner.

Returning to the systematic review<sup>15</sup> of what makes for high quality antenatal care; findings from this study demonstrate that general practice nurses are able to provide evidence based information and support to enable women to make informed choices about their health care. Because there is an increase in available service provision, antenatal appointments are provided that are flexible and meet clients' needs.

### **Limitations**

Problems we experienced with the recruitment and retention of participants, coupled with low return rates were a limitation of this study that are common in general practice research<sup>26, 27</sup>.

### **Recommendations**

It is recommended that the educational program be modified to require confirmation of clinical placement on enrolment and that clinical placement options not be restricted to mainstream acute care environments. Further, Divisions of General Practice are encouraged to develop partnerships with local maternity care services to facilitate the delivery of a more extensive and comprehensive approach to shared care.

### **Conclusion**

Registered nurses' experiences of undertaking the pilot program, *Continuing Professional Development Program for Practice Nurses To Deliver Antenatal Services* found the level and applicability of the content, and the mode of delivery

met their learning needs. Completing the pilot program led to an increase in registered nurses' confidence in providing antenatal services along with the limited introduction of varying new models of service delivery and care. General practitioners demonstrated a mixed understanding of the role of the registered nurse in providing antenatal services, and the impact that this new role could have on models of service delivery and care. When an understanding is gleaned of the specific context in which these nurses provide care, health care professionals can recognize the value that is inherent in increasing accessibility to quality services that will ultimately enhance the wellbeing of women and their babies.

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