Rural Australian Doctors' Views About Midwifery and Midwifery Models of Care: A Qualitative Study

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Rural Australian doctors' views about midwifery and midwifery models of care: a qualitative study

Abstract

Aim

Australian rural areas access to midwifery continuity of carer models is restricted. Lack of medical support has been identified as one of the reasons midwifery continuity of carer models have not been implemented. This study explored rural Australian doctors' views about midwifery and midwifery continuity of carer models.

Study Design

A qualitative study with general practitioner and specialist obstetricians (n=10) working in Australian rural maternity services. Semi-structured interviews were undertaken and analysed using thematic analysis.

Findings

Participants' views of midwifery and midwifery continuity of carer models were expressed in three themes. The themes related to the concepts of knowing: knowing the model, knowing the midwife, and knowing the system. Participants had misconceptions and misunderstandings of the model, midwifery, and systems issues relating to midwifery continuity of carer models.

Conclusion

Increasing understanding about midwifery and midwifery continuity of carer models may facilitate implementation of these models. A national education program for doctors about the structure and function of midwifery continuity of carer models would support knowledge building for obstetric doctors. Strong leadership and incentivisation for health services may be needed to sustainably roll-out rural models. At a service level, responsibility for establishing and sustaining models should shift from local midwife leaders to hospital executives.

Keywords: Midwife, continuity of carer, general practitioner, obstetricians, views, rural

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In midwifery continuity of carer (MCOC) models, a known, named midwife provides individualised care for a woman during pregnancy, labour and birth, and postnatally, regardless of whether the woman also requires medical care (Toohill et al., 2020). Midwifery continuity of carer specifically requires care to be provided by the same named midwife throughout pregnancy, labour and birth and the postnatal period with a back-up midwife or two, whereas midwifery continuity of care may mean care provided within the same philosophy but not necessarily provided by a designated midwife (Toohill et al., 2020).

Consumer demand for MCOC models reflects the value of this model for women. MCOC models significantly improve outcomes for women and babies. Women accessing MCOC models are less likely to request regional analgesia, to experience instrumental birth, preterm birth, or fetal loss at less than 24 weeks. Women are also more likely to achieve spontaneous vaginal birth (Sandall et al., 2016), and the care is cost-effective (Tracy et al., 2013). Despite this evidence, and even though the expansion of MCOC was recommended in the2009 national Maternity Services Review (Bryant, 2009) and again in the 2019 National Health Department strategy (COAG, 2019), few Australian women have access to MCOC. The best estimate is that only 30% of Australian maternity services offer MCOC models and only 10% of women are provided with MCOC. Access to for rural women to MCOC is even more limited (Dawson et al., 2016).

Local maternity services are vital for the health of communities. There is growing evidence that loss of rural and remote birthing services has negative health and social impacts on rural communities (Barclay et al., 2016). When appropriate maternity services are not available close to home, women experience significant challenges including travel and accommodation costs, and being separated from family and social networks for extended periods of time (Barclay et al., 2016). Women may not attend for care if they fear that they may be transferred away from home (Barclay

et al., 2016). For Aboriginal women, not being able to birth on country presents significant cultural risk (Barclay et al., 2016).

MCOC models have been suggested as a strategy to provide rural women with access to maternity care close to home (Tran et al., 2017). There have been successful MCOC models in rural and remote locations across Australia, demonstrating that these models are achievable and sustainable (Quinn et al., 2013).

Midwifery skills and knowledge are underused within the current maternity system particularly in rural areas, despite medical workforce shortages (McIntyre et al., 2012). MCOC models could harness the skills and knowledge of midwives to provide maternity services for women within their local community including intrapartum care, thereby improving access and quality of maternity care in Australian rural areas (McIntyre et al., 2012).

Significant barriers to the implementation of MCOC have hampered efforts to expand access. The known barriers relate to medical and midwifery workforce shortages, a lack of information provided to women regarding options for care (Brown & Dietsch, 2013), and a lack of commitment from health services to implement MCOC models (Dawson et al., 2016). Doctors perceived concerns about clinical risk and poor birth outcomes may be a contributing factor to a lack support for MCOC (Barclay et al., 2016 ; Brown & Dietsch, 2013 ; Dawson et al., 2016). Research exploring doctors' views on MCOC revealed that differing birth philosophies provided a barrier to the implementation of social models of care such as MCOC (Jaye et al., 2013; Lundgren et al., 2020 ; Ratti et al., 2014). Funding models may impact doctors' views about MCOC. Maternity reform in both New Zealand and Canada included changes to funding with the introduction of access payments to midwives that had previously only been available to medical practitioners (Jaye et al., 2013; Ratti et al., 2014). This funding strategy in Alberta, Canada led to increased concern from family physicians that midwives were better paid and that they would "poach patients" (Ratti et al., 2014, p.594). It has been suggested that the decision to fund midwifery as a professional

service was a strategy to challenge medical dominance within the health system (Jaye et al., 2013 ; Ratti et al., 2014) .

Rural Australian doctors' perceptions of MCOC have not previously been investigated. Considering the challenges in sustaining rural maternity services and the benefits of MCOC, understanding rural doctors' views about MCOC may inform the development of implementation strategies to enhance access to this model of care in rural Australia.

Aim

This study aimed to explore doctors' views about midwifery and midwifery continuity of care models in the Australian rural context.

Methods

Research Design

A qualitative descriptive approach was undertaken to explore the views of rural Australian doctors. Qualitative description is based around the principles of naturalistic inquiry and offers a means of summarising an event or phenomena as provided by participants (Bradshaw et al., 2017 ; Sandelowski, 2000).

Participants

We recruited obstetricians and general practitioner obstetricians (GPOs) currently practising obstetrics in rural Australia with visiting rights to public maternity services. Purposive sampling was undertaken to ensure that participants had experience and knowledge around the phenomena of interest. Recruitment approaches made use of the first author's direct professional network, referral from other maternity professionals, and social media.

Data collection

Data were collected by the first author, a clinical midwife consultant in a rural maternity service, and the research was conducted as part of the requirements for a Masters degree. Interviews were conducted in person, via phone, or on the Zoom video platform. Semi-structured interview questions covered the doctors' background education and experience, their views of midwifery and MCOC, the advantages and disadvantages of MCOC models, midwifery management of complications, and the role of the midwife. Interviews were 20 to 40 minutes in length and were digitally recorded then transcribed.

Data analysis

Data were analysed using thematic analysis, following the six-phase framework developed by Braun and Clarke (2012). During the data familiarisation process, the interview recordings were listened to at least twice to ensure the transcriptions were accurate, and additions were made to field notes and interview reflections. Each transcript was read and reread, and codes were developed. The coding process was aided using NVivo 12 Pro software, as well as manual processes. These codes were reviewed during meetings with one of the research supervisors and broad concepts were explored and clarified and then themes were developed.

Rigour

Credibility was achieved by immersion into the data throughout the analysis, documentation of reflection and decision making, storing of the data in an organised manner, and the use of field notes and reflexive journaling throughout the process (Lincoln & Guba, 1986). Peer debriefing was also used. Transferability came from the provision of thick description directly from the data (Lincoln & Guba, 1986). Dependability and confirmability were established with the creation of an audit trail in the form of the reflexive journal, emails of thoughts and ideas shared with supervisors, and documentation of meetings with supervisors.

Ethics

Ethics approval was granted by XXX University Human Ethics Committee (xx Ref No: 2019/549). Doctors were emailed an information and consent form prior to being interviewed, and written consent was obtained. Pseudonyms have been used to ensure confidentiality.

Findings

Ten doctors from four different Australian states (New South Wales, Queensland, South Australia, and Victoria) participated. All participants worked in rural maternity services at the time of the interview, and six had previous experience with MCOC models. Only three participants were currently working in a maternity service with a MCOC model.

Three major themes were identified, all related to the concept of knowing: **knowing the model**, **knowing the midwife**, and **knowing the system** with some overlap across themes.

Knowing the model

Understanding and misunderstandings of MCOC models

Although all participants identified the central tenet of MCOC models involved women having a primary known midwife, they described varying understandings of MCOC models. Better understanding of MCOC models was evident for participants with considerable experience of MCOC models and was also related to the participant's interest in implementing a MCOC model into their service. *Arthur* worked extensively with MCOC models both in Australia and the United Kingdom and confidently provided this accurate definition '"Midwifery continuity of care means, to me, having dedicated, named midwifery contact throughout your pregnancy and the postnatal period, and ideally, with an intrapartum component as well."

Some participants expressed misunderstandings, which included beliefs that MCOC models were the same as GPO models of care, and that any midwifery care was MCOC. The difference between midwives being familiar with birthing women and having a known midwife in a MCOC

model was also not recognised. *Seth* spoke positively of a model he previously experienced, but failed to recognise that this was not a MCOC model:

> We were working solely within our own hospital with midwives who grew up in the community, with the patients and their families, so the midwives knew the mothers and the fathers and the children, there is a great bond that is already present prior to the delivery process and I think that brings a great richness and security to the mother's experience.

Several midwives knowing a woman personally is not the same as having a known midwife within the therapeutic space of a MCOC model.

Doctors' perspectives of advantages and disadvantages of MCOC models

All participants displayed basic knowledge of general advantages of MCOC models consistent with the current evidence. Participants spoke of improved clinical outcomes but specifics of the particular benefits such as reductions in preterm birth and perinatal loss were not offered. Advantages were mostly viewed as a consequence of stronger relationships between women and midwives. No connection was made that these outcomes were a consequence of midwives' clinical capabilities as primary care providers. The relationship between the woman and the midwife in a MCOC model was also seen to result in increased confidence, and higher levels of satisfaction for birthing woman, and improved job satisfaction for midwives. *Brian* emphasised the advantage of the relationship that developed between a midwife and a woman in a MCOC model:

> Well, I think from the woman's point of view it's great. I've always believed that if a woman is going to have a baby, we get much better outcomes and we get a much more satisfying result for everybody if she knows the people that she's working with intimately. It's about relationships.

A disadvantage of MCOC voiced by two participants centred around reduced contact for women with their GPO during the pregnancy. *Murray*, who worked in a service with a MCOC model, expressed this as a gap:

> When the antenatal care is so well provided by continuity midwives, it can leave a bit of a gap in that women then aren't advised to or don't see or don't have the time to see their usual doctor during the pregnancy.

Arthur discussed concerns that reduced contact between women and their GPO as they accessed care in MCOC models might lead to feelings of exclusion, "You may then find that GPOs or specialist obstetricians in the rural communities may feel excluded from the care, and that may affect the ongoing viability of services, the relationships between the different craft groups and families." The relationship between feelings of exclusion and service viability which *Arthur* raised were not explored further.

Difficulty in maintaining the obstetric competence of doctors was also mentioned as a disadvantage. *Seth* expressed this as a theoretical concern:

> In regard to a hospital where the midwifery group practice were directly providing care next to some other rural GPOs that may have limited workloads, then that could impact on the GPOs experience and competency. That would be a concern in that scenario.

From the literature review, changes to the way maternity care was funded to enable midwives to access funding, supported the implementation of MCOC models. It was also reported that these changes created a negative financial impact for the doctors. Participants were specifically questioned about any financial impact that MCOC models may have for them. No participant saw it as a significant issue for them personally, as obstetric practice was only a small part of the workload for most GPO participants. *Brian* described how rather than being a financial burden, MCOC models could relieve work pressure:

> Essentially, I've been a GPO for 30-odd years, so from that point of view I don't rely on my obstetrics for financial gain. It doesn't pay that much anyway compared to the rest of my income. Yeah, I don't really see that there would be a problem from the financial point of view. The only other point of view would be that perhaps I would not have to work as hard, and after 30 years in the game that's attractive.

Knowing the midwife:

There was emphasis from the participants about knowing the individual midwife at a personal level, which did not necessarily translate into an understanding of the scope of the professional role of the midwife. Most of the participants identified that in addition to having a general knowledge about midwifery, personal knowledge of the individual midwife was central to shaping their attitude towards midwives and confidence in MCOC models.

The role of midwives

Participants were questioned regarding their perceptions of the role of the midwife to explore whether this aligned with support of MCOC models. Participants recognised midwives as supportive professionals, as educators for women and families, and as having key roles in health promotion and supporting women through normal pregnancy, labour and birth, and the postnatal period. There was not a focus on the midwife as an autonomous primary care provider.
Murray summarised his thoughts:

> It is very much a longitudinal service that assists women in a whole heap of parts of being pregnant, having a baby, the actual having of the baby, the birth, the care of the baby afterwards, planning for future family members and the like. There's a lot of clinical care involved. There's a lot of science to it but it's also very much a true part of the caring sort of professions and a very rewarding one at that from what I can tell.

The literature review identified concerns with the ability of midwives to manage complications safely and appropriately, and that this could serve as a barrier to supporting MCOC models. All of the participants were questioned about whether this was a concern for them. In terms of the ability to safely manage complications, and to consult and refer appropriately, the focus was on the ability of the individual midwife rather than a profession-wide competency. *Murray* described how he made an individual assessment of each midwife:

> … the ability to do that [manage complications] varies on experience and level of training and all the rest. It's something I don't necessarily take for granted with everyone. Like in all other areas, I try to have an understanding of where a particular midwife I'm working with is at in terms of that knowledge and those skills, but I certainly expect it to be part of the role of a midwife, yes.

Sam described using a similar approach, and modified his own responses according to how well he knew the midwife:

> Yes, it does worry me, but it comes down to knowing your workforce. It's been very interesting going round to different sites, and from working with staff that you've known for 10 years, you've all of a sudden got people who you know for 15 minutes and you're managing an emergency caesar or a sick baby or something. So you get very good at working out who knows what's what. But you don't know what you don't know, so your threshold for checking—coming in and checking on the woman's progress —is lower.

Sam's response demonstrated an assumption that the doctors' role included being aware of and monitoring the competence of individual midwives.

Education and early experience

Where a MCOC had not been implemented, midwives were required to work shift on the wards providing a mix of both nursing and midwifery care and therefore needing registration as a

nurse. This impacted participants’ views about the qualifications of the midwife, with some participants indicating that midwives with nursing degrees were better equipped for rural practice. *Seth* also spoke of direct-entry midwives in rural sites,

> I think your rural GPOs, that there is considerable concern in rural hospitals where a midwife who is direct-entry and doesn’t have experience and understanding around general medical nursing care, so that is a direct concern I would have in a rural environment.

Arthur reflected, “The newer way [direct entry] doesn’t necessarily equip you with all of the skills that you need to work rurally, that you then have to learn on the job, so to speak.”

Several of the participants identified an association between a midwife’s years of experience with doctor’s attitudes towards midwives. *Roger* discussed years of experience in terms of midwives successfully working in MCOC models, saying “There’s also the experience level of the midwives providing that service, because it's a bit tricky for a relatively junior midwife

Ryder similarly said, “Then we have our really junior midwives coming through that would feel overwhelmed at having that level of responsibility.”

Collaboration

Collaboration was discussed in all interviews either directly or indirectly. Viewing MCOC as a collaborative way for doctors and midwives to work together, was associated with GPOs support for MCOC models. *Murray* raised this point:

> I have doctor colleagues who have a negative view of such models. I think sometimes it's based in an ignorance of the exact structure of the model. I think maybe that comes from the fact that they're working in a place where there isn't currently collaborative relationship between the midwives and the doctors. Perhaps because there is too much of a silo arrangement between those two groups. By breaking that down a bit, I think it lends itself to being open to these sorts of models more.

Participants saw their role as providing support, particularly during labour and birth. They provided support for the midwife, should care move outside the midwife's scope, but trusted in the ability of the midwife to work with the woman through labour and birth. This was reflective of the confidence in midwives held by majority of the participants. *Ryder* reflected on his role in labour and birth*:*

> I'm there if you need me. Doing a great job, just a bit of encouragement. But I'd eyeball the midwife and say you've been here continually doing your continuous midwifery care. You care for this woman; I'm here if you need me and usually that'd be in the case in our unit of getting water, hot packs and there if things go pear shaped.

Knowing the system:

The views of informants about MCOC models, incorporated knowledge of the system within which these models are implemented. Informants spoke of how health systems can have significant impact on the ability for MCOC models to be developed and implemented, and of the possible impacts that MCOC models might have on the health system. The implementation and sustainability of MCOC models were discussed in the majority of the interviews. This included staff shortages, interest in and support for the model at all levels including the health service executive level, and governance and financial considerations. *Ryder* suggested that the hospital executive provided barriers to establishing MCOC models at the service he worked with, "I guess in terms of disadvantages the hospital see it [MCOC model] as something too complex, too hard to arrange, too expensive."

Brian also voiced the opinion of lack of support for MCOC models at the hospital system level:

> The major reason why I haven't [worked with MCOC models] is just because of the fact that most of the public hospital systems don't seem to have a lot - or haven't in the past had a lot of interest or a lot of support for that model.

Brian summarised the issue of staff shortages of both midwives and GPOs, “I think the biggest problem is that at the moment we have a lot of difficulty keeping midwives anyhow. We're also finding it more and more difficult to find rural GPOs.”

Staff shortages make it difficult to have a stable foundation on which to build a new model of care. Conversely, developing and implementing MCOC models may attract staff to the service. Casualisation of the workforce, with increasing dependence on midwives employed through agencies, who have short-term contracts was also an issue. *Brian* spoke of the shift towards a casual midwifery workforce:

> At the present time we have very few full-time midwives. I think we've got two or maybe three, and the rest of the positions were taken up with some casuals who were previously on the permanent staff who stopped to have children of their own and have come back on a more casual basis and, otherwise, we get a lot of agency midwives.

Arthur suggested the financial benefits of MCOC that weren’t necessarily recognised by rural services, whereby services can reduce their costs with MCOC model implementation:

> If you’re reducing your service needs or your [in hospital] care requirements, you’re going to have [positive] financial implications for the services. You have reduced length of stays, because women with continuity models are more likely to be managed in the community far more, both antenatal, in labour, and afterwards with earlier discharge, and better and less postnatal needs that you would necessarily [have] if you had that more fragmented care model.

Arthur saw the opportunity for the introduction of more MCOC models as a workforce strategy for health services:

> I do see, however, the advantages of midwifery continuity models of care in rural places where there is a scarcity of GPOs or specialist obstetricians. I think that may become more

apparent because of the ageing general practitioner population, and the lack of people wanting to take on rural proceduralist roles.

Discussion

This study aimed to gain understanding of the views of doctors regarding midwifery and MCOC models of in the Australian rural context. Data analysis revealed three themes: knowing the model, knowing the midwife, and knowing the system. Misunderstandings about how MCOC models work; the role of obstetric doctors in relation to MCOC models; the professional role of the midwife; midwifery and nursing qualifications; as well as health systems issues, were aspects of the findings that contributed to these themes.

Most participants in this study had a basic knowledge of MCOC models but not a specific understanding of the design, functioning, and outcomes of the models. Specifically, doctors' did not report a complete understanding of the autonomous role and professional scope of the midwife, didn't recognise that knowing a midwife is different to having a known midwife, failed to consider that any midwifery care is not the same as MCOC, and lacked knowledge of the existence of governance structures and processes that assessed the competence and skills of midwives. Research undertaken by Styles et al. (2019) found that doctors' positive opinions of midwifery and their understanding of the role of the midwife aligned with a knowledge of how MCOC models function. Increasing doctors' knowledge of the specifics of design, function, and benefits of MCOC models may help to address their concerns.

Participants in our study expressed concern about being excluded from maternity care as well as the perceived break in the care they provided to women as their GPO. In previous studies, being involved in pregnancy and birth has been described as a positive experience, which gave doctors a break from other more challenging clinical work (Jaye et al., 2013). With the introduction of new models, this sense of loss needs to be acknowledged as a reality for some doctors. It also

needs to be acknowledged that GPOs see themselves as providing good care and the arguments for change may not be evident to them. Doctors lacked a complete understanding of MCOC models. Better understanding of midwifery and MCOC models addresses these issues and may generate altruistic support for a model that generates better outcomes. When implementing MCOC models, strategies need to be considered that recognise the perceived loss faced by GPOs. Doctors' place in maternity care in the future needs to be clearly defined and the opportunity presented to embrace new ways of working.

This study highlighted the preference of the doctors for knowing the individual midwife. Most participants reflected confidence in the skills, knowledge, and competence of the midwives who they worked with over an extended period. Collaborative relationships are an important part of MCOC models (Homer. 2016). Positive and supportive interprofessional collaboration between medical and midwifery staff enable successful implementation of MCOC models (Styles et al., 2019). Individual relationships are not the only path to interprofessional collaboration. In the current health system, locum and agency cover in healthcare is common. When this occurs the healthcare team don't have established individual relationships but are aware of the roles that need to be undertaken by each member, enabling successful care to be provided. With a greater understanding and respectful recognition of the professional autonomy of midwives, knowing midwifery as a profession would replace the need to know the individual midwife.

Participants assumed it was their role to assess and decide whether the midwife was competent or not, to a standard determined by the doctors. The Nursing and Midwifery Board of Australia have rigorous governance processes and professional standards of practice in place for midwives (Nursing & Midwifery Board of Australia, 2018). There are also localised health service processes for performance management and managing clinicians of concern (NSW Health Workplace Relations, 2018). This governance is outside the role of the GPO. By defining the role of doctors within the maternity care setting, it can be clarified that midwives are not subordinate or

accountable to obstetric doctors. This may relieve the sense of responsibility doctors seem to have for assessing the practice of individual midwives.

Concerns were also raised by participants about midwives without nursing qualifications working in rural sites. Restructuring rural maternity services so that all maternity care is provided in MCOC models would mean midwives could work in midwifery and their midwifery skills would not be underutilised (Yates et al., 2011). The presence of midwives with direct entry qualifications working in MCOC models is well established in Australia and internationally. For rural areas, using midwives with direct entry qualifications could be an opportunity to strengthen and stabilise the midwifery workforce. Innovations in service design could expand continuity of carer across the first 1000 days in areas where there are lower numbers of birthing women. Additionally, midwives as primary care providers may also provide health services in areas such as sexual health and contraception, child and family health and perinatal mental health to address gaps, particularly in vulnerable populations such as Aboriginal and Torres Strait Islander families, where populations are higher in rural areas (Siverston et al., 2020).

Participants highlighted barriers to MCOC model implementation at the level of the health service executive. There appears to be little incentive, particularly for small hospitals, to offer maternity care options other than those already existing in the community (Sutherland et al., 2009). As the current National Strategic Maternity Service Plan (COAG, 2019) prioritises woman-centred care, governments should look to the implementation of funding mechanisms that incentivise the achievement of evidence- and value-based care such as MCOC models (Lukas et al., 2010). The implementation of MCOC models in New Zealand and Alberta Canada was made possible by changes to maternity service funding at a government level (Jaye et al., 2013; Ratti et al., 2014).

Having leadership and accountability at the health service executive level to implement evidence-based practice may also assist in building strong interprofessional relationships between the medical and midwifery professions. Leadership in establishing MCOC models is generally reliant

on small groups of motivated midwives (McInnes et al., 2020) who must overcome organisational inertia to change. Instead we argue that health service leaders hold responsibility for bringing key stakeholders together to work towards implementing best-practice models. Organisational change is more likely to occur when senior leadership create systems, processes, and cultures with clear vision and direction for change, at the same time recognising the complexities for implementation of evidence-based practice (Lukas et al., 2010).

Recommendations

Development of a national government funded education program and guidelines for GPOs who are involved in the implementation of a MCOC model would clarify and establish roles and expectations for doctors. This would specifically address the structure and design of MCOC models and pathways for consultation and referral and provide suggestions to support the development of stronger interprofessional relationships. There could be consideration of medical students working with midwives during their undergraduate term, to gain and understanding around the role of midwives, woman-centred care, and models of maternity care.

Financial and regulatory incentives need to be established to build and drive the implementation, expansion and maintenance of MCOC models. Hospital accreditation processes could be harnessed to drive expansion of MCOC models (Gamble et al., 2020). Future research should aim to explore the barriers for health service executives to implement and sustain evidence-based care and progress towards universal access to MCOC models.

Strengths and limitations

This study addresses a significant gap in our knowledge of rural doctors' views towards midwifery and MCOC models. The research was conducted under the close supervision of two experienced supervisors who provided clear guidance and support to ensure the integrity and quality of the research and used a reflexive approach to assist in identifying and controlling biases (Darawesh, 2014). We are aware that most participants in the research already had an interest in MCOC models and therefore the findings may not reflect the views of all rural doctors. Knowing

that the interviewer was a midwife may have influenced participants' responses. Alternately, participating in this study may have presented doctors with an opportunity to share insights that they may have been reluctant to share with a medical researcher.

Conclusion

This study provided insight into rural Australian doctors' views towards midwifery and MCOC models. Doctors currently play a significant role in the provision of maternity care in the rural setting, yet our findings demonstrated that they did not have a clear understanding of the role of the midwife or of MCOC models. While participants in this study did not voice strong opposition to implementation of MCOC, they did express concern about changes to their role in maternity care with the advent of MCOC. Clarification of roles and responsibilities of professionals in MCOC models, a thorough understanding of the structure and function of MCOC models, a shift in the responsibility for establishing and sustaining MCOC models from midwives to hospital executives may help to overcome the barriers to providing rural Australian women with access to MCOC models.

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