



Australian College of
Midwives

ACM: For midwives. With women. For the future.

Working Better for Medicare
(Distribution Levers - Review)

ACM Submission

Issued March 2024

Working Better for Medicare Review – Distribution Levers

The Australian College of Midwives

The Australian College of Midwives (ACM) is the peak professional body for midwives in Australia; and welcomes the opportunity to provide a written submission to the ***Working Better for Medicare Review – Distribution Levers review ‘The Review’***. ACM represents the professional interests of midwives, supports the midwifery profession to enable midwives to work to full scope of practice (SoP), and is focused on ensuring better health outcomes for women, babies, and their families.

Midwives are primary maternity care providers working directly with women and families, in public and private health care settings across all geographical regions. There are over 25,000¹ midwives in Australia and 1,123 endorsed midwives². ACM is committed to leadership and growth of the midwifery profession, through strengthening midwifery leadership and enhancing professional opportunities for midwives.

Terms of Reference

This submission will address the subject matter as identified by the *Working Better for Medicare* (Distribution Levers) survey questions.

Background

The Review examines the effectiveness of ‘current health workforce distribution levers’. Its objectives include to evaluate assumptions, identify inhibiting factors, and identify improvement opportunities and alternative approaches for workforce distribution levers. To date current [distribution levers](#) policy has focused on medical professionals. In view of the declining GP and GP specialist workforce³, it remains critical to ensure the medical workforce is facilitated to work in thin markets.

However further to the [Strengthening Medicare Taskforce Report](#) and associated current reviews, including the [Scope of Practice review](#), it is evident that if ‘high quality, skilled, person centred care for all Australians’ is to be facilitated, the distribution levers for thin markets needs to include not only medical professionals but also all multi-disciplinary primary care professions, including midwives, nurses and allied health professionals.

Midwives are the most appropriate healthcare professionals to provide primary healthcare to women and babies perinatally, and especially when working in Midwifery Continuity of Care models, midwifery care results in the best outcomes for mothers and babies, both clinically and psychosocially^{4,5}.

Maternity in rural and remote locations

There is a shortage of maternity care outside of regional centres⁶. Women living in remote areas are more likely to have delayed access to healthcare when they are pregnant, and complication rates are higher for women living in rural and remote areas, including perinatal mortality⁷. Availability of local maternity care improves outcomes for women and babies⁶. There is also a lack of culturally safe, accessible maternity care for Indigenous women living in rural and remote locations⁸. Maternity care in the local community increases cultural safety for Indigenous women.

Midwifery Continuity of Care (MCoC) is a maternity care model where women see the same midwife or small team of midwives throughout their perinatal experience. Midwifery Continuity of Care is known to be the gold standard of maternity care⁹. Women and babies experience reduced interventions and better

outcomes, both physically and^{4,5}. In addition, MCoC costs the healthcare system 22% less than other models of care¹⁰. Midwives provide MCoC in publicly funded models and in private practice.

Clearly the rural maternity workforce of GPs and GP Obstetricians are central to this review, however ACM asserts that consideration should be given to further focus on non-medical professionals, including midwives, in the distribution policy settings as per the objective in this review of identifying ‘improvement opportunities and alternative approaches’ as a key future role of distribution levers.

The priority opportunities for ACM include;

1. Prioritise scale of up MCoC models by incentivising PHNs and Health Services to implement these models, with multidisciplinary collaboration, as is seen in [South Australia](#) and [Maryborough](#)
2. Remove barriers for all midwives to work to full scope of practice in all settings, including rurally and remotely
3. Create equity of incentives for all health professionals
4. Ensure that midwives are included in all incentive programs relevant to rural and remote locations
5. Mandate cultural training and specific training in women’s health for overseas trained doctors
6. Re-open rural and remote birthing services and establish new services in under-serviced areas, prioritising MCoC models of care
7. Upscale roll out of [Birthing on Country](#) models of care
8. Increase the availability of placement opportunities in rural and remote locations
9. Implement training and incentive programs for midwives equivalent to examples such as the [John Flynn Prevocational Doctor Training Program](#) for medical professionals
10. Implement bundled funding in maternity care
11. Place-based funding approaches to create distribution levers for locations of market failure
12. Fund and support Endorsed Midwives to receive training in skills such as pre-conception care, termination of pregnancy care and early childhood care
13. Midwives hold a national registration with the [NMBA](#). There should be a national approach to credentialling (national passport) and scope of practice to allow for locational flexibility

In your view/experience what are the main issues regarding access to primary care, GPs and or medical specialists and their distribution across Australia?

In this section the main issues impacting access to primary maternity care across Australia, especially in rural and remote settings, will be addressed.

Midwifery Continuity of Care by midwives working in private practice and Midwifery Group Practice

Midwives are the most appropriate health professionals to provide primary care to all women during pregnancy, labour, birth and postnatally, and the model of care with the best outcomes for mothers and babies is midwifery continuity of care (MCoC)^{4,5}. Despite extensive evidence of its benefits, under 10% of Australian women currently have access to MCoC⁹. Increasing MCoC in rural and remote areas would increase the availability of appropriate, evidence-based primary maternity care for women. The ratio of midwives and nurses relative to the population working in remote and very remote areas is greater than the ratio of medical professionals¹¹, so harnessing the midwifery workforce to provide primary maternity care would reduce the demand for medical professionals. Contrary to medical professionals, midwives are distributed relatively evenly across Australia, with a range of 11-18% across most Modified Monash Model (MMM) categories.

Midwives are more satisfied working in MCoC models¹², with lower levels of burnout and psychological distress¹³. Shortages of midwives across Australia are exacerbated by attrition rates due to job dissatisfaction¹⁴ and lack of opportunities to practice Midwifery Continuity of Care¹⁵. Retention of Newly Qualified Midwives is a challenge, and the demand for jobs in MCoC models is greater than the number of positions available¹⁶. Therefore, increasing the number of MCoC models in rural and remote areas would attract more midwives to work in these areas. Please see Appendix – Policy Brief Midwifery in Rural Australia by Charles Darwin University and [Molly Wardaguga Research Centre](#).

In remote areas where there is genuinely not a safe referral pathway for women experiencing intrapartum complications, an adapted MCoC model which excludes intrapartum care is an option which provides effective primary maternity care during the antenatal and postnatal period. This model of care, known as Maternal and Postnatal Service (MAPS), has demonstrated positive outcomes, is well received by women⁹, and is being used in some location already, for instance [Alukura Maternity Services](#).

There are multiple barriers to increasing the availability of MCoC in Australia, some of which are outlined below:

Health system barriers

- MCoC is not mandated or required as part of health service re-accreditation⁵
- Funding models currently support fragmented maternity care¹⁷
- General Practitioners have limited understanding of midwifery models of maternity care¹⁸, so are less likely to refer to MCoC models, if available.

Endorsement to prescribe medications

- Endorsed Midwives are midwives who have met the requirements of the [Nursing and Midwifery Board of Australia](#) to qualify to prescribe scheduled medicines. This means that they can provide Private Practice Midwifery services which meet all the perinatal needs of a well woman and baby. As an independent practitioner, they can relieve the maternity care burden for GPs and GP Obstetricians working in rural and remote locations
- There are low but increasing numbers of Endorsed Midwives in Australia (see below):

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	No PPP	Total
As at 30 Sept 2023	22	162	19	359	89	18	177	197	80	1123

Figure 1 – Midwives with scheduled medicines endorsement²

- The endorsement application process for midwives is time consuming and challenging¹⁹
- The requirement for 5,000 hours of recent clinical experience prior to endorsement is prohibitive for midwives working part time, midwives who take maternity leave, and midwives working in rural and remote settings who work in hybrid jobs which include a proportion of general nursing work. The post-registration clinical practice hours are not based on evidence, and there are calls to include prescribing in pre-registration programs so that midwives graduate workforce-ready²⁰
- Endorsed Midwives working in public healthcare often cannot exercise their prescribing authority, which restricts medication access for women¹⁹ and leads to workarounds such as blank pre-signed pathology forms²¹. Expansion of the 19 (2) exemption would allow all primary care providers, including midwives to work to scope, thereby maximising the workforce use.

Medicare rebates

- Whilst out of scope for this review, it is important to note that Medicare rebates are not sufficient to cover the cost of a midwife in private practice, especially in remote areas where the midwife may need to travel long distances for an appointment. This leads to the need to charge a gap fee, reducing the availability of affordable maternity care options for women²¹
- Planned birth at home is safe for mothers and babies^{22,23}. In rural and remote locations, planned home birth may be a safer option than travelling large distances while in labour or relocating prior to birth.

Insurance

- There is currently only one Professional Indemnity Insurance product available to Privately Practicing Midwives, and this product is only available for Endorsed Midwives, and does not cover intrapartum care outside of hospital. This is a significant barrier to midwives working to their full scope of practice to provide primary maternity care in all settings in Australia, and needs to be urgently addressed. In rural and remote locations, where maternity care options are often lacking, this insurance gap significantly impacts on choices for childbearing women

Recommendations

- ***Prioritise scale of up MCoC models by incentivising PHNs and Health Services to implement these models, with multidisciplinary collaboration, as is seen in [South Australia](#) and [Maryborough](#)***
- ***Remove barriers for all midwives to work to full scope of practice in all settings, including rurally and remotely***
- ***19 (2) Exemption: Enact Recommendation 37 of the [NHRA mid-term report](#), ‘The process for the application and approval of exemptions from Section 19(2) Health Insurance Act 1973 should be reviewed, simplified and expanded to improve access to bulk-billed primary health care (MBS-eligible GP, nursing and allied health services) in rural and remote areas and where there are thin and failing markets.’ noting midwifery also to be included in this recommendation.***

Rural and remote birthing services

Birthing services in remote areas have seen progressive closure over a number of years, with 138 rural maternity units closed across Australia between 1995 and 2005²⁴. Closure of local birthing services increases cost and risk for women and babies, including financial, emotional and safety risks²⁵. Rural and remote women frequently need to drive up to four hours to access their nearest maternity service, and to relocate for a month or longer while awaiting birth²⁵. Inaccessibility of perinatal care leads to women avoiding seeking healthcare until concerns are urgent, and travel distances result in roadside births²⁵, unintended home births, and births attended by ambulance officers or inadequately trained nurses or doctors. The financial burden to families of a lack of local maternity care services includes accommodation, travel, and childcare costs, and current subsidy schemes are insufficient and not well known²⁵. There is also a significant social, cultural, and emotional burden for women and families when services are not located in their community, a burden which is overlooked when only clinical outcomes are considered²⁶.

Closures have been based on concerns about distance to the nearest facility with the capacity to perform an emergency caesarean section, however these concerns do not take into account the volume of high-level evidence for the safety of midwifery models of care for low-risk women²⁵. Outcomes for women being cared for in small centres are as good as or better than for women in larger hospitals²⁴.

Small maternity facilities are often closed when workforce pressures change, or availability of medical professionals fluctuate. An alternative to closure of these essential services is to accommodate the option for facilities to flex between level 2 and 3 birthing services (supporting more or less complexity and intervention) depending on relevant factors.

Recommendations

- ***Re-open rural and remote birthing services and establish new services in under-serviced areas, prioritising MCoC models of care***

Midwifery Scope of Practice and Access to Care

Many rural positions request dual registration (nursing and midwifery) to fill vacancies. This prevents many midwives from applying for these positions. In some remote Australian contexts, dual qualified Registered Nurse / Midwives are not able to work to midwifery scope as they are employed as registered nurses. As midwifery does not appear in the role description, the employee is not able to work in the capacity of a midwife while employed in those roles. In order to recruit and retain midwives in rural and remote areas, these barriers should be addressed.

There are jurisdictional and local hospital level variance in what is considered scope of practice for midwives. Midwives are often required to be 'credentialed' for many areas which are routine scope of practice for midwives, including water immersion in labour, perineal suturing, and cannulation. In addition, there are many skills that are considered normal scope in some areas and extended scope in others. These jurisdictional variations reduce access to care for women and increase frustrations for midwives navigating illogical barriers to working to their full scope of practice.

Recommendations

- ***Midwives hold a national registration with the NMBA. There should be a national approach to credentialling (national passport) and scope of practice to allow for locational flexibility***

Midwifery Scope of Practice and Reproductive Health

Endorsed Midwives can provide extensive primary health care to rural and remote communities, including pre-conception, termination of pregnancy, and early childhood care²⁷. Supporting midwives to offer these services would increase availability of primary health care for women and children in under-serviced locations, as well as extending the continuity of care experience for women, which promotes a sense of safety and increases likelihood of accessing services.

Recommendation

- ***Fund and support Endorsed Midwives to receive training in skills such as pre-conception care, termination of pregnancy care and early childhood care***

First Nations Populations: Birthing on Country

For Indigenous women and babies, intrapartum care in their community is culturally important. Deep spiritual connection to their homeland is a part of their heritage, and ensuring their babies spiritual connection to the land by Birthing on Country is deeply significant²⁸. In addition, Indigenous women often experience racism from health professionals, and travel to distant urban hospitals does not allow for inclusion of family support²⁸.

Indigenous babies are twice as likely to be born preterm as non-Indigenous babies, which leads to increased morbidity and mortality rates²⁹ and Indigenous mothers are 2-3 times more likely to die in childbirth³⁰. In the Birthing in Our Community model, designed by Mater Hospital, women are cared for by a midwife in a continuity of care relationship alongside a First Nations Family Support Worker. Care in this model has shown a 5.34% to 14.3% reduction in preterm births, along with a saving to the health care system of \$4810 per mother-baby pair (in a 2023 study)²⁹.

Birthing on Country models are being implemented around Australia, but face barriers. These include legislative³⁰, as well as issues already outlined in relation to MCoC such as inadequate MBS items and lack of Professional Indemnity Insurance policies for out-of-hospital births²⁰. Other challenges include requirements for medical practitioner presence to licence a Level 2 private maternity facility, inflexible and expensive unsubsidised insurance policies for hospital birth, and funding²⁰. The [RISE framework](#) has been proposed and tested as a model to support widespread implementation of Birthing on Country models³¹.

Recommendations

- ***Upscale roll out of Birthing on Country models of care***

Funding

Maternity care funding is fragmented. Funding is distributed via the MBS, public hospital funding, and private health insurance which has been shown to be inefficient and increases costs³². Due to the focus on medical acuity and diagnosis, it also minimises choice, and is a barrier to best practice CoMC.

Most maternity care funding is activity based, meaning the more episodes of care provided, the more funding the health service receives. Bundled funding is an alternative mechanism which funds the full episode of care including pregnancy, birth and postnatal care through a bundle payment model. Bundled maternity care funding is recommended as the pilot model for bundled funding payments in the National Health Reform Agreement 2020-2025, and the ACM supports this introduction as per the [NHRA report, recommendation 13](#).

Australian research demonstrates MCoC models deliver cost savings of up to 22% for health services when compared to 'standard', fragmented public service provision¹⁰. This cost saving is largely due to lower rates of intervention, operative births, and inpatient stays. Funding models should incentivise MCoC, which is not only less expensive to the healthcare system but also proven to result in better outcomes for women and babies^{3,4} and increased job satisfaction for midwives¹².

Recommendations

- ***Implement bundled funding in maternity care***

Positive impacts on access

How do the specific workforce distribution levers being reviewed help or support access to primary care, GPs and or medical specialists

As Section 19AA, Section 19AB, DWS and DPA are all related to medical professionals, they do not positively impact on access to primary care by midwives, nurses, or allied health professionals. Incentives offered should be equitable across health professions to encourage a diverse, robust workforce which meets all the needs of rural and remote communities and offers choice for healthcare consumers.

Incentives should recognise midwives as the most appropriate professionals to provide primary maternity care.

Medical practitioners are integral to the provision of safe effective healthcare in rural and remote locations, and in terms of maternity care, distribution of GP obstetricians and GP anaesthetists is essential to consider. Ideally, a collaborative team of midwives, doctors and allied health professionals would provide maternity care services to each community.

Negative impacts on access

How do the specific workforce distribution levers being reviewed hinder or limit access to primary care, GPs and or medical specialists

The [Strengthening Medicare Taskforce Report](#) prioritises multidisciplinary care, continuity of care, and reduced fragmentation.

‘Coordinated multidisciplinary teams of health care professionals work to their full scope of practice to provide quality person-centred continuity of care, including prevention and early intervention; and primary care is incentivised to improve population health, work with other parts of the health and care systems, under appropriate clinical governance, to reduce fragmentation and duplication and deliver better health outcomes.’

[Strengthening Medicare Taskforce Report](#), p. 3

Despite these Government commitments, Section 19AA, Section 19AB, DWS and DPA are all related to medical professionals. Including nurses, midwives, and allied health professionals in distribution levers would attract a wider range of primary health care professionals to rural and remote areas. Increased recruitment of this wider workforce would improve choice and access for healthcare consumers, and support collaborative multidisciplinary healthcare.

Grants and incentive schemes

[Government incentive schemes](#) which aim to attract healthcare workers to rural and remote locations are overwhelmingly focussed on medical professionals, and often exclude midwives. For instance, the [HELP for Rural Doctors and Nurse Practitioners](#) Program does not include Endorsed Midwives. Likewise, the [Workforce Incentive Program](#) is largely directed at doctors. The recent inclusion of midwives into the Workforce Incentive Program requires promotion to encourage more GP practices to employ midwives, and expansion is required for private midwifery practices to receive the same incentives. Recommendations in the [Strengthening Medicare Taskforce Report](#) include increased investment in the Workforce Incentive Program to improve multidisciplinary teamwork and empower all health professionals to work to their full scope of practice. Expansion to include private midwifery practices and increase inclusion of midwives in general practices would work towards this goal.

While small [grants](#) are available for midwives relocating to rural areas, more extensive support programs such as the [Remote Area Nursing Pathway](#) and [Rural Nursing Scholarships](#) are available to nurses but not midwives. [Australia’s Long Term National Health Plan](#) specifies the goal of 3,000 new doctors and 3,000 new nurses in rural and remote areas, but midwives are not mentioned in the document. National plans, funding and incentive models should prioritise midwives as the most appropriate health professionals to provide maternity care for well women.

An important consideration when introducing incentives for health professionals to relocate to rural and remote locations is not to overlook those clinicians already living and working regionally. Therefore, an additional consideration is to incentivise midwives who already live in rural and remote locations to remain there, to encourage workforce stability. This must include education and upskilling opportunities.

Recommendation

- ***Ensure that midwives are included in all incentive programs relevant to rural and remote locations***

Modified Monash Model

It is important to have a system for classifying areas in need of greater access to healthcare. The [Modified Monash Model](#) (MMM) is not a perfect system, but appears to be the best currently available tool. It is noted that although this system is not specific only to medical practitioners, the language used to describe the Model refers only to doctors, and does not reference midwives, nurses or other health professionals. As doctors are not the only health professionals who provide primary health care in these locations, this language could be misleading and potentially lead to solutions that do not consider all available avenues for improving access to health care for people living in rural and remote locations.

Another flaw in this classification system is that the MMM does not strongly relate to healthcare worker shortages. For instance, some areas classified as MMM1 are listed as DWS for all specialities according to the [Health Workforce Locator](#). Including MMM1 and MMM2 areas in distribution strategies calls into question the effectiveness of this classification system. In order for distribution levers to be constructive, there needs to be a way to accurately identify areas in greater need of additional healthcare workforce. If all MMM areas are being included, this suggests that the model is not meeting this need effectively. A more appropriate model would take into account real-time shortages of specific professions, and would also consider the most necessary healthcare professionals according to each community's needs.

Recommendations

- ***Place-based funding approaches to create distribution levers for locations of market failure***

Impacts on availability of training

How do the specific workforce distribution levers being reviewed impact the availability of training opportunities for primary care, GPs and/or medical specialists?

Whilst not universally available, the workforce distribution levers in general incentivise medical professionals. ACM recommends that consideration is given to also prioritising training opportunities for midwives, nurses or allied health professionals. In order to harness the full potential of the primary healthcare workforce, midwives and other health professionals need to be considered and included in all efforts to recruit and retain healthcare professionals to rural and remote locations.

Students from rural and remote areas are more likely to decide to work in rural and remote locations, and students who undergo placements (especially long placements) in rural and remote locations are also more likely to choose to work in a similar area^{33, 34}. Therefore, prioritising recruiting and training health professionals from areas with greater need for primary healthcare workers would be beneficial, as would increasing the availability of placement opportunities in rural and remote areas.

In a study of nursing and allied health students and new graduates, all respondents expressed the opinion that recruitment and retention of nursing and allied health professionals to rural and remote areas is seen as less important than recruitment and retention of medical practitioners, and that nursing and allied health professionals are disadvantaged in this area³⁵. Additionally, the majority of respondents were unaware of incentives and initiatives intended to attract nurses and allied health professionals to rural and remote areas³⁵.

To capitalise on the potential of midwives, especially midwives working in rural and remote locations, financial, legislative and education support is needed to make it easier for midwives to become endorsed and to upskill to work to full Scope of Practice. Furthermore infrastructure such as safe housing and access to childcare options is also required.

Recommendations

- **Increase the availability of placement opportunities in rural and remote locations**
- **Implement training and incentive programs for midwives equivalent to examples such as the [John Flynn Prevocational Doctor Training Program](#) for medical professionals**

Impacts on quality of practice

How do the specific workforce distribution levers being reviewed impact the quality of practice for primary care, GPs and/or medical specialists?

'General practice incentive payment programs should be better targeted and simplified to more effectively incentivise innovation, and to deliver high-quality models of **multidisciplinary team-based care** with measurable quality care and health outcome improvements.'

[Strengthening Medicare Taskforce Report](#), p.5

The specific distribution levers do not consider midwives, nurses or other health professionals. This is not in line with Government commitments to prioritise multidisciplinary care. As noted above under 'Grants and incentive schemes', some incentives such as the [Workforce Incentive Program](#) and [Practice Incentive Program](#) reduce true multidisciplinary collaboration by only including midwives and other health professionals as long as they are working within a GP practice, not as independent practitioners.

Section 19AB

Section 19AB is a negative lever, as opposed to positive levers such as incentives. Levers that bond medical practitioners to rural and remote locations have the potential to decrease effective multidisciplinary teamwork between midwives and doctors, as doctors may be living and working in locations they do not wish to be in, and rotations in and out of rural and remote areas can fragment attempts to establish mutually beneficial working relationships which would lead to the best care for families.

In reviewing distribution levers, consideration must be given to the personal sustainability of living and working conditions for health professionals in rural and remote locations. Programs such as Section 19AB that bond practitioners to work in areas they may not prefer must consider the potential impact on morale, and should include a focus on supporting health professionals to be integrated into the local community. Length of commitment should also be considered, and must balance the importance of stability against mental health and job satisfaction of the individual practitioner. Ten years is an onerous length of time to be required to work in a less-preferred location and / or speciality.

As a result of Section 19AB, it is important to note that overseas trained doctors are sometimes required to work outside of their speciality as part of this commitment, which may not be the optimal use of their skills and training, and in some cases may result in doctors working in areas of healthcare they have relatively little training or experience in. Cultural training, especially in Indigenous culture and women's health, should be provided to all overseas trained doctors, especially those working in rural and remote locations.

Recommendations

- **Create equity of incentives for all health professionals**
 - *Distribution levers should consider impact on morale of health professionals, and how this affects healthcare consumers*
- **Mandate cultural training and specific training in women's health for overseas trained doctors**

Solutions

The Australian College of Midwives recommends the following actions to improve equity of access to quality primary health care for rural and remote women. See details under Recommendations above.

1. Prioritise scale of up MCoC models by incentivising PHNs and Health Services to implement these models, with multidisciplinary collaboration, as is seen in [South Australia](#) and [Maryborough](#)
2. Remove barriers for all midwives to work to full scope of practice in all settings, including rurally and remotely
3. Create equity of incentives for all health professionals
4. Ensure that midwives are included in all incentive programs relevant to rural and remote locations
5. Mandate cultural training and specific training in women's health for overseas trained doctors
6. Re-open rural and remote birthing services and establish new services in under-served areas, prioritising MCoC models of care
7. Upscale roll out of Birthing on Country models of care
8. Increase the availability of placement opportunities in rural and remote locations
9. Implement training and incentive programs for midwives equivalent to examples such as the [John Flynn Prevocational Doctor Training Program](#) for medical professionals
10. Implement bundled funding in maternity care
11. Place-based funding approaches to create distribution levers for locations of market failure
12. Fund and support Endorsed Midwives to receive training in skills such as pre-conception care, termination of pregnancy care and early childhood care
13. Midwives hold a national registration with the NMBA. There should be a national approach to credentialling (national passport) and scope of practice to allow for locational flexibility

Conclusion

Current distribution levers focus exclusively on medical professionals, and do not acknowledge or capitalise on the midwifery workforce as the most appropriate health professionals to provide primary maternity care across Australia, including in rural and remote locations. Actioning our solutions would significantly increase access to quality primary health care for women and babies.



Helen White
Chief Executive Officer

E: Helen.white@midwives.org.au

W: <https://www.midwives.org.au>



Alison Weatherstone
Chief Midwife

E: Alison.Weatherstone@midwives.org.au

Attribution: Aya Emery, ACM Policy Officer

Consent to publish

ACM consents to this submission being published in its entirety, including names.

Consent to provide further information

ACM is available to provide further expert opinion and advice if required.

References

1. Australian Government. (2023). *Summary Statistics, Nursing and Midwifery Professions*. [Summary Statistics, Nursing and Midwifery Professions \(health.gov.au\)](https://www.health.gov.au)
2. Nursing and Midwifery Board. AHPRA. (2023). *Statistics. Nurse and Midwife – Registration Data Table – 30 September 2023*. [Nursing-and-Midwifery-Board---Report---Registrant-data---30-September-2023.PDF](https://www.nmb.gov.au/~/media/Files/Statistics/2023-24/Nursing-and-Midwifery-Board---Report---Registrant-data---30-September-2023.PDF)
3. Royal Australian College of General Practitioners. (2023). *General Practice health of the Nation 2023*. [Health-of-the-Nation-2023.pdf.aspx \(racgp.org.au\)](https://www.racgp.org.au/~/media/Files/Statistics/2023-24/Health-of-the-Nation-2023.pdf.aspx)
4. Sandall, J., Soltani, H., Gates, S., Shennan, A., & Devane, D. (2016). Midwife-led continuity models versus other models of care for childbearing women. *The Cochrane Database of Systematic Reviews*, 4(4). <https://doi.org/10.1002/14651858.CD004667.pub5>
5. Gamble, J., Browne, J., & Creedy & D. K. (2021). Hospital accreditation: Driving best outcomes through continuity of midwifery care? A scoping review. *Women and Birth*, 34(2), 113–121. <https://doi.org/10.1016/j.wombi.2020.01.016>
6. Kuliukas, L., Warland, J., Cornell, P., Thomson, B., Godwin, H., & Bradfield, Z. (2023). Embracing the continuity of care experience: A new Australian graduate entry master of midwifery course with a student caseload of 15 women per year. *Women and Birth*, 36(2), 151–154. <https://doi.org/10.1016/j.wombi.2022.11.011>
7. Australian Institute of Health and Welfare. (2022). *Mothers who live in remote areas and their babies*. Australia's Health 2022 data insights. [Chapter 9: Mothers who live in remote areas and their babies \(aihw.gov.au\)](https://www.aihw.gov.au/reports/2022/09/mothers-who-live-in-remote-areas-and-their-babies)
8. Munns, A. (2021). Community midwifery: A primary health care approach to care during pregnancy for Aboriginal and Torres Strait Islander women. *Australian Journal of Primary Health*, 27(1), 57–61. <https://doi.org/10.1071/PY20105>
9. Cummins A., Griew K., Devonport C., Ebbett W., Catling C. & Baird K. (2022). Exploring the value and acceptability of an antenatal and postnatal midwifery continuity of care model to women and midwives, using the Quality Maternal Newborn Care Framework. *Women and Birth*, 35(2), 59-69. <https://doi.org/10.1016/j.wombi.2021.03.006>
10. Callander, E. J., Slavin, V., Gamble, J., Creedy, D. K., & Brittain, H. (2021). Cost-effectiveness of public caseload midwifery compared to standard care in an Australian setting: A pragmatic analysis to inform service delivery. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care*, 33(2). <https://doi.org/10.1093/intqhc/mzab084>
11. Australian Institute of Health and Welfare. (2022). *Health workforce*. <https://www.aihw.gov.au/reports/workforce/health-workforce#rural>
12. Dawson, K., Newton, M., Forster, D., & McLachlan, H. (2018). Comparing caseload and non-caseload midwives' burnout levels and professional attitudes: A national, cross-sectional survey of Australian midwives working in the public maternity system. *Midwifery*, 63, 60–67. <https://doi.org/10.1016/j.midw.2018.04.026>
13. Fenwick, J., Sidebotham, M., Gamble, J., & Creedy, D. K. (2018). The emotional and professional wellbeing of Australian midwives: A comparison between those providing continuity of midwifery care and those not providing continuity. *Women and Birth: Journal of the Australian College of Midwives*, 31(1), 38–43.
14. Matthews, R. P., Hyde, R. L., McLachlan, H. L., Llewelyn, F., & Forster, D. A. (2024). Midwifery workforce challenges in Victoria, Australia. A cross-sectional study of maternity managers. *Women and Birth*, 37(1), 144–152. <https://doi.org/10.1016/j.wombi.2023.07.130>
15. Council of Deans of Nursing and Midwifery. (2023). *Australian midwifery workforce is in crisis: CDNM calls for urgent action*. [CDNM Midwifery Workforce Paper media release 18.8.23.pdf \(cdn-website.com\)](https://www.cdnm.org.au/~/media/Files/Statistics/2023-24/CDNM-Midwifery-Workforce-Paper-media-release-18.8.23.pdf)
16. Australian Government Department of Health and Aged Care. (n.d.). *Department of Health Australia's Future Health Workforce Report – Midwives*. Australian Government. [midwives-australia-s-future-health-workforce-report.docx \(live.com\)](https://www.health.gov.au/~/media/Files/Statistics/2023-24/midwives-australia-s-future-health-workforce-report.docx)
17. COAG Health Council. (2019). *Woman-centred care: Strategic directions for Australian maternity services*. Australian Government Department of Health and Ageing. <https://www.health.gov.au/sites/default/files/documents/2019/11/woman-centred-care-strategic-directions-for-australian-maternity-services.pdf>
18. Thomas, J., Kuliukas, L., Frayne, J., Bradfield, Z. (2022). Factors influencing referral to maternity models of care in Australian General Practice. *Journal of Paed and Child Health* <https://doi.org/10.1111/jpc.15946>

19. Hull, E., Donnellan-Fernandez, R., Hastie, C., Bradfield, Z., & Small, K. (2023). Endorsed midwives prescribing scheduled medicines in Australia: A scoping review. *Women and Birth: Journal of the Australian College of Midwives*, 37 (2), 288-295. <https://doi.org/10.1016/j.wombi.2023.10.009>
20. Roe, Y., Allen, J., Haora, P., Hickey, S., Briggs, M., Wilkes, L., Nelson, C., Watego, K., Coddington, R., Ireland, S., Kruske, S., Gao, Y., & Kildea, S. (2023). Enabling the context for Aboriginal and Torres Strait Islander community-controlled Birthing on Country services: Participatory action research. *Women and Birth: Journal of the Australian College of Midwives*, 37(2), 368-378. <https://doi.org/10.1016/j.wombi.2023.11.007>
21. Medway, P., Sweet, L., & Müller, A. (2021). Barriers and enablers for midwives to use the Nursing and Midwifery Board of Australia's endorsement for scheduled medicines for midwives. *Women and Birth: Journal of the Australian College of Midwives*, 34(1), 66. <https://doi.org/10.1016/j.wombi.2020.06.001>
22. Homer, C. S. E., Cheah, S. L., Rossiter, C., Dahlen, H. G., Ellwood, D., Foureur, M. J., Forster, D. A., McLachlan, H. L., Oats, J. J. N., Sibbritt, D., Thornton, C., & Scarf, V. L. (2019). Maternal and perinatal outcomes by planned place of birth in Australia 2000 - 2012: A linked population data study. *BMJ Open*, 9(10). <https://doi.org/10.1136/bmjopen-2019-029192>
23. Scarf, V. L., Rossiter, C., Vedam, S., Dahlen, H. G., Ellwood, D., Forster, D., Foureur, M. J., McLachlan, H., Oats, J., Sibbritt, D., Thornton, C., & Homer, C. S. E. (2018). Maternal and perinatal outcomes by planned place of birth among women with low-risk pregnancies in high-income countries: A systematic review and meta-analysis. *Midwifery*, 62, 240–255. <https://doi.org/10.1016/j.midw.2018.03.024>
24. Stewart, R., & Evans, R. (2017). *A toolkit for reopening remote birthing services: enablers, barriers, tasks and processes*. 14th National Rural Health Conference. https://www.ruralhealth.org.au/14nrhc/sites/default/files/Stewart%2C%20Ruth_A6_0.pdf
25. Bradow, J., Smith, S. D.-V., Davis, D., & Atchan, M. (2021). A systematic integrative review examining the impact of Australian rural and remote maternity unit closures. *Midwifery*, 103. <https://doi.org/10.1016/j.midw.2021.103094>
26. Barclay, L., Kornelsen, J., Longman, J., Robin, S., Kruske, S., Kildea, S., Pilcher, J., Martin, T., Grzybowski, S., Donoghue, D., Rolfe, M., & Morgan, G. (2016). Reconceptualising risk: Perceptions of risk in rural and remote maternity service planning. *Midwifery*, 38, 63–70. <https://doi.org/10.1016/j.midw.2016.04.007>
27. Toll, K., Sharp, T., Reynolds, K., & Bradfield, Z. (2024). Advanced midwifery practice: A scoping review. *Women and Birth*, 37(1), 106–117. <https://doi.org/10.1016/j.wombi.2023.10.001>
28. Buzzacott, C. (2019). Birthing on country report. *Australian Midwifery News*, 19(1), 11–12.
29. Gao, Y., Roe, Y., Hickey, S., Chadha, A., Kruske, S., Nelson, C., Carson, A., Watego, K., Reynolds, M., Costello, J., Tracy, S., & Kildea, S. (2023). Birthing on country service compared to standard care for first nations Australians: A cost-effectiveness analysis from a health system perspective. *The Lancet Regional Health - Western Pacific*, 34. <https://doi.org/10.1016/j.lanwpc.2023.100722>
30. Australian Government. (2023). *Birthing healthy and strong babies on Country*. Australian Government Department of Health and Aged Care. <https://www.health.gov.au/news/mrff-birthing-healthy-and-strong-babies-on-country>
31. Kildea, S., Hickey, S., Barclay, L., Kruske, S., Nelson, C., Sherwood, J., Allen, J., Gao, Y., Blackman, R., & Roe, Y. L. (2019). Implementing birthing on country services for Aboriginal and Torres Strait Islander families: Rise framework. *Women and Birth*, 32(5), 466–475. <https://doi.org/10.1016/j.wombi.2019.06.013>
32. Hu Y., Zhang X., & Callander E. (2023). Unlocking big data to understand health services usage and government funding during pregnancy and early childhood, evidence in Australia. *Birth*, 50 (4), 890-915. <https://pubmed.ncbi.nlm.nih.gov/37434333/>
33. Ogden, J., Preston, S., Partanen, R. L., Ostini, R., & Coxeter, P. (2020). Recruiting and retaining general practitioners in rural practice: Systematic review and meta-analysis of rural pipeline effects. *Medical Journal of Australia*, 213(5), 228–236. <https://doi.org/10.5694/mja2.50697>
34. Skinner, T. C., Semmens, L., Versace, V., Bish, M., & Skinner, I. K. (2022). Does undertaking rural placements add to place of origin as a predictor of where health graduates work? *The Australian Journal of Rural Health*, 30(4), 529–535. <https://doi.org/10.1111/ajr.12864>
35. Sutton, K., Waller, S., Fisher, K., Farthing, A., McAnnally, K., Russell, D., Smith, T., Maybery, D., McGrail, M., Brown, L. & Carey, T. (2016). Understanding the Decision to Relocate Rural Amongst Urban Nursing and Allied Health Students and Recent Graduates. Newborough: Monash University Department of Rural Health. [UQ715984 OA.pdf](https://doi.org/10.1111/ajr.12864)

Appendix



Safety and Effectiveness of Continuity of Midwifery Carer in Rural and Remote Australia

Evidence Base: Midwifery Continuity of Carer Models	
<ul style="list-style-type: none"> Continuity of midwifery carer is best practice² positively impacting outcomes and popular with midwives and women, including low risk pregnancies,^{2,3} complex pregnancies^{4,6} young women,^{7,8} women from a refugee background⁹ and First Nations women.^{8,10-16} Caseload midwifery attracts, motivates and enables midwives to go 'Above and Beyond' such that women feel empowered, nurtured and safe during pregnancy, labour and birth.¹⁷ Caseload midwifery is associated with lower burnout scores, anxiety and depression; and higher autonomy, empowerment and professional satisfaction; whilst midwives working in shift-based models are at greater risk of psychological distress.^{18,19} Continuity of midwifery carer buffers the effects of prenatal maternal stress on mothers and babies reducing depression and anxiety at 6-weeks postpartum²⁰ and improving infant neurodevelopment at 6-months: fine motor skills and problem solving.²¹ Despite this evidence only ~15% of Australian women access MGPs and only ~2% access private midwifery.²² A Cochrane Systematic Review¹ of continuity of midwifery care found outcomes for women and babies are significantly improved when care is offered by a known midwife. 15 randomised studies involving 17,674 mothers and babies found benefits include: 	
Reductions in	Increases in
<ul style="list-style-type: none"> ↓ Fetal loss and neonatal death ↓ Amniotomies (artificial breaking of waters) ↓ Augmentation (Syntocinon) ↓ Epidural and spinal analgesia ↓ Episiotomies ↓ Instrumental births (vacuum or forceps) ↓ Preterm babies ~24% ↓ Cost 	<ul style="list-style-type: none"> ↑ Women not needing analgesia or anaesthesia in labour ↑ Spontaneous vaginal births ↑ Women knowing their midwife at birth ↑ Satisfaction ↑ Women feeling more in control and more able to cope physically and emotionally
Challenges in rural, remote and very remote Australia	
<ul style="list-style-type: none"> 25% of non-First Nations and 64% of First Nations birthing women live outside of cities and have less choice in maternity care.²³ A higher proportion of First Nations birthing women live in remote and very remote areas (19% vs 2%) where they are less likely to have access to midwifery care or maternity services²⁴ and perinatal outcomes reflect vast inequity and disadvantage.^{25,26} Nationally, there has been a 41% decline in rural maternity services (1992–2011) correlating with a 47% increase in unplanned out of hospital births, impacting 22,814 families exposing them to distress, increased clinical risk and poorer outcomes.²⁷ Maternity unit closures are an ongoing concern and inconvenience for women in rural and remote Australia meaning they must travel for birth resulting in greater financial, emotional, social, and cultural strain, distress and loneliness on families.²⁸⁻³⁰ Women from Indigenous communities experience the loss of spiritual and cultural connections when unable to birth on country. This loss of connectivity has been associated with emotional distress, anxiety, stress and depression.²⁷ There has been slow uptake of evidence on best practice midwifery into practice in rural and remote Australia.^{25,31,32} 	
Evidence to support continuity of midwifery carer in rural and remote Australia	
<ul style="list-style-type: none"> Midwives working in caseload models of midwifery care have decreased burnout and increased satisfaction with care provision.³³ Caseload MGP is a safe, satisfying and sustainable model of maternity care in a rural setting over 20-years.³⁴ Caseload MGP operating in a rural primary maternity unit with high populations of young women and First Nations women can be safe, sustained and provide excellent outcomes.³⁵ Success factors supporting caseload midwifery in rural areas include strong leadership across all levels of policy, health service management and, from the midwives themselves.³⁴ Embedding students in rural and private continuity models is highly beneficial to learning, promoting confidence & competence.³⁶ Caseload midwifery builds partnership between woman and midwives, enabling flexible working hours and increased autonomy.³⁷ Being on call allows the midwife to work on the whole scope of midwifery practice.³⁷ Continuity models may be a means to attract midwives to work in rural areas.³⁷ 	



Continuity of midwifery carer is a core component of Birthing on Country Services for First Nations Australians

- **Birthing on Country** is a metaphor for the best start in life for First Nations families⁷ recognising that when women give birth in Australia, they are doing so on the sovereign lands of the First peoples of Australia who have never ceded ownership of their land, seas and sky.³⁸
- **Birthing on Country Services** are complex interventions recommended in national policy³⁹ where they are described as:
 - *“community-based and governed; allow for incorporation of traditional practice; involve a connection with land and country; incorporate a holistic definition of health; value Indigenous and non-Indigenous ways of knowing and learning, risk assessment and service delivery; are culturally competent; and developed by, or with, Indigenous people”*.⁴⁰
- **MGP care is a core element of a Birthing on Country services for First Nations women** but there are only a few MGPs in Australia that target First Nations women despite high levels of acceptability.¹⁶
- Results from an NHMRC partnership project (Indigenous Birthing in an Urban Setting Study) conducted in Brisbane showed statistically significant improvements in care and outcomes for First Nations women receiving the Birthing in Our Community service compared to standard care.^{14,41}

<ul style="list-style-type: none"> ↓ Preterm birth by 38% ↓ Epidural pain relief in labour ↓ Planned caesarean sections ↓ Admissions to neonatal nursery ↓ Cost (\$4810 per mother infant pair¹⁴) ↓ Unborn notifications and babies removed at birth 	<ul style="list-style-type: none"> ↑ First Nations governance and control ↑ Cultural safety ↑ First Nations workforce (~550%) ↑ Integration of wrap around services ↑ Women presenting early and more often ↑ Continuity of midwifery and community-based care ↑ Known midwife at birth ↑ Physiological management of third stage ↑ Exclusive breastfeeding at discharge
---	---

National Policy Supports access to continuity of midwifery carer in Rural and Remote Australia

In response to consumer demand and a reliable evidence base, Australian Governments have committed to improving rural and remote women’s access to midwifery models of care over many years:

- In 2008, all Australian state and territory Governments committed to: *“extending and enhancing primary maternity services models as a preferred approach to providing pregnancy and birthing services to women with uncomplicated pregnancies.”*⁴²
- In 2019, these commitments were then embedded in Australia’s national maternity policy document that supports woman-centred care and access to maternity services.³⁹
- In 2019, the Australian Medical Association Rural Health Issues Survey identified the top 10 solutions for rural health care and the top priority was extra funding for resources and staff with the goal of creating a better workplace to attract long term staff.⁴³ Despite their recommendations the frameworks and guidelines are not being translated into practice in the rural sector. Consequently, there is an inequity between recommendations for best practice and what transpires into local policy and operating procedures.⁴⁴

Primary Maternity Units (PMUs)

PMUs are defined as birthing services without onsite access to caesarean section, also known as birth centres and Level 2 maternity units in Australia. Access to an operating theatre is not required 24/7 in the context of low-risk birthing. There is strong evidence that PMUs provide safe perinatal care for women who are classified as low-risk including rural and remote areas.^{35,45-49}

- They report higher spontaneous vaginal births, less caesarean section rates, reduced odds of intrapartum interventions and similar improved odds of neonatal well-being.
- Despite the evidence base for PMUs, we found few across Australia (3 urban; 17 rural; 0 remote), reflecting a lack of medical support in some cases, risk aversion and sustainability concerns in others⁵⁰.
- Additionally, strong evidence finds distance to care, accidental, out-of-hospital births, increased psycho-social stress, social and cultural vulnerability and unstable services lead to worsened outcomes for women and their babies³².
- Whilst policy at the national level reflects a particular strategic intent for maternity services, there is a considerable gap between this intent and service delivery at local levels. Contributing factors were found to be ad-hoc local, non-evidence based decision-making, poorly prepared or supported leadership, lack of knowledge of contemporary models of care and inefficient use of maternity staff; absent clinical governance and inadequate workforce planning, misinformed perceptions of risk and a dearth of community consultation.²⁵



1. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database Syst Rev* 2016; **4**: Cd004667.
2. McLachlan HL, Forster DA, Davey MA, et al. The effect of primary midwife-led care on women's experience of childbirth: results from the COSMOS randomised controlled trial. *BJOG: An International Journal of Obstetrics & Gynaecology* 2016; **123**(3): 465-74.
3. Forster DA, McLachlan HL, Davey M-A, et al. Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: results from the COSMOS randomised controlled trial. *BMC Pregnancy and Childbirth* 2016; **16**(1): 28.
4. Tracy S, Hartz D, Tracy M, et al. Caseload midwifery care versus standard maternity care for women of any risk: M@NGO, a randomised controlled trial. *The Lancet* 2013; **382**(9906): 1723-32.
5. Allen J, Kildea S, Tracy MB, Hartz DL, Welsh AW, Tracy SK. The impact of caseload midwifery, compared with standard care, on women's perceptions of antenatal care quality: Survey results from the M@NGO randomized controlled trial for women of any risk. *Birth* 2019; **46**(3): 439-49.
6. Fox D, Scarf V, Turkmani S, et al. Midwifery continuity of care for women with complex pregnancies in Australia: An integrative review. *Women and Birth* 2023; **36**(2): e187-e94.
7. Allen J, Gibbons K, Beckmann M, Tracy M, Stapleton H, Kildea S. Does model of maternity care make a difference to birth outcomes for young women? A retrospective cohort study. *International journal of nursing studies* 2015.
8. Kruske S, Schultz T, Eales S, Kildea S. A retrospective, descriptive study of maternal and neonatal transfers, and clinical outcomes of a Primary Maternity Unit in rural Queensland, 2009–2011. *Women and Birth* 2015; **28**(1): 30-9.
9. Dube M, Gao Y, Steel M, Bromley A, Ireland S, Kildea S. Effect of an Australian community-based caseload midwifery group practice service on maternal and neonatal outcomes for women from a refugee background. *Women and Birth* 2023; **36**(3): e353-e60.
10. Barclay L, Kruske S, Bar-Zeev S, et al. Improving Aboriginal maternal and infant health services in the 'Top End' of Australia; synthesis of the findings of a health services research program aimed at engaging stakeholders, developing research capacity and embedding change. *BMC Health Services Research* 2014; **14**(1): 241.
11. Kildea S, Gao Y, Rolfe M, et al. Remote links: Redesigning maternity care for Aboriginal women from remote communities in Northern Australia – A comparative cohort study. *Midwifery* 2016; **34**: 47-57.
12. Kildea S, Gao Y, Hickey S, et al. Reducing preterm birth amongst Aboriginal and Torres Strait Islander babies: A prospective cohort study, Brisbane, Australia. *eClinicalMedicine, A Lancet Publication* 2019.
13. Kildea S, Gao Y, Hickey S, et al. Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomised, interventional trial. *Lancet Glob Health* 2021; **9**(5): e651-e9.
14. Gao Y, Roe Y, Hickey S, et al. Birthing on country service compared to standard care for First Nations Australians: a cost-effectiveness analysis from a health system perspective. *The Lancet Regional Health – Western Pacific* 2023.
15. Josif C, Kildea S, Kruske S, Barclay L. No more strangers: Investigating the experiences of women, midwives and others during the establishment of a new model of maternity care for remote dwelling aboriginal women in northern Australia. *Midwifery* 2015; **30**(3): 317-23.
16. McLachlan HL, Newton M, McLardie-Hore FE, et al. Translating evidence into practice: Implementing culturally safe continuity of midwifery care for First Nations women in three maternity services in Victoria, Australia. *eClinicalMedicine* 2022; **47**.
17. Allen J, Kildea S, Hartz DL, Tracy M, Tracy S. The motivation and capacity to go 'above and beyond': Qualitative analysis of free-text survey responses in the M@NGO randomised controlled trial of caseload midwifery. *Midwifery* 2017; **50**: 148-56.
18. Newton MS, McLachlan HL, Willis KF, Forster DA. Comparing satisfaction and burnout between caseload and standard care midwives: findings from two cross-sectional surveys conducted in Victoria, Australia. *BMC pregnancy and childbirth* 2014; **14**: 426-.
19. Fenwick J, Sidebotham M, Gamble J, Creedy DK. The emotional and professional wellbeing of Australian midwives: A comparison between those providing continuity of midwifery care and those not providing continuity. *Women Birth* 2018; **31**(1): 38-43.
20. Kildea S, Simcock G, Liu A, et al. Continuity of midwifery carer moderates the effects of prenatal maternal stress on postnatal maternal wellbeing: the Queensland flood study. *Archives of Women's Mental Health* 2018; **21**(2): 203-14.
21. Simcock G, Kildea S, Kruske S, Laplante DP, Elgbeili G, King S. Disaster in pregnancy: midwifery continuity positively impacts infant neurodevelopment, QF2011 study. *BMC pregnancy and childbirth* 2018; **18**(1): 309-.
22. Australian Institute of Health and Welfare. Maternity care in Australia: first national report on models of care. 2021 (accessed 07 April 2022 2022).
23. ABS. Births Australia Statistics about births and fertility rates for Australia, states and territories, and sub-state regions 2021. <https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>.
24. ABS. Births, Summary, Remoteness Areas (ASGS 2016)–2011 to 2021. Canberra: Australian Bureau of Statistics, 2022.
25. Kildea S, Tracy S, Sherwood J, Magick-Dennis F, Barclay L. Improving maternity services for Indigenous women in Australia: moving from policy to practice. *Medical Journal of Australia* 2016; **205**(8): 374-9.
26. Rolfe M, Donoghue DA, Longman J, et al. The distribution of maternity services across rural and remote Australia: does it reflect population need? *BMC Health Serv Res* 2017; **17**(1): 163.
27. Kildea S, McGhie AC, Gao Y, Rumbold A, Rolfe M. Babies born before arrival to hospital and maternity unit closures in Queensland and Australia. *Women Birth* 2015; **28**(3): 236-45.
28. Tran T, Longman J, Kornelsen J, Barclay L. The development of a caseload midwifery service in rural Australia. *Women Birth* 2017; **30**(4): 291-7.



29. Barclay L, Kornelsen J, Longman J, et al. Reconceptualising risk: Perceptions of risk in rural and remote maternity service planning. *Midwifery* 2016; **38**: 63-70.
30. Dietsch E, Davies C, Shackleton P, Alston M, McLeod M. 'Luckily We Had a Torch': Contemporary Birthing Experiences of Women Living in Rural and Remote NSW Charles Sturt University, 2008.
31. Quinn E, Noble J, Seale H, Ward JE. Investigating the potential for evidence-based midwifery-led services in very remote Australia: viewpoints from local stakeholders. *Women Birth* 2013; **26**(4): 254-9.
32. Longman J, Kornelsen J, Pilcher J, et al. Maternity services for rural and remote Australia: barriers to operationalising national policy. *Health Policy* 2017; **121**(11): 1161-8.
33. Dawson K, Newton M, Forster D, McLachlan H. Comparing caseload and non-caseload midwives' burnout levels and professional attitudes: A national, cross-sectional survey of Australian midwives working in the public maternity system. *Midwifery* 2018; **63**: 60-7.
34. Haines HM, Baker J, Marshall D. Continuity of midwifery care for rural women through caseload group practice: Delivering for almost 20 years. *Aust J Rural Health* 2015; **23**(6): 339-45.
35. Kruske S, Schultz T, Eales S, Kildea S. A retrospective, descriptive study of maternal and neonatal transfers, and clinical outcomes of a Primary Maternity Unit in rural Queensland, 2009-2011. *Women Birth* 2015; **28**(1): 30-9.
36. Carter AG, Wilkes E, Gamble J, Sidebotham M, Creedy DK. Midwifery students' experiences of an innovative clinical placement model embedded within midwifery continuity of care in Australia. *Midwifery* 2015; **31**(8): 765-71.
37. Kashani A, Ingberg JL, Hildingsson I. Caseload midwifery in a rural Australian setting: A qualitative descriptive study. *Eur J Midwifery* 2021; **5**: 2.
38. Kildea S, Hickey S, Barclay L, et al. Implementing Birthing on Country services for Aboriginal and Torres Strait Islander families: RISE Framework. *Women Birth* 2019; **32**(5): 466-75.
39. COAG Health Council. Woman-centred care: Strategic directions for Australian maternity services. Canberra: COAG Health Council as represented by the Department of Health, 2019.
40. Kildea S, Lockey R, Roberts J, Magick-Dennis F. Guiding Principles for Developing a Birthing on Country Service Model and Evaluation Framework, Phase 1. Brisbane: Mater Medical Research Unit and the University of Queensland on behalf of the Maternity Services Inter-Jurisdictional Committee for the Australian Health Ministers' Advisory Council, 2016.
41. Kildea S, Hickey S, Nelson C, et al. Birthing on Country (in Our Community): a case study of engaging stakeholders and developing a best-practice Indigenous maternity service in an urban setting. *Aust Health Rev* 2018; **42**(2): 230-8.
42. ANMAC. Primary Maternity Services in Australia: A Framework for Implementation. Canberra Australian Health Ministers' Advisory Council 2008.
43. AMA. Rural Health Issues Survey Improving care for Rural Australia 2019, 2019.
44. Bradow J, Smith SD, Davis D, Atchan M. A systematic integrative review examining the impact of Australian rural and remote maternity unit closures. *Midwifery* 2021; **103**: 103094.
45. Monk A, Tracy M, Foureur M, Grigg C, Tracy S. Evaluating Midwifery Units (EMU): a prospective cohort study of freestanding midwifery units in New South Wales, Australia. *BMJ Open* 2014; **4**(10).
46. Longman J, Pilcher J, Morgan G, et al. ARBI Toolkit: A resource for planning maternity services in rural and remote Australia. Lismore: University Centre for Rural Health North Coast, 2015.
47. Tracy SK, Hartz D, Nicholl M, McCann Y, Latta D. An integrated service network in maternity--the implementation of a midwifery-led unit. *Aust Health Rev* 2005; **29**(3): 332-9.
48. Scherman S, Smith J, Davidson M. The first year of a midwifery-led model of care in Far North Queensland. *Med J Aust* 2008; **188**(2): 85-8.
49. Leeman L, Leeman R. Do all hospitals need cesarean delivery capability?: An outcomes study of maternity care in a rural hospital without on-site cesarean capability. *The Journal of Family Practice* 2002; **51**(2): 129-34.
50. Kruske S, Kildea S, Jenkinson B, et al. Primary Maternity Units in rural and remote Australia: Results of a national survey. *Midwifery* 2016; **40**: 1-9.