



# Rural Maternity Services in Australia

Maternity services are seen by many rural<sup>1</sup> people as essential to their community. When these services are threatened community concern is high, other rural health services may also be placed at risk and the broader range of community businesses, services and local employment may also be negatively impacted. While rural people understand that they will have to travel to access many health services, particularly specialist services, having access to maternity care services within their local region is an issue about which rural people have strong feelings.

RDAA does not support the unwarranted closure or downgrading of rural maternity services.

Emergency births are still relatively common in non-birthing facilities in rural Australia. The removal of essential obstetric and neonatal equipment and medication from these facilities has become commonplace, and is, in essence, a downgrading of all rural hospitals, impacting greatly on their capacity to provide high quality and safe care for rural women and their babies during any obstetric emergency. This situation needs to be urgently rectified. Lack of preparedness for imminent birth will lead to worsening perinatal outcomes.

Providing maternity services in rural Australia that will meet the needs of rural women and their babies into the future requires:

- A long-term vision for the provision and sustainability of services that encompasses a range of areas, including: quality and safety; patient access and sustainability of rural maternity services; the rural health workforce and necessary skill sets; sustainable models of care; appropriate infrastructure; and provision on support services and products
- Secure funding at adequate levels across all areas to enable the provision of rural models of obstetric care that have the care and safety of rural women (and their babies) at their core.

RDAA is committed to working with all relevant stakeholders to ensure that rural women have access to maternity services that are safe and of high quality as close as possible to where they live.

## Position

- Rural women have a right to safe, high-quality maternity services as close as possible to where they live.
- Quality and safety must underpin the provision of maternity services in rural and remote areas.
- The continuing trend toward downgrading or closing of rural maternity services must be halted and reversed.

<sup>&</sup>lt;sup>1</sup> Within this document the term 'rural' is used to encompass locations described by Modified Monash Model levels 3-7.



- A highly-skilled workforce is necessary to provide sexual, reproductive and maternal health care for rural women, and manage obstetric emergencies when they arise.
- Models of care for rural maternity services must be fit-for-purpose for their communities.
- A continuing decline in rural health infrastructure, including for maternity services, has negative consequences for the health and safety of rural people and on rural communities.
- Lack of preparedness for obstetric emergencies and imminent birth in rural nonbirthing facilities is a key issue that must be immediately addressed to prevent worsening perinatal outcomes for rural women and their babies.

### RDAA will:

- Work with all relevant stakeholders to ensure that rural women have access to maternity services that are safe, of high quality, and as close as possible to where they live
- Advocate for the maintenance of existing rural maternity services and for the reopening or establishment of new services as appropriate
- Continue to seek feedback from its broader membership on all aspects of rural maternity service provision
- Provide support for members (including maternity services corporate members) to address any issues as they arise
- Ensure that standardised equipment & medication guidelines for imminent birth and neonatal resuscitation are developed and implemented by working with federal, jurisdictional and local health services to
  - o Progress the adoption of the initiative nationally, and
  - Ensure the availability of appropriate training such as Rural Emergency Obstetrics Training (REOT), PRactical Obstetric Multi-Professional Training (PROMPT), the Maternity Emergency Care Course and Queensland's Imminent Birthing Course – for non-birthing and birthing facilities staff
- Advocate for multi-disciplinary approaches that are inclusive of Rural Generalists (particularly GP Obstetricians and GP anaesthetists) and promote continuity of care
- Advocate for incentives and adequate remuneration to train, attract, recruit and retain Rural Generalists in rural areas. It is important that similar incentives are made available to all members of rural maternity services teams, including nursing, midwifery, rural consultant specialists, and allied health professionals.

## Conclusion

Access to safe, high-quality maternity services that deliver contraceptive, safe termination, preconception, antenatal, perinatal and postnatal care, provided by a well-trained and supported health workforce, diminishes the health risks for rural women and their babies.

Health workforce training, recruitment, retention and development strategies are necessary to ensure the ongoing provision, maintenance and sustainability of rural maternity services.



# Background and detailed position

Reducing access to rural maternity services places expectant mothers and their babies at significant risk. Maternity services are not routinely provided in all rural hospitals, and there is an apparent nationwide trend toward further closing or downgrading of existing rural maternity facilities – often without evidence to support this action. Recent evidence confirms<sup>2</sup> that this is happening across the country, but that the reopening of some facilities is offsetting the overall numbers of closures in some States. However, the overall trend raises issues of distribution, equity and safety and remains concerning.

RDAA acknowledges that there have been some high-profile instances where there have been legitimate safety concerns, but they have been rare and related to specific circumstances in the particular service. For example, the avoidable perinatal deaths identified in the 2016 investigation into maternity services provided by Djerriwarrh Health Service<sup>3</sup> happened within a facility operating a specialist model of care. While such occurrences reinforce the need for excellent training, appropriate resourcing and robust governance, extrapolating identified issues of concern in individual services to ALL rural maternity services is misdirected and counterproductive.

Rural maternity services have an exceptional safety record and rural women and their babies are at greater risk where maternity care and birthing services are far distant. While women giving birth on the side of the road is still a relatively rare occurrence in Australia, increased rates of babies born before arrival (BBAs) at hospital are significantly associated with closure of maternity units<sup>4</sup>. When rural maternity services are downgraded or closed, women (and following birth, their newborns) may have to travel significant distances over rough roads for appointments and deliveries at distant centres.

Rural women are also often asked to relocate to a town or city with a birthing facility two to four weeks (and sometimes more) prior to their due date depending on distance to travel and assessed level of risk. This places considerable financial and other burdens on expectant mothers, their partners and families. Not all women have the flexibility to leave their family, home or livelihood for extended periods without serious negative impacts. For example, the livelihood of dairy farmers is dependent on milking cows at least twice a day. Any absence from the farm can impact significantly their ability to earn an income and support their families.

The downgrading or closure of birthing facilities can also have significant immediate and long-term impacts on access to a broader range of health services and on local communities. Closure of birthing facilities can force rural women and their families to permanently relocate to other towns to start or add to their families, contributing to the social and economic decline of rural communities. In the lead up to or following the downgrading or closure of a rural maternity unit, midwives and Rural Generalists who provided the services often leave the communities of the high-quality medical care that staff with these skill sets provide, but also of opportunities for the employment of supporting health professionals and administrative staff, and the income derived by other local businesses. Queensland Health in

<sup>&</sup>lt;sup>4</sup> Kildea, S., McGhie, A.C. et al (2015) Babies born before arrival to hospital and maternity unit closures in Queensland and Australia. Accessed 2 March 2021. <u>https://pubmed.ncbi.nlm.nih.gov/25845486/</u>.



<sup>&</sup>lt;sup>2</sup> Rural Doctors Association of Australia & Royal Australian and New Zealand College of Obstetricians and Gynaecologists (2021) *Rural Maternity Services: 16 March 2021 Reality Check.* Presented at RDAA Annual Politician's Function, Parliament House, Canberra, Australia, 16 March 2021. Retrieved 17 March 2021 from <a href="https://www.rdaa.com.au/documents/item/1406">https://www.rdaa.com.au/documents/item/1406</a> <sup>3</sup> *Targeting zero, the review of hospital safety and quality assurance in Victoria* was commissioned following a number of perinatal deaths at Djerriwarrh Health Services, Bacchus Marsh, Victoria. <a href="https://www.dhhs.vic.gov.au/publications/targeting-zero-review-hospital-safety-and-quality-assurance-victoria">https://www.dhhs.vic.gov.au/publications/targeting-zero-review-hospital-safety-and-quality-assurance-victoria</a>

its *Rural Maternity Taskforce Report – June 2019* notes that "Rural and remote maternity services are a barometer for rural health services in general. The same clinicians providing maternity services to rural communities often provide all the other emergency and planned healthcare for the community. Loss of maternity and procedural skills means loss of broader skills available to the community." <sup>5</sup>

Halting and reversing the trend toward the closing or downgrading of rural maternity services not only benefits rural communities but has considerable potential benefit for the health system more broadly, including by decreasing demand on already busy hospitals in large or metropolitan centres, decreasing spending on Patient Assisted Travel Schemes (PATS) and decreasing reliance on retrieval services. Retrieval services would also be freed up to respond to the ongoing challenge of timely response to other emergencies such as strokes or cardiac emergencies.

The Australian Government's *Woman-centred care: Strategic directions for Australian maternity services* <sup>6</sup> is a high-level framework for the provision of maternity services across the country. While the strategic intent to provide maternity services as close as possible to a woman's home is articulated, it has yet to be realised. Barriers include "absence of informed leadership; lack of knowledge of contemporary models of care and inadequate clinical governance; poor workforce planning and use of resources; fallacious perceptions of risk; and a dearth of community consultation".<sup>7</sup>

There is a continuing risk that rural maternity services will remain under threat.

The development of supporting guidance, planning tools and operative frameworks will be necessary to mitigate this risk. They should:

- Detail actions to be taken at all levels
- Stipulate timeframes
- Specify federal, jurisdictional and service responsibilities
- Outline evaluation methodology and requirements, performance criteria and accountability mechanisms.

A review of the *National Maternity Services Capability Framework 2012*<sup>8</sup> is also needed to confirm common understandings of facility capability levels, and ensure national consistency of maternity service provision across jurisdictions. Currently not all jurisdictions align facility capability with service provision. This means that women in some areas have to travel much further for care than is warranted by their assessed level of risk. A small number of sites may fluctuate between levels of service, or experience periods of bypass, depending on workforce availability. Consistent arrangements for level of service that can be clearly communicated to the community are necessary.

http://www.health.gov.au/internet/main/publishing.nsf/Content/FC3A10DCCCE8CC0BCA257D2A0016CD0E/\$File/capab.pdf



<sup>&</sup>lt;sup>5</sup> State of Queensland (Queensland Health). *Rural Maternity Taskforce Report – June 2019*. Accessed 02 March 2021. <u>https://clinicalexcellence.qld.gov.au/sites/default/files/docs/maternity/rural-maternity-taskforce-report.pdf</u>.

<sup>&</sup>lt;sup>6</sup> COAG Health Council (August 2019). Woman-centred care: Strategic directions for Australian maternity services. Accessed 1 March 2021. <u>https://www.health.gov.au/sites/default/files/documents/2019/11/woman-centred-care-strategic-directions-for-australian-maternity-services.pdf</u>

<sup>&</sup>lt;sup>7</sup> Longman, J., Kornelsen, J., Pilcher, J. *et al* (2017). Maternity services for rural and remote Australia: barriers to operationalising national policy. *Health Policy* Vol.121, Issue 11, pp 1161-1168. Accessed 2 March 2021. https://pubmed.ncbi.nlm.nih.gov/28965791/

<sup>&</sup>lt;sup>8</sup> Commonwealth of Australia, Australian Health Ministers' Advisory Council (2013). *National Maternity Services Capability Framework 2012I*. Accessed 2 March 2021.

A specific, rurally focused action plan should also be developed and implemented to redress the inequities in access to maternity services in rural Australia and ensure a sustainable continuum of service provision in rural areas.

To support rural women's access to maternity services, the policy and planning approach must be more innovative and flexible than is currently apparent. Local health boards, executive management and state/territory governments often seem to see only two options – all or nothing – and the range of possible actions to ameliorate underlying issues are not always fully explored, or given sufficient time to yield positive results.

Maintaining rural maternity services in rural areas where services are identified as being at risk – for example, a service that has been staffed by locums for an extended period of time – will require both investments to address the deficits in the service or workforce model, and sufficient time for that investment to bring about change. One without the other will do little to negate the risks of downgrading or closure: it is unrealistic to expect that investment will lead to improvement in the immediate or short-term future.

RDAA continues its commitment to the 2008 *National Consensus Framework for Rural Maternity Services*<sup>9</sup> (the Framework). While there have been a number of systemic reviews and initiatives, at both federal and state/territory levels, that impact maternity services – for example, the development of *Woman-centred care: Strategic directions for Australia maternity services*<sup>10</sup> – and some changes have been instituted over the past decade, the Framework's content remains largely relevant.

There are five key areas that must be addressed to ensure high-quality, safe and sustainable maternity services are available in rural Australia. They must all be underpinned by adequate and secure levels of funding that reflect the greater costs of service provision in rural areas.

## **Quality and Safety**

The care and safety, including cultural safety, of rural women throughout the whole of their reproductive journey must be the key principle governing provision of maternity services in rural areas.

This means that rural maternity services must be 'all risk' services.

Care must be:

- Evidence-based
- Underpinned by nationally-consistent obstetric guidelines for maternity services and clinicians, with clear reference to the varying contexts of rural maternity units
- Provided by well-trained and supported rural maternity workforces that can:
  - Deliver both the continuum of care, and the continuity of care, needed by rural women, their babies and their families
  - Respond effectively to any obstetric emergency that arises.

 <sup>&</sup>lt;sup>9</sup> Rural Doctors Association of Australia, Australian College of Rural and Remote Medicine, Australian College of Midwives, Royal Australian and New Zealand College of Obstetricians and Gynaecologists, National Rural Faculty of the Royal Australian College of General Practitioners, and Rural Health Workforce Australia (2008). *National Consensus Framework for Rural Maternity Services*. Accessed 2 March 2021 <u>https://www.rdaa.com.au/documents/item/577</u>
<sup>10</sup> Op cit. COAG Health Council.



## RDAA Policy Position: Rural Maternity Services in Australia

Rural maternity services must also recognise the significance of Birthing on Country for Aboriginal and Torres Strait Islander people. All staff must be trained in providing culturally safe care. Where medical need requires clinical escalation to a distant facility, every effort must be made to maintain engagement with family, community and carer.

Rural maternity services should be:

- Nationally accredited
- Culturally safe
- Delivered locally by well-trained generalist doctors, midwives and other health professionals with strong telehealth mechanisms to link patients to their Rural Generalists, GPs and consultant specialists as needed, and to link health professionals to each other
- Underpinned by clinical services capability frameworks and clinical governance measures (including credentialling and genuine peer review) that support quality improvement and practitioner development
- Characterised by an evidence-based, continuous quality improvement culture, and by innovation processes that are mindful of the realities of rural and remote practice
- Based on models of care that have been proven to be successful in rural settings, not transposed urban models
- Backed by reliable information, communication and other technologies to:
  - Support formal networking arrangements to provide increasingly specialised care appropriate to assessed level of risk
  - Facilitate sharing of information and expertise between local and further afield services and clinicians
- Reinforced by effective referral and transfer systems to ensure that:
  - Women have safe and high-quality care appropriate to their assessed level of risk
  - The transfer of women and babies requiring more specialised care is timely
  - Emergency retrieval and transport services are efficiently dispatched when needed
- Regulated by robust, dynamic administration and governance processes (including for risk management and for clinical peer review for credentialling, performance and clinical outcomes), at both the system-wide and local service levels to:
  - Identify possible vulnerabilities for the provision of high quality and safe rural maternity services and provide solutions that can be adapted to the needs of individual services
  - Identify specific quality and safety deficiencies and develop appropriate mitigation strategies
  - Ensure that obstetric clinicians are supported during and after critical incidents, and that critical incident reviews emphasise systems-based solutions over individual blame.

It is crucial that all rural hospitals, with or without birthing services, be prepared for imminent unplanned births and neonatal resuscitation by ensuring staff have the training, equipment and communication plans and systems to manage such situations.



This should include ensuring that all emergency departments have:

- Readily available monitoring equipment (e.g., Point of Care Ultrasound and CTG) and standardised imminent birth and neonatal resuscitation equipment and medication
- Easy to access obstetric emergency protocols (including for premature labour, preeclampsia and severe postpartum haemorrhage) and relevant perinatal clinical guidelines
- High fidelity video conferencing technology and digital services, including reliable connection to the internet, to support non-obstetric services through imminent birthing.

### Access

Rural women have the right to make informed choices about their sexual, reproductive and maternal health care, and have access to services that are safe and of high quality as close as possible to where they live.

Ensuring rural women have access to contraception and safe termination of pregnancy services and to preconception, antenatal, intrapartum and postnatal care (as a continuous model of care) is critical to maintaining the health and wellbeing of rural women and their babies, diminishing health risks and reducing negative health outcomes.

Very few rural maternity services have sufficient activity to support the full-time obstetric teams needed to provide adequate numbers for the on-call roster or ensure that all professionals are able to update and maintain their skills. Consequently, rural hospitals require a team of generalist clinicians who have not only advanced skills in obstetrics, maternity and neonatal care but also a broader generalist skill set in medicine, nursing and allied health. Direct entry midwifery, is an example of a specialised workforce model which is not fit-for-purpose in the rural context. Rural midwives need the flexibility to work across other areas of rural hospital care to support the sustainability of services. Even a small change in circumstances of this workforce can impact on the viability of many rural birthing services putting them at risk of closure.

RDAA recognises that it is not practicable to provide full obstetric services in all rural hospitals, however a continuum of service that gives consideration to the distance required to travel to the next birthing facility must be provided in rural areas. At the very least, women should be able to access contraception, termination of pregnancy, preconception and antenatal care, postnatal care and support services (including for mental health) that are as safe as possible in their own communities, even if birthing services are not available.

It is the responsibility of health professionals to provide all relevant information to enable women to make informed choices about their sexual, reproductive and maternal health and relevant services they can access. The limitations of any service, including part-time maternity services, must be understood by all team members and clearly communicated to patients.

All staff from the smallest to the largest hospital must be trained to manage an obstetric emergency and neonatal resuscitation.



Clearly defined telehealth processes and networks and reliable technology are necessary in all rural hospitals to ensure rural practitioners are able to easily access specialist advice when needed, including during obstetric emergencies.

# Rural maternity services must be stable and sustainable to provide certainty for rural communities.

All levels of government must work to provide stable and sustainable maternity services in rural Australia. This will require:

- A long-term vision for service sustainability
- Active succession planning that is mindful of the unique private-public relationship in rural
- A watchful, preventive approach to risk management that is cognizant of the risks inherent to the rural context
- Commitment to finding innovative solutions to identified problems
- Consultation and communication with key stakeholders and the local community, in particular about the limitations of the various service models
- That those involved in the development of policy, planning and service management:
  - Define and clearly articulate processes to ascertain risks to services before they eventuate
  - o Identify and implement strategies to mitigate against those risks
  - Utilise all available options to maintain a service that is identified as being at risk
- The provision of incentives and appropriate levels of remuneration to attract maternity services health professionals to rural areas
- Ensuring ongoing access to state-based employer indemnity and premium support for private professional indemnity insurance.

# The future sustainability of a rural maternity service must be an underlying operating principle of that service.

The downgrading or closure of rural maternity services places rural women and their babies at risk. To reduce the likelihood of this happening, rural maternity services must take a longer-term view. Ensuring sustainability will require:

- A keen awareness of the realities of rural practice
- Continuing vigilance to identify emerging threats
- Responsive governance
- Preparedness for action at the first indication of a workforce shortage (or other issue) that may put pressure on service viability.

Where decisions to downgrade or close a maternity service are made, they must be:

- Governed by strong transparency and accountability mechanisms
- Informed by evidence and independent impact assessments
- Taken in close and genuine consultation with key stakeholders and local communities.



A closure of service framework must be developed to ensure that all possible avenues for maintaining a rural maternity service have been exhausted before a service can be closed. This framework should:

- Identify mandatory steps that must be taken to identify, assess and address underlying causes
- Link evaluation measures and performance criteria to each step
- Specify timeframes for acting on and evaluating implementation of those steps.

### Workforce

The provision of safe, high-quality sexual, reproductive and maternal health services in rural areas is highly dependent on having a highly-skilled medical, midwifery and other health professional workforce.

A well-trained generalist medical and midwifery workforce, supported by other health professionals, is generally the best option to deliver sustainable rural maternity services. All health professionals involved in providing these services – including Rural Generalists (especially GP Obstetricians and GP Anaesthetists), GPs, midwives and obstetric specialists – have a valid role in patient care that must be recognised and valued.

The importance of collaborative, team-based care must be recognised in strategic plans at all levels of government and at individual service level, and be reflected in robust and supportive governance processes for administration and operations.

To deliver models of care appropriate to rural communities requires a multi-disciplinary, team-based approach that:

- Is founded on understanding and respect for the roles of each member of the team
- Effectively utilises the skills of team members by ensuring involvement at the appropriate level of service delivery
- Gives consideration to continuity of carers
- Clearly articulates the operational principles and processes under which the team works, including clinical escalation trigger points and procedures
- Supports obstetric clinicians in critical incidents
- Has efficient referral pathways and communication mechanisms to support collaborative care, including for non-obstetrically trained GPs to deliver antenatal care.

Targeted, coordinated strategies to support and enhance this collaborative care must include:

- Adequate long-term investment in the National Rural Generalist Pathway as an important step to redress the shortage of Rural Generalists (particularly GP Obstetricians and GP Anaesthetists) that threatens the viability of maternity services in many rural areas
- Investment in the training of rural midwives and other rural health professionals, including Aboriginal Health Workers
- Training all staff in providing culturally safe care
- Ongoing and active support for staff engagement in Continuing Professional Development (CPD) to maintain and update knowledge and skills



- Alignment of training initiatives with appropriate and continuing recruitment and retention strategies to ensure workforce sustainability
- Flexible employment models that can support innovative models of care tailored to local circumstances, for example, midwifery-led medically integrated care
- Investment in incentives and remuneration to attract Rural Generalists and other health professionals to rural areas.

Any new national and jurisdictional maternity services plans and frameworks must align with the development of a National Rural Generalist Pathway when making rural maternity workforce recommendations.

## Models of care

#### Rural maternity models of care must be fit-for-purpose for the communities they serve.

Rural maternity models of care must be aligned with community needs and expectations.

While not all rural hospitals can have the capacity to support maternity services that cater for complex, high-risk deliveries, a formal network of nationally accredited services must be maintained in rural and remote areas to provide clinical support and escalation pathways. As communities increase in size (and with consideration given to the distance to the next service) the capacity of rural hospitals within the network to provide birthing services should increase from low-risk deliveries to 24-hour emergency and caesarean capability. Formal referral and transfer systems must also be in place to ensure safe and timely transfer of women and their babies who require more specialised care.

Rural obstetric care must:

- Be multi-disciplinary and collaborative in approach
- Be reinforced by robust mechanisms that clearly identify the roles of each team member
- Comprise a continuum of care inclusive of contraceptive and safe termination of pregnancy services as well as preconception, antenatal, peripartum and postnatal care
- Provide continuity of care that places the care and safety (including cultural safety) of women through the whole of their reproductive journey at the centre and is mindful of the lifelong health of the woman
- Reflect the complexity, scope and circumstances of maternity service provision in rural communities
- Be based on evidence about what works in these settings, including integrated midwifery and medical models
- Provide holistic care for mothers and babies that gives consideration to continuity of carers
- Be flexible and adaptable to enable innovation, tailoring to local circumstances and responsiveness to changing conditions
- Be governed by unambiguous protocols for clinical escalation, referral and transfer
- Be underpinned by nationally consistent obstetric guidelines with clear reference to the varying context of different rural maternity units.



#### Infrastructure

Adequate investment in physical and capital infrastructure, and the ongoing supply of support services and products (e.g., blood products), is necessary for the provision of safe, high quality maternity services in rural areas.

The continuing decline in rural health infrastructure and services is impacting negatively on the health and safety of rural people, and more broadly, on rural communities. Unless this trend is halted, and reversed, rural people will have even poorer access to maternity and other health services than is currently the case. This may worsen already poorer health outcomes being experienced by rural Australians compared to urban Australians.

Many rural maternity service facilities (including hospital theatres) are ageing. This can compromise functionality. The age of facilities and the cost of renovation should not be used as a reason for closing a rural maternity service. The building or refurbishment of existing rural maternity facilities to ensure that they are up-to-date, fit-for-purpose and of a similar standard to facilities in larger regional or major city hospitals will have a positive impact, not just with respect to the number of women giving birth locally, but also for employment and support for local economies.

Continuing access to support services and products (such as pathology and blood products) is also necessary to maintain rural maternity services. The guaranteed availability of these services and products is critical to underpin day-to-day functions as well as emergency preparedness.

Improvements in physical infrastructure must be supported with capital investment. Reliable and up-to-date equipment and information/communication technology, including computer systems, video/teleconference services and phone networks (mobile, satellite and landline) that can support the requirements of digital health initiatives, are essential tools for safety and quality.

All rural hospitals must be equipped to manage an obstetric emergency and provide neonatal resuscitation.

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# Additional References

Australian Institute of Health and Welfare 2020. *Australia's mothers and babies 2018: in brief.* Perinatal statistics series no. 36. Cat. no. PER 108. Canberra: AIHW. Accessed 2 March 2021. <u>https://www.aihw.gov.au/getmedia/aa54e74a-bda7-4497-93ce-e0010cb66231/aihw-per-108.pdf.aspx?inline=true</u>

Australian Institute of Health and Welfare 2020. *Australia's mothers and babies: data visualisations (web report)*. Accessed 2 March 2021. <u>https://www.aihw.gov.au/reports/mothers-babies/australias-mothers-babies-2017-data-visualisations/contents/demographics-of-mothers-and-their-babies/geography.</u>

Australasian Health Infrastructure Alliance (2017). *Australasian Health Facility Guidelines: Part B - Health Facility Briefing and Planning HPU 510 – Maternity Unit.* Rev 7.0 18 May 2017. Accessed 9 March 2021. https://aushfg-prod-com-au.s3.amazonaws.com/HPU B.0510 7 5.pdf.

Barclay, L. & Kornelsen, J. (2016). The Closure of Rural and Remote Maternity Services: Where are the Midwives? *Midwifery* 38, pp 9-11. Accessed 2 March 2021. <u>https://reader.elsevier.com/reader/sd/pii/S0266613816300092?token=BAFFF2257193578C8</u> 0144BFAE91AE534E11E0A7E49876DABE180FE5E2FBA4CA54A4D6E78EB02FD9F821F B685F3CFAE2E

Congress of Aboriginal and Torres Strait Islander Nurses and Midwives, Australian College of Midwives & CRANAplus (n.d.) *Birthing on Country Position Statement*. Accessed 2 March 2021.

https://www.catsinam.org.au/static/uploads/files/birthing-on-country-position-statementendorsed-march-2016-wfaxpyhvmxrw.pdf

Pregnancy Birth & Beyond (n.d.). Accessed 2 March 2021 https://www.pregnancy.com.au/birth/list-of-maternity-hospitals/.

Rolfe, M.I., Donoghue, D.A., Longman, J.M. *et al.* (2017) The distribution of maternity services across rural and remote Australia: does it reflect population need? *BMC Health Serv Res* 17, 163. Accessed 2 March 2021. https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2084-8

Stewart, R. & Evans, R. (2017). *A toolkit for reopening remote birthing services: enablers, barriers, tasks and processes.* Presented at 14<sup>th</sup> National Rural Health Conference, Cairns, Queensland, Australia. 26-29 April 2017. Retrieved 2 March 2021 from <a href="http://www.ruralhealth.org.au/14nrhc/sites/default/files/Stewart%2C%20Ruth\_A6\_0.pdf">http://www.ruralhealth.org.au/14nrhc/sites/default/files/Stewart%2C%20Ruth\_A6\_0.pdf</a>

Tennett, D., Kearney, L. & Kynn, M. (2020) Access and outcomes of general practitioner obstetrician (rural generalist)-supported birthing units in Queensland. *Australian Journal of Rural Health.* Vol. 28, Issue 1, pp 42-50. Accessed 2 March 2021. https://onlinelibrary.wiley.com/doi/full/10.1111/ajr.12593.

The Honourable Steven Miles, Minister for Health and Minister for Ambulance Services, Queensland (19 June 2019) *Maternity report proposes changes for rural* mums, media Statement. Accessed 2 March 2021. <u>https://statements.gld.gov.au/statements/87658</u>

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