

# Developing a National Strategic Approach to Maternity Services

Consultation paper

SUBMISSIONS CLOSE  
**MONDAY**  
**18 JUNE**  
2018



AUSTRALIAN HEALTH MINISTERS'  
ADVISORY COUNCIL





© Commonwealth of Australia as represented by the Department of Health 2018

Developing a National Strategic Approach to Maternity Services - Consultation Paper  
Publications approval number: 12189

### **Creative Commons Licence**

This publication is licensed under the Creative Commons Attribution 4.0 International Public License available from <https://creativecommons.org/licenses/by/4.0/legalcode> ("Licence"). You must read and understand the Licence before using any material from this publication.

### **Restrictions**

The Licence may not give you all the permissions necessary for your intended use. For example, other rights (such as publicity, privacy and moral rights) may limit how you use the material found in this publication.

The Licence does not cover, and there is no permission given for, use of any of the following material found in this publication:

- any logos and trademarks;
- any photographs and images;
- any signatures; and
- any material belonging to third parties.

### **Attribution**

Without limiting your obligations under the Licence, the Department of Health requests that you attribute this publication in your work. Any reasonable form of words may be used provided that you:

- include a reference to this publication and where, practicable, the relevant page numbers;
- make it clear that you have permission to use the material under the Creative Commons Attribution 4.0 International Public License;
- make it clear whether or not you have changed the material used from this publication;
- include a copyright notice in relation to the material used. In the case of no change to the material, the words "© Commonwealth of Australia (Department of Health) 2017" may be used. In the case where the material has been changed or adapted, the words: "Based on Commonwealth of Australia (Department of Health) material" may be used; and
- do not suggest that the Department of Health endorses you or your use of the material.

### **Enquiries**

Enquiries regarding any other use of this publication should be addressed to the Branch Manager, Communication Branch, Department of Health, GPO Box 9848, Canberra ACT 2601, or via e-mail to [enquiries@health.gov.au](mailto:enquiries@health.gov.au)

### **Acknowledgement**

Prepared by Ampersand Health Science Writing for the  
Australian Government Department of Health

# Participating in developing a National Strategic Approach to Maternity Services

The development of a National Strategic Approach to Maternity Services (NSAMS) is being conducted on behalf of the Australian Health Ministers Advisory Council (AHMAC). It follows on from the National Maternity Services Plan 2010 – 2015. The success of this process depends largely on the participation of people and organisations in the community. This process aims to provide the opportunity for all points of view in the community to be heard and considered. All individuals, groups and organisations with an interest in maternity services are invited to participate.

All comments and submissions will be taken into account in the development of the final National Strategic Approach to Maternity Services.

While it will not be possible to respond individually to all submissions and comments received, it is important that these are made publicly available. Unless otherwise indicated in the submission, all submissions will be published on the Commonwealth Department of Health website. In addition, where submissions focus on the issues relevant to the States and Territories, this information will be forwarded to the relevant jurisdiction(s).

It is intended that a collaborative and consultative approach be taken to the development of the NSAMS. This discussion paper is part of the first stage of that process. It provides a snapshot of the current evidence on maternity services in Australia and some of the national initiatives underway.

Through dissemination of this discussion paper and the consultation process more broadly, we are seeking input on ways forward to improve outcomes for all Australian women and families. Consultation questions are included at the end of the document and available in a separate template to assist in ease of responding.

## **We sincerely welcome your input.**

**The paper is available on the Commonwealth Department of Health's website:**  
[consultations.health.gov.au](http://consultations.health.gov.au)

**Email:** [NSAMS@health.gov.au](mailto:NSAMS@health.gov.au)

**Mail:** MDP 515, Australian Government Department of Health, PO Box 9848, Canberra, ACT 2601

Appendix B provides the template for input on the NSAMS.

**Closing date: 18 June 2018**

# Contents

Introduction .....	3
The context of the National Strategy and this discussion paper.....	4
Births in Australia.....	5
Safety and quality.....	6
Access.....	12
Models of care.....	13
Preconception care.....	15
Pregnancy care.....	16
Postnatal care.....	17
Maternity services for Aboriginal and Torres Strait Islander women and families.....	18
Maternity services for culturally and linguistically diverse families.....	19
Perinatal mental health.....	20
Family violence.....	21
When a baby dies.....	22
What about workforce?.....	23
Insurance.....	24
Appendix A: Advisory Group membership .....	25
Appendix B: Consultation input template.....	26
Appendix C: Successes of National Maternity Services Plan 2010–2015.....	30
Appendix D: Guiding documents.....	32

# Introduction

Significant progress in improving Australian maternity care services was made under the National Maternity Services Plan 2010–2015 (NSMP). Successes included Australian Health Ministers' Advisory Committee (AHMAC) endorsement of national core maternity indicators and evidence-based antenatal care guidelines, expanding the range of maternity models of care, establishing the Pregnancy, Birth and Baby Helpline, identifying characteristics of culturally competent maternity care for Aboriginal and Torres Strait Islander peoples and developing a framework for birthing on country programs. See Appendix C for more detail.

The National Maternity Services Plan concluded on 30 June 2016. In April 2016, Australian Health Ministers agreed to continue to work together to improve maternity services, through the development of an enduring National Framework for Maternity Services.

The draft Framework was developed by the Maternity Care Policy Working Group (MCPWG), a jurisdictional group, chaired by Queensland, established under the auspices of the Community Care and Population Health Principal Committee, a principal committee of AHMAC.

Throughout the development of the Framework, concerns were raised by stakeholders. These focused on the lack of health professionals and consumer representation on the MCPWG, inadequate transparency surrounding the process to develop the Framework, and lack of service obligations and accountability measures. A Forum held in Melbourne in June 2017 was unable to resolve these issues and it was decided to cease work on the Framework.

At the AHMAC meeting on 22 September 2017 it was agreed that work would commence on a new process to develop a National Strategic Approach to Maternity Services (NSAMS), to be led by the Commonwealth.

As this is work being undertaken on behalf of AHMAC there are required processes to be followed. A jurisdiction takes a lead role for the project on behalf of all the jurisdictions and for NSAMS this is the Commonwealth. AHMAC projects are overseen by an interjurisdictional committee made up of representatives of each of the jurisdictions, in this case the Project Reference Group (PRG). Members of the PRG are nominated by and function as representatives of their respective governments. The PRG reports to AHMAC through the Health Services Principal Committee (HSPC). Given the concern expressed by a number of stakeholders during the work by the MCPWG, the PRG agreed to establish an Advisory Group (AG) (membership listed at Appendix A) so as to receive direct advice from a cross-section of key stakeholders as the development of the NSAMS progresses. To facilitate communication, the co-chairs of the AG are invited to attend at the beginning of each PRG meeting. The PRG has also given consideration to providing several ways in which interested people can provide input to the development of the NSAMS, including this consultation paper.

The final NSAMS will require the approval of AHMAC prior to release.

# The context of the National Strategy and this discussion paper

In Australia, the planning and delivery of maternity services is predominantly a state and territory responsibility, with the Commonwealth playing a role in providing national direction and supporting efforts to improve care and outcomes. The initial contact for many women is with their general practitioner (GP) who may advise on models of maternity care and assist in accessing the relevant service in line with the woman's preferences. A smaller number of women present directly to a midwife or public service. Maternity services are provided in both the public and private sectors. The majority of maternity services are provided by each of the eight state and territory health services through publicly funded care models. These services are provided with the support of obstetricians, midwives and some GPs. Private services are offered in private hospitals and public hospitals by private providers, who are largely obstetricians and midwives.

There is a diverse range of views held by health care professionals and consumers in relation to maternity care and outcomes. It is unlikely that the NSAMS will meet the needs and expectations of everyone and there are a number of issues that will need to be, and may more appropriately be, addressed through other channels.

The NSAMS is intended to provide an overarching national approach to maintaining Australia's high-quality maternity care system and working towards further improvements in line with contemporary practice, research and international developments. It is expected that the NSAMS will cover at least the next decade. The NSAMS will need to recognise that the jurisdictions are responsible for the provision of maternity services at the local level. It therefore will be expected that the NSAMS will provide jurisdictions with direction while maintaining flexibility, in recognition of the diversity in geography, demographics, workforce and service delivery models between and within Australia's jurisdictions.

There are a range of other programs of work that will potentially link to the NSAMS. The NSAMS will be informed and will inform the work of other government agencies, including the Australian Institute of Health and Welfare (AIHW), the National Health and Medical Research Council (NHMRC), the Australian Commission on Safety and Quality in Health Care (ACSQHC), the Australian Digital Health Agency (ADHA), the Medical Research Future Fund (MRFF) and the Independent Hospital Pricing Authority (IHPA). It will also link with other work being done by the Australian Department of Health in the areas of health workforce, Medicare Benefits Schedule (MBS) review and medical indemnity review. In addition, it will link with other national strategies including those on Aboriginal and Torres Strait Islander health, breastfeeding, diabetes and mental health.

While the focus of the NSAMS is on activity at the national level, it is recognised that there are also many linkages to policies and programs at the jurisdictional level.

## Underpinning philosophy and approach

In the previous work led by the MCPWG, a set of values and a philosophy for the framework were included. It is not unusual to include such overarching statements to underpin a strategy as they can be useful in assisting to clarify the focus of the strategy. The World Health Organization (WHO) has a vision that aims to see a world where 'every pregnant woman and newborn receives quality care throughout pregnancy, childbirth and the postnatal period'.<sup>1</sup> WHO defines quality of care as 'the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, health care must be safe, effective, timely, efficient, equitable and people centred'.<sup>1</sup>

There are many areas of interest associated with maternity services. Given it will not be possible to address the interests of everyone, guidance is being sought on what the key areas of focus should be for the NSAMS.

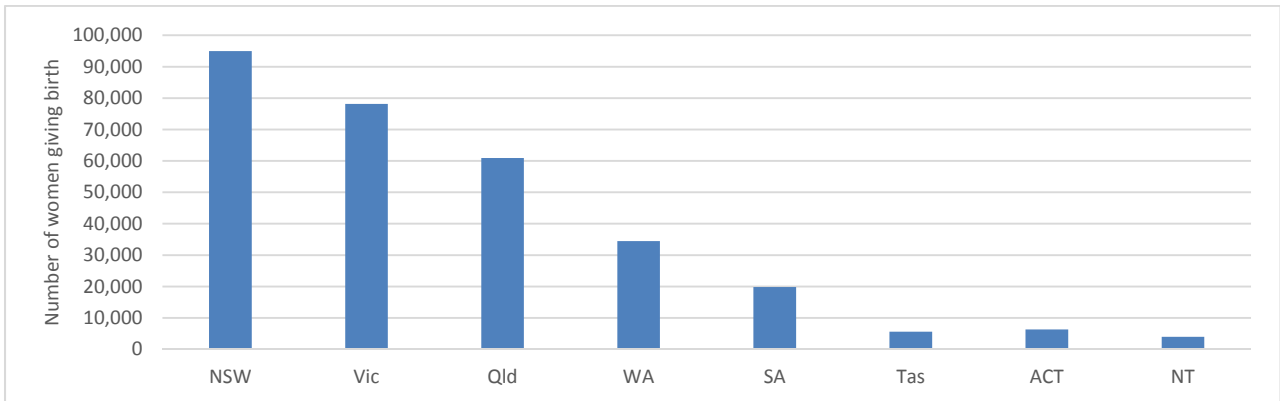
## Consultation feedback

Appendix B includes consultation questions and a template for providing input into the NSAMS.

# Births in Australia

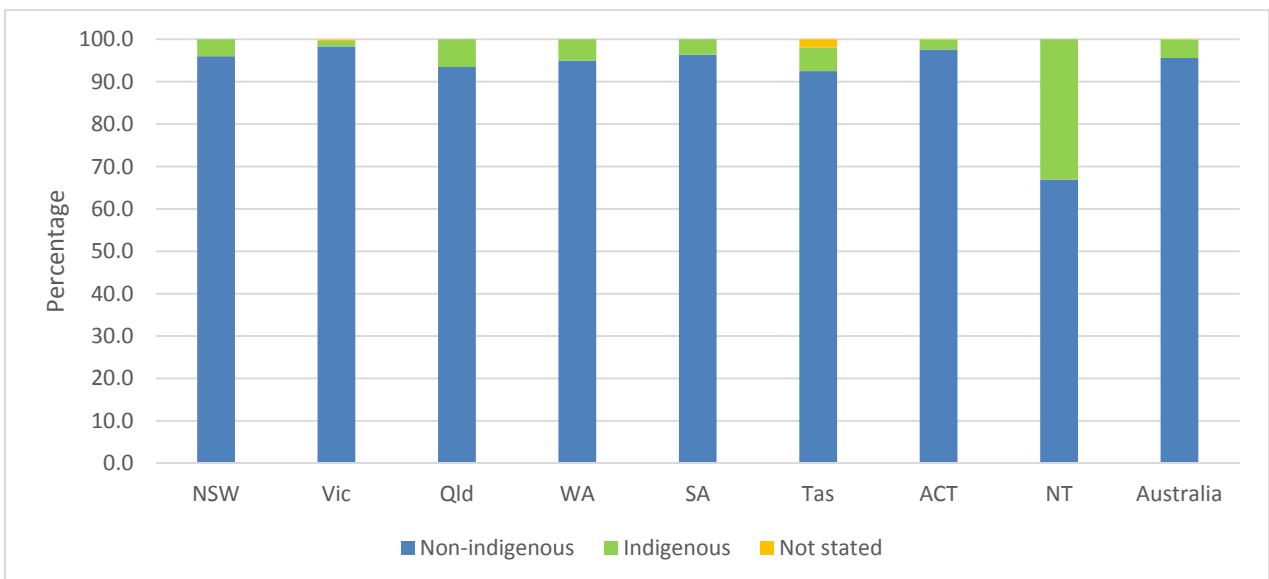
In 2015 in Australia, 308,887 babies were born — an increase of 12% since 2005. Reflecting population size in each jurisdiction, New South Wales accounted for the highest proportion of births (about one-third of all births) (see Figure 1). Nationally, 4.3% of births were to Aboriginal and Torres Strait Islander women, with one-third of women giving birth in the Northern Territory identifying as Aboriginal and/or Torres Strait Islander (see Figure 2). The majority of births occurred in major cities except in the Northern Territory and Tasmania (see Figure 3), with hospitals being the most common place of birth (see Figure 4) and more women giving birth in the public hospital setting than in private hospitals (see Figure 5).

Figure 1: Births in Australia, by state/territory of birth, 2015



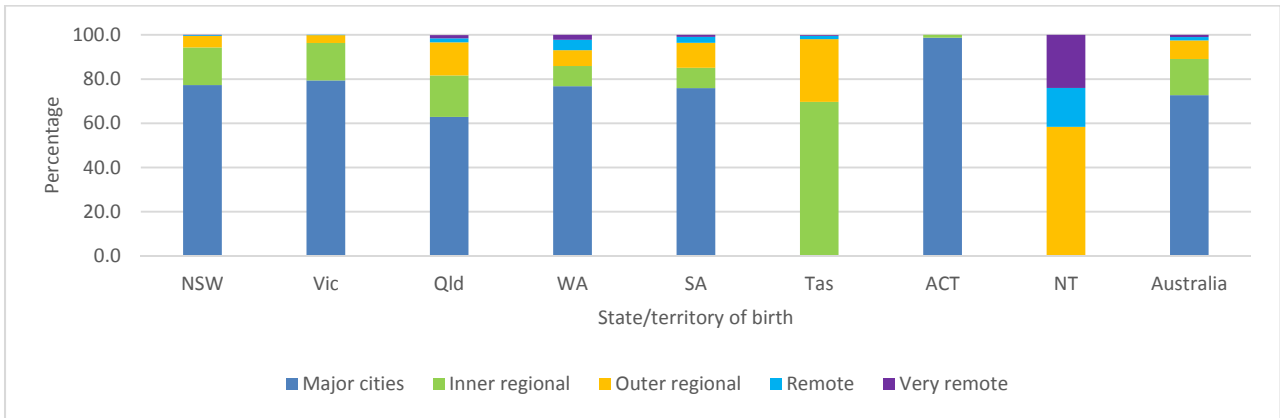
Source: AIHW analysis of the National Perinatal Data Collection.

Figure 2: Women who gave birth in Australia, by indigenous status and state/territory of birth, 2015



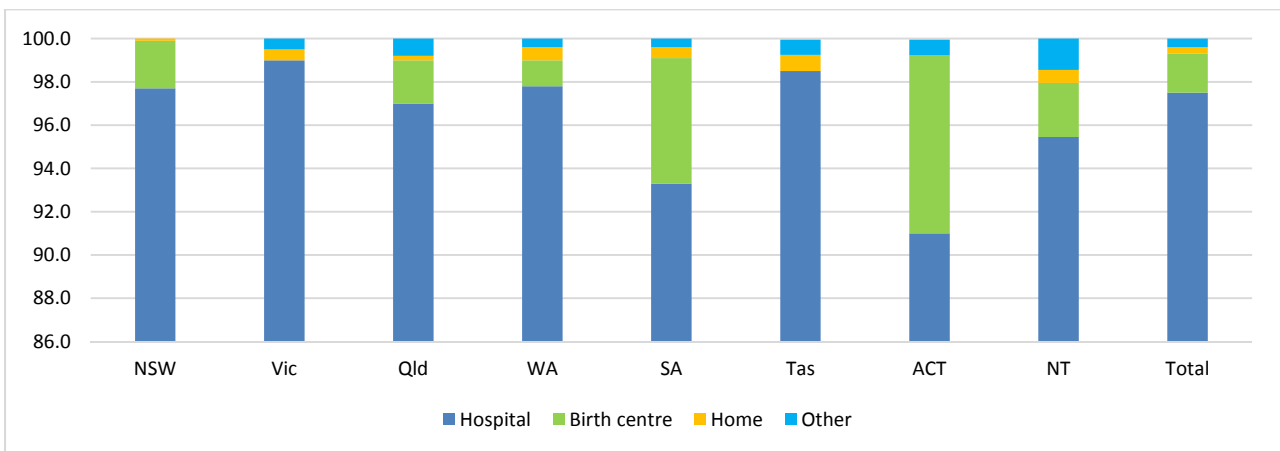
Note: Among Aboriginal and Torres Strait Islander women who gave birth in the ACT, 24.8% were non-ACT residents.  
 Source: AIHW analysis of the National Perinatal Data Collection.

Figure 3: Births in Australia by state/territory and remoteness area of mother's usual residence, 2015



Source: AIHW analysis of the National Perinatal Data Collection.

Figure 4: Births in Australia, by state/territory and place of birth, 2015



Notes: In WA, hospital births include women who gave birth before arrival. In WA and the NT, the majority of 'other' births occurred in remote community health centres.

Source: AIHW analysis of the National Perinatal Data Collection.

Figure 5: Births in Australia, by state/territory and hospital sector, 2015



Note: In WA, some private hospitals admit women from the public health system.

Source: AIHW analysis of the National Perinatal Data Collection.

## Safety and quality

Perinatal outcomes in Australia are excellent in the context of those in other Organisation for Economic Co-operation and Development (OECD) countries. Australia is regarded as a safe country in which to have a baby and compares well on a number of international measures. However, there are certain areas where there



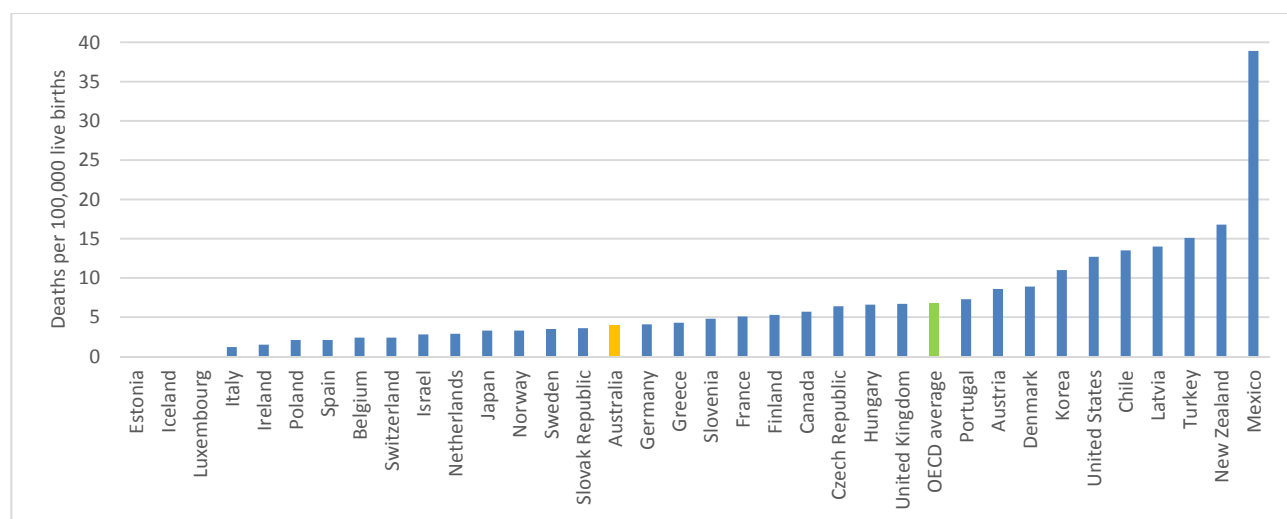
are disparities between population groups or where Australian outcomes are poorer than those of other OECD countries. Monitoring a number of indicators rather than considering each in isolation provides a more complete overall picture of care, particularly in maternity care.

The AIHW National Perinatal Data Collection reports on maternal and perinatal deaths and other outcomes such as low birth weight. The ACSQHC Second Atlas of Healthcare Variation<sup>2</sup> identifies caesarean section among women aged 24 to 30 years and third and fourth degree perineal tears as indicators of the safety and quality of maternity care. The National Core Maternity Indicators provide a measure of the clinical management and outcomes of care, which reflect safety and quality but are not the only measures that can be applied. Patient-reported outcome measures are an emerging method of assessing the quality of health care.

## What does the evidence tell us?

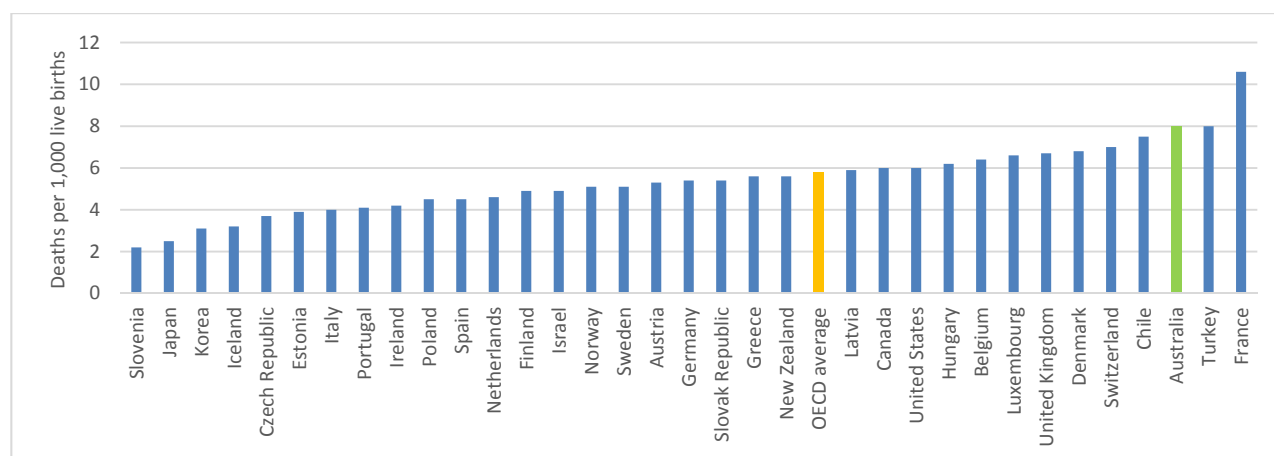
- In Australia in 2014, rates of maternal, neonatal and infant deaths and low birth weight were all lower than the OECD average (see Figures 6 and 9 to 11). The Australian rate of perinatal deaths reflects a high rate of still births (see figures 7 and 8 and page 21). Outcomes for Aboriginal and Torres Strait Islander women and babies are poorer than those in the general population (see page 18).

Figure 6: Maternal deaths from all causes, OECD countries, 2014 (or nearest year)



Source: OECD Health Statistics 2017.

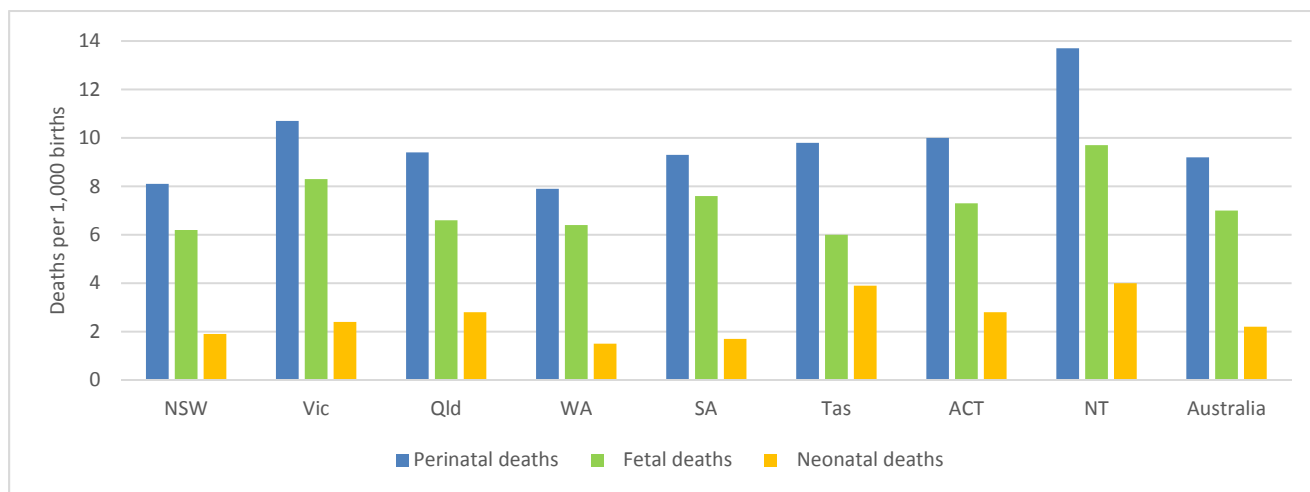
Figure 7: Perinatal deaths, OECD countries, 2014 (or nearest year)



Notes: Includes deaths of babies within one week of birth (early neonatal deaths) plus fetal deaths of minimum gestation period 28 weeks or minimum fetal weight of 1,000 g (note that these definitions differ from those use in Australia).

Source: OECD Health Statistics 2017.

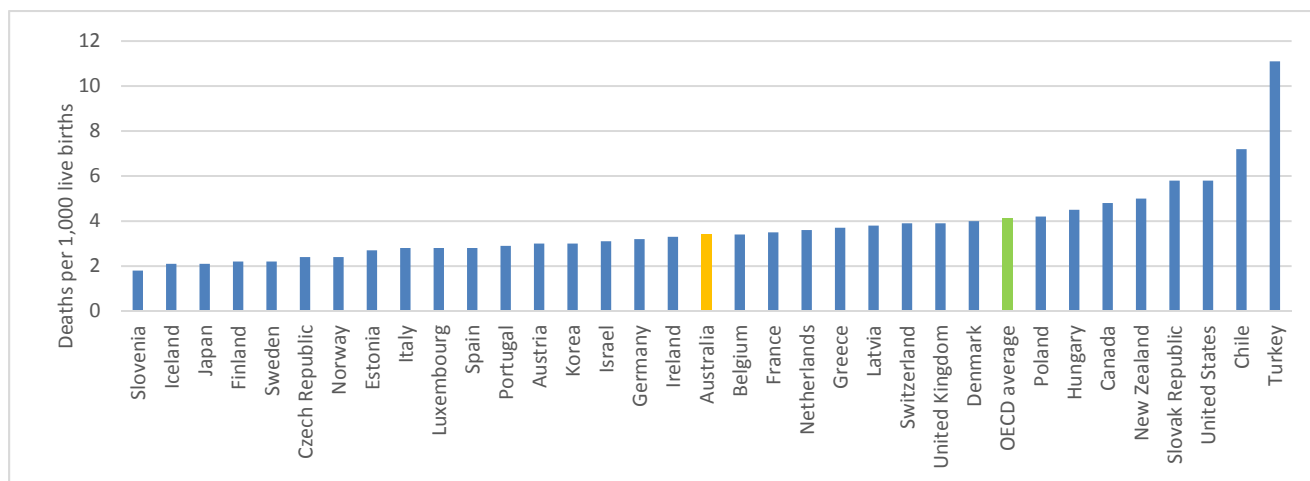
Figure 8: Perinatal deaths in Australia, by state/territory, 2015



Notes: Many women travel from interstate (and overseas) to Vic to have a termination of pregnancy. When terminations are excluded, the Victorian perinatal death rate was 9.0 per 1,000 births. In 2015, 14.3% of women who gave birth in the ACT were non-ACT residents. For ACT residents who gave birth in the ACT, there were 8.3 perinatal deaths and 6.0 fetal deaths per 1,000 births and 2.4 neonatal deaths per 1,000 live births. Fetal and neonatal deaths may include late termination of pregnancy. Neonatal deaths may exclude deaths within 28 days of birth for babies transferred to another hospital or readmitted to hospital and those dying at home.

Source: Source:AIHW analysis of the National Perinatal Data Collection.

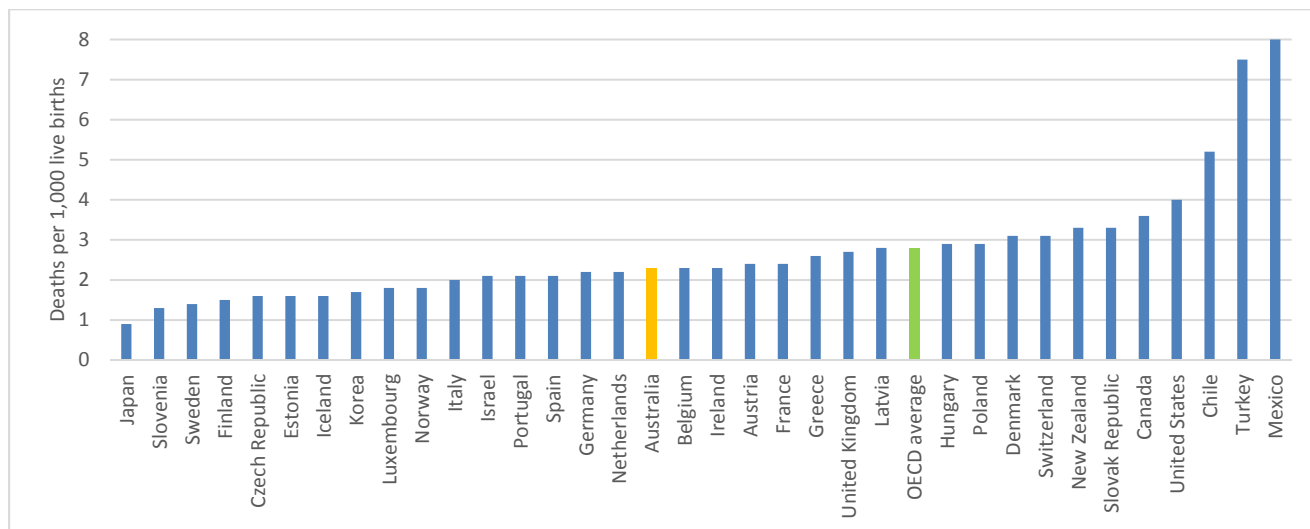
Figure 9: Infant deaths, OECD countries, 2014 (or nearest year)



Note: Includes deaths of children aged under 1 year of age that occurred in a given year.

Source: OECD Health Statistics 2017.

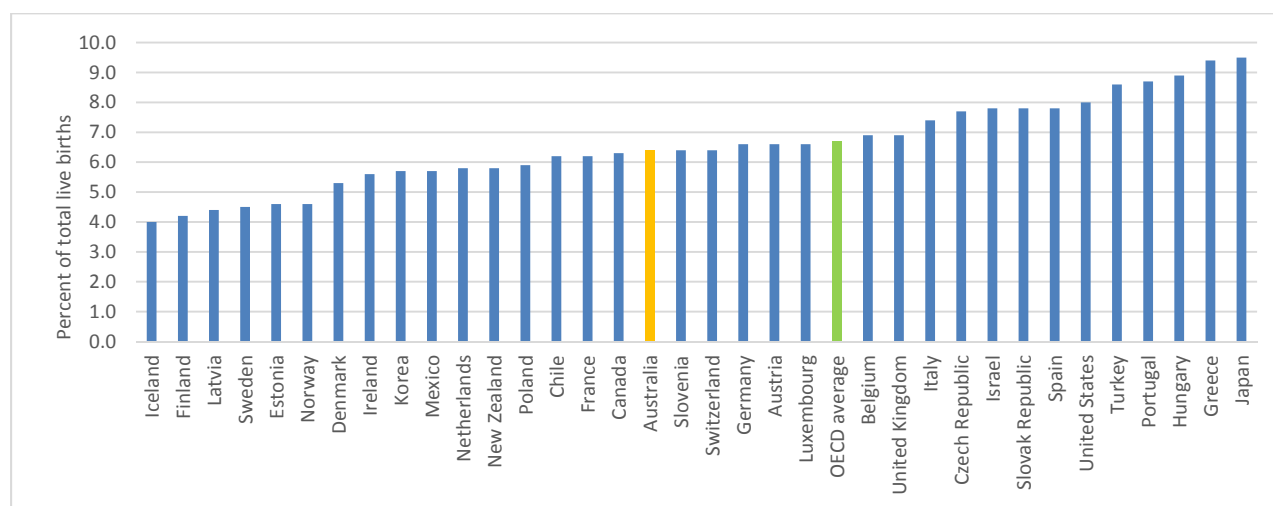
Figure 10: Neonatal deaths, OECD countries, 2014 (or nearest year)



Notes: Includes deaths of babies under 28 days of age in a given year.

Source: OECD Health Statistics 2017.

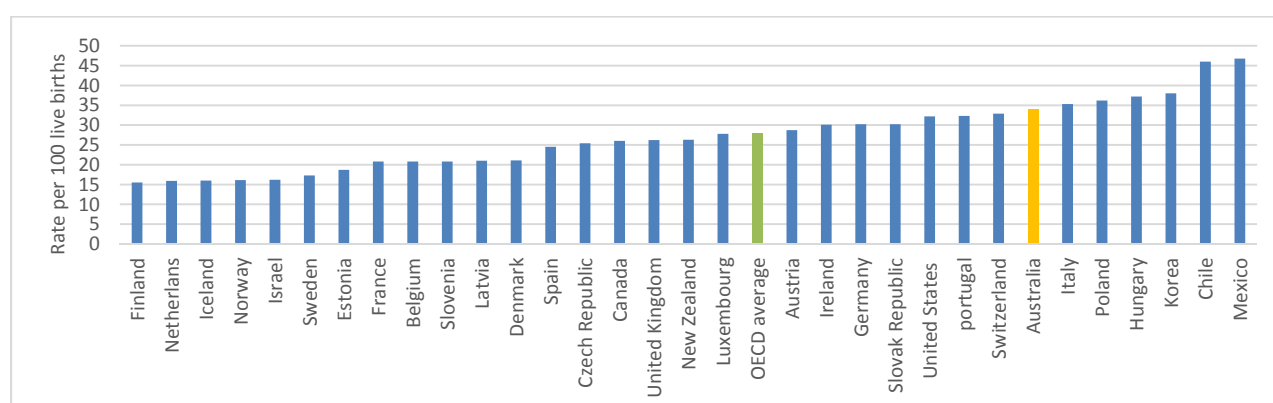
Figure 11: Low birth weight, OECD countries, 2014 (or nearest year)



Source: OECD Health Statistics 2017.

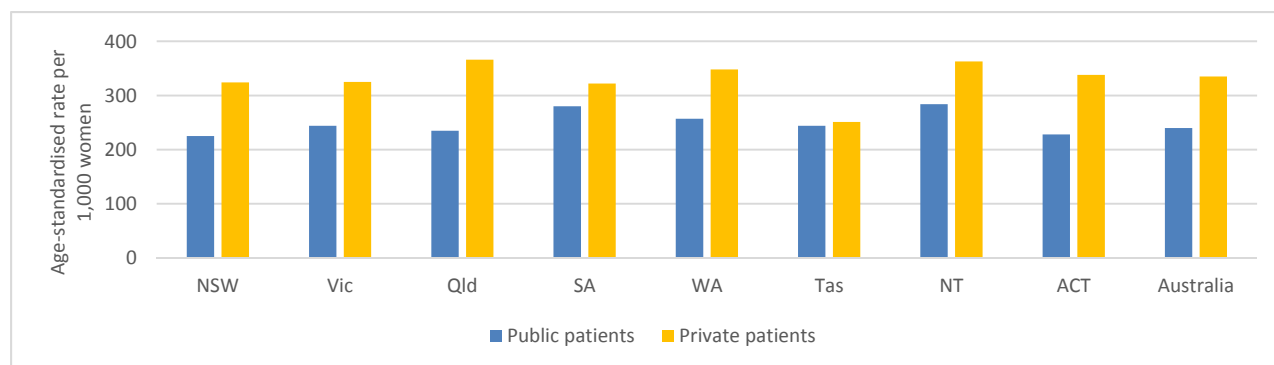
- In 2012–14, the most common causes of maternal death were bleeding in the brain and in the abdomen (non-obstetric haemorrhage). Women over the age of 35 and under 20 were more likely to die in association with childbirth.<sup>3</sup>
- The most common cause of perinatal death was congenital anomalies (3 in 10) deaths, followed by unexplained antepartum death (still birth; see page 22) and spontaneous preterm birth (both 7 in 100). The leading causes of death vary between fetal and neonatal deaths.<sup>4</sup>
- In 2015, 1 in 15 liveborn babies were of low birthweight. Of these babies, 1 in 7 were of very low birthweight (less than 1,500 g) and 1 in 17 were extremely low birthweight (less than 1,000 g).<sup>4,3</sup>
- The WHO notes that, while caesarean sections are effective in saving maternal and infant lives, they are only required when medically indicated and every effort should be made to provide caesarean sections to women in need, rather than striving to achieve a specific rate.<sup>5</sup> Caesarean sections are associated with short and long-term risk which can extend many years beyond the current birth and affect the health of the woman, her child, and future pregnancies.<sup>5</sup> Caesarean section rates in Australia are high relative to most OECD countries (see Figure 12)<sup>2</sup> and rates of both emergency and elective caesarean sections have risen over the last decades, with a greater increase in elective than emergency caesarean sections.<sup>2</sup> Current Australian rates vary by jurisdiction and are higher for privately funded patients than for women in the public system (s Nationally, repeat caesarean sections occur for four-fifths of women with one previous caesarean section and almost all (98%) of women with two or more previous caesarean sections (see Figure 14).<sup>6</sup> However, vaginal birth after a primary caesarean section can be successful in around 60% of women depending on individual circumstances.<sup>7</sup>

Figure 12: Rates of caesarean section, OECD countries, 2015 (or nearest year)



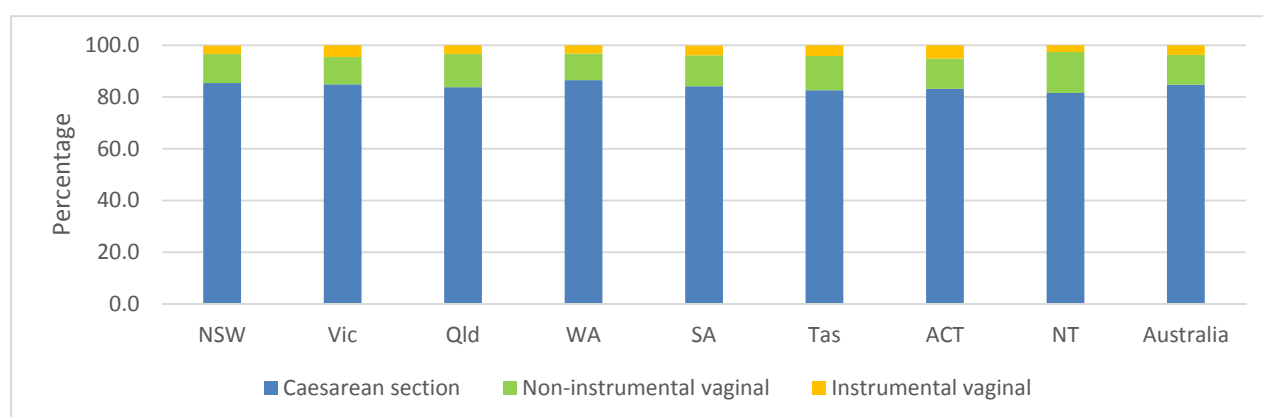
Source: OECD. *Health at a glance 2015: health care activities*. Paris: OECD; 2015.

Figure 13: Number of caesarean sections, by state/territory and health sector, 2012–14



Source: ACSQHC, AIHW. *The Second Australian Atlas of Healthcare Variation*. Sydney: Australian Commission on Safety and Quality in Health Care; 2017.

Figure 14: Multiparous mothers who had previous caesarean section, by current method of birth and state and territory, 2015

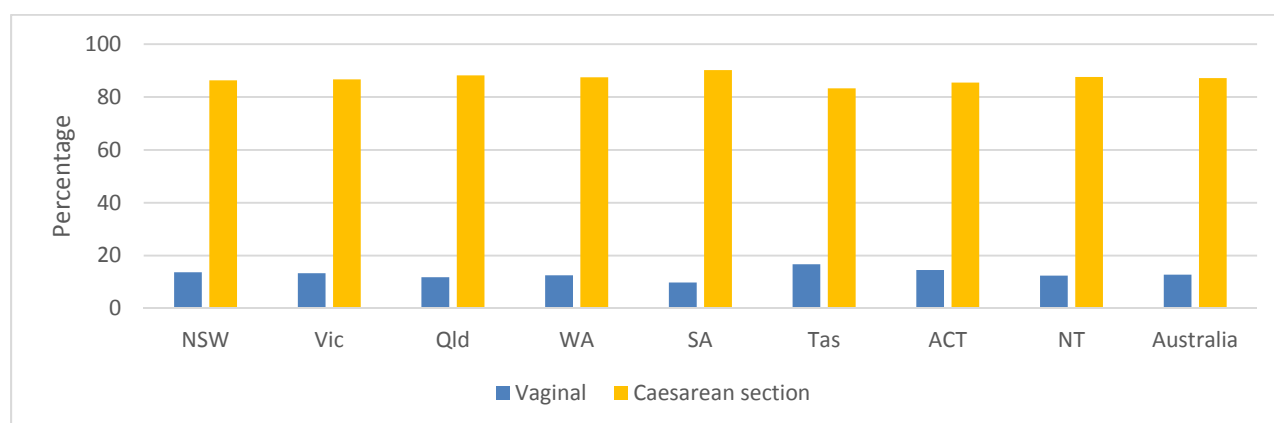


Note: For NSW, WA and the NT, 'Non-instrumental vaginal' includes all women who had a vaginal breech birth, whether or not instruments were used. For the remaining jurisdictions, vaginal breech births are included only where instruments were not used.

Source: Source:AIHW analysis of the National Perinatal Data Collection.

- Nine in ten babies presenting as breech (where the baby presents with buttocks) are born by caesarean section (see Figure 15).<sup>4</sup> However, several studies have shown that, with careful selection criteria and involvement of experienced health professionals in centres that are supportive, vaginal breech birth can be successful in up to four-fifths of women.<sup>8</sup>

Figure 15: Babies with breech presentation by state/territory and mode of birth, Australia 2015

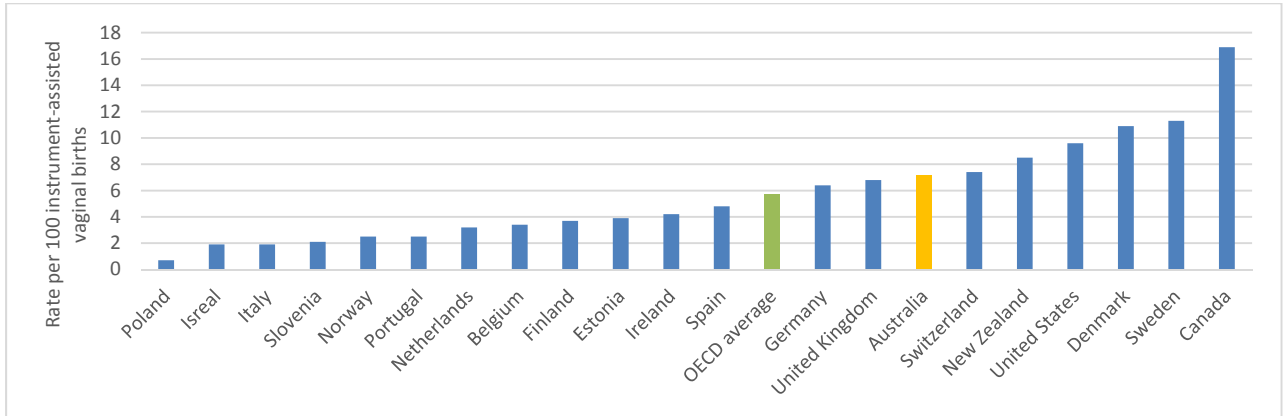


Note: Includes instrumental and non-instrumental vaginal births.

Source: AIHW analysis of the National Perinatal Data Collection.

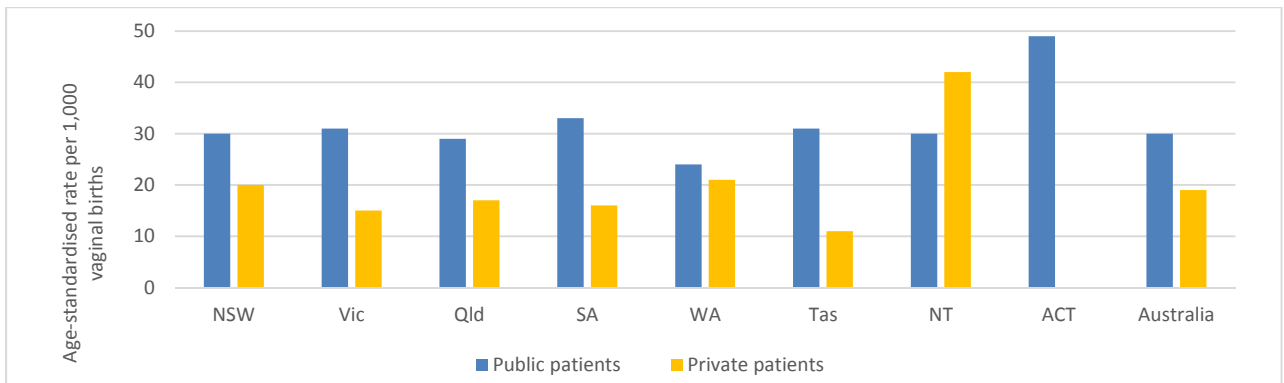
- Perineal tears (tears of the skin and other tissues between the vagina and anus) can cause long-term consequences for women’s lives if not detected and repaired. The Australian rate of third- and fourth-degree perineal tears is higher than the average for comparable OECD countries (see Figure 16).<sup>2</sup> Differences in clinical practice and in reporting are likely to contribute to variation between countries. Rates are higher with instrument-assisted birth. Rates in Australia vary by jurisdiction and health sector (see Figure 17) and are lower among Aboriginal and Torres Strait Islander women and among women living in remote areas.<sup>2</sup>

Figure 16: Rates of obstetric trauma in instrument-assisted birth, OECD countries, 2015 (or nearest year)



Source: OECD. Obstetric trauma. In: *Health at a glance 2017: OECD indicators*. Paris: OECD; 2017.

Figure 17: Number of third- and fourth-degree perineal tears, by state and territory and health sector, 2012–14



Note: Data on perineal tears in the private sector in the ACT are not published.

Source: ACSQHC, AIHW. *The Second Australian Atlas of Healthcare Variation*. Sydney: Australian Commission on Safety and Quality in Health Care; 2017.

## What's happening?

- Women's Healthcare Australasia is currently conducting a National Collaborative Improvement Project in partnership with the NSW Clinical Excellence Commission (CEC), and with the support of Safer Care Victoria and the Clinical Excellence Division of Queensland Health.<sup>10</sup> The aim of the Collaborative is reducing by 20% the number of women experiencing a third or fourth degree tear by the end of 2018.
- The National Safety and Quality Health Service (NSQHS) Standards were developed by the ACSQHC with the Australian Government, state and territory partners, consumers and the private sector. They apply to all patients in acute health care facilities, including adults, adolescents, children and babies and to all types of patients including medical, surgical, maternity and mental health patients'. The primary aim of the NSQHS Standards is to protect the public from harm and improve the quality of health care. They describe the level of care that should be provided by health service organisations and the systems that are needed to deliver such care. All hospitals and day procedure services across Australia are required to implement the NSQHS Standards.
- Patient-reported outcome measures are an emerging method of assessing the quality of health care. They are not yet embedded in routine measurement at regional, jurisdictional or national level. Internationally, such routine and consistent measurement is being developed or is already embedded in the health systems of several OECD countries.<sup>11</sup> In late 2016, the ACSQHC contracted the University of Wollongong to conduct an environmental scan of the Australian healthcare sector. It gives detail about the current situation in Australia regarding the collection and use of patient-reported outcome measures.<sup>12</sup> The ACSQHC is currently scoping an appropriate role at national level to support the consistent and routine use of patient-reported outcomes to drive quality improvement in a way that brings patients' voices and outcomes to the fore.<sup>11</sup> This project will involve a consultation process.

## Access

While Australia has universal access to health care and a highly skilled health workforce, there are some disparities in access to maternity care. Access can mean different things to different people. For some people, it will relate to geography and their ability to access/attend clinical and social services close to where they live. For others, it can be about having a range of models of care available and choice as to which one they may choose for the provision of their care. For still others it may be about health literacy, information on services, cost and outcomes of care. Access is also about access to specialist services for complications/comorbidities common in the perinatal period (e.g. mental health conditions). In addition, there is the issue of sharing of information across jurisdictional borders, between institutions and between individual health professionals. This section discusses some of the evidence on these aspects.

Access to maternity services for Aboriginal and Torres Strait Islander women is discussed on page 18.

## What does the evidence tell us?

- Around a quarter of Australian births are to women whose usual place of residence is non-metropolitan (see Figure 2, page 6) and antenatal care is least accessible to women living in remote areas.<sup>4</sup>
- Based on 2015 data, nationally, most women give birth in public hospitals, with slightly more than one-quarter giving birth in a private hospital.<sup>6</sup> Almost all births in Australia occur in hospitals in conventional labour-ward settings. Births in birth centres account for 1.8% of births, and homebirths and other births (such as those occurring before arrival in hospital or in other settings) account for 0.3% and 0.4%, respectively (see Figure 3, page 7).<sup>6</sup> In 2012, 3.5% of women intended to give birth outside a labour-ward setting and 3.1% actually did so, giving birth in places such as birth centres or at home.<sup>13</sup>

- In a 2015 survey of access to midwifery postnatal care outside the hospital setting,<sup>13\*</sup> most women reported access to a midwife at some time in the postnatal period (6 weeks after the baby is born) though women giving birth in the public sector and those in non-metropolitan areas were significantly more likely to access a midwife in the community than their private or metropolitan counterparts. Women experiencing continuity of midwifery care were most likely to have access to a midwife for postnatal care outside of the hospital setting.

## What's happening?

The Pregnancy, Birth and Baby helpline replaced the National Pregnancy Support Helpline on 1 July 2010. The Pregnancy, Birth and Baby Helpline offers a more comprehensive service, providing evidence-based information and advice on pregnancy, birthing, postnatal care and the early parenting period, regardless of geographic location. The helpline can be accessed 24 hours a day, seven days a week and is supported by a complementary [web portal](http://www.pregnancybirthbaby.org.au/) (<http://www.pregnancybirthbaby.org.au/>).

- In 2015, the national Maternity Services Inter Jurisdictional Committee (MSIJC), in overseeing the implementation of the National Maternity Services Plan, endorsed the Australian Rural Birthing Index (ARBI) Toolkit, a validated, evidence-based guide to assessing the appropriate level of maternity service for rural communities with populations of 1,000-25,000.<sup>15</sup> The Toolkit combines instructions for calculating the ARBI with a checklist for planners to assess contextual and pragmatic issues that impact the ability to deliver sustainable health services in a given rural community. It is founded on the principles of the Canadian Rural Birth index and birth rates, social vulnerability, isolation factors and service capabilities. States and territories can use the methodology to assist in maternity care planning.
- Medicare Benefits Schedule (MBS) items are available to support consultations via video-conferencing in geographically eligible areas.<sup>16</sup> According to the 2016 National Health Workforce Dataset, 7.4% (1,763) of the midwifery workforce stated that they practiced via tele-health. On average these midwives practiced via tele-health 10.1 hours per week.<sup>17</sup>
- In the 2017 Budget, the Federal Government committed to expanding the My Health Record system, with the aim of extending the program nationally by the end of 2018.<sup>18</sup> Through the My Health Record system health professionals will have access to timely information about patients, such as shared health summaries, discharge summaries, prescription and dispense records, pathology reports and diagnostic imaging reports.

## Models of care

Women's choices about pregnancy and birth care in Australia are expanding. Models of care are evolving in response to both consumer demand and a widening evidence-base on the benefits of new models of care.<sup>19</sup> Obstetricians, midwives and GPs are the key providers of maternity care in Australia. Since the last National Maternity Services Plan, jurisdictions have implemented strategies to improve the range of models of care available, although there is currently no data on who, where and how. While this may still be considered to require further work, there has been improvement.

### Current models of maternity care<sup>19</sup>

- Private obstetrician (specialist) care: Antenatal care provided by a private specialist obstetrician. Intrapartum care is provided in either a private or public hospital by the private specialist obstetrician and hospital midwives in collaboration. Postnatal care is usually provided in the hospital by the private specialist obstetrician and hospital midwives and may continue in the home, hotel or hostel.
- Private midwifery care: Antenatal, intrapartum and postnatal care is provided by a private midwife or group of midwives in collaboration with doctors in the event of identified risk factors. Antenatal, intrapartum and postnatal care could be provided in a range of locations including the home.

\* Note that the survey was not a comprehensive report of postnatal services in Australia and may not necessarily be generalisable.

- **GP obstetrician care:** Antenatal care provided by a GP obstetrician. Intrapartum care is provided in either a private or public hospital by the GP obstetrician and hospital midwives in collaboration. Postnatal care is usually provided in the hospital by the GP obstetrician and hospital midwives and may continue in the home or community.
- **Shared care:** Antenatal care is provided by a community maternity service provider (doctor and/or midwife) in collaboration with hospital medical and/or midwifery staff under an established agreement, and can occur both in the community and in hospital outpatient clinics. Intrapartum and early postnatal care usually takes place in the hospital by hospital midwives and doctors, often in conjunction with the community doctor or midwife (particularly in rural settings).
- **Combined care:** Antenatal care provided by a private maternity service provider (doctor and/or midwife) in the community. Intrapartum and early postnatal care provided in the public hospital by hospital midwives and doctors. Postnatal care may continue in the home or community by hospital midwives.
- **Public hospital maternity care:** Antenatal care is provided in hospital outpatient clinics (either onsite or outreach) by midwives and/or doctors. Care could also be provided by a multidisciplinary team. Intrapartum and postnatal care is provided in the hospital by midwives and doctors in collaboration. Postnatal care may continue in the home or community by hospital midwives.
- **Public hospital high risk maternity care:** Antenatal care is provided to women with medical high risk/complex pregnancies by maternity care providers (specialist obstetricians and/or maternal-fetal medicine subspecialists in collaboration with midwives) with an interest in high risk maternity care in a public hospital. Intrapartum and postnatal care is provided by hospital doctors and midwives. Postnatal care may continue in the home or community by hospital midwives.
- **Team midwifery care:** Antenatal, intrapartum and postnatal care is provided by a small team of rostered midwives (no more than eight) in collaboration with doctors in the event of identified risk factors. Intrapartum care is usually provided in a hospital or birth centre. Postnatal care may continue in the home or community by the team midwives.
- **Midwifery Group Practice caseload care:** Antenatal, intrapartum and postnatal care is provided within a publicly-funded caseload model by a known primary midwife with secondary backup midwife/midwives providing cover and assistance with collaboration with doctors in the event of identified risk factors. Antenatal care and postnatal care is usually provided in the hospital, community or home with intrapartum care in a hospital, birth centre or home.
- **Remote area maternity care:** Antenatal and postnatal care is provided in remote communities by a remote area midwife (or a remote area nurse) or group of midwives sometimes in collaboration with a remote area nurse and/or doctor. Antenatal and postnatal care, including high- and low-risk pregnancies, as well as consultations for the management of gestational diabetes is currently provided via telehealth in a number of areas. Alternatively, fly-in-fly-out models can support clinicians in an outreach setting. Intrapartum and early postnatal care is provided in a regional or metropolitan hospital (involving temporary relocation prior to labour) by hospital midwives and doctors.
- **Private obstetrician and privately practising midwife joint care:** Antenatal, intrapartum and postnatal care is provided by a privately practising obstetrician and midwife from the same collaborative private practice. Intrapartum care is usually provided in either a private or public hospital by the privately practising midwife and/or private specialist obstetrician in collaboration with hospital midwifery staff. Postnatal care is usually provided in the hospital and may continue in the home, hotel or hostel by the privately practising midwife.



## What does the evidence tell us?

- A 2012 survey of access to public antenatal care<sup>20</sup> found that an area where continuing development appeared to be required was the promotion and acceptance of midwife-led care and participation in collaborative models. Qualitative comments to the survey suggested that the cultural shift in health services associated with these models was not yet complete.
- A Cochrane review<sup>21</sup> found that women who received midwife-led continuity of care were less likely to have an epidural, episiotomy or instrumental birth. Women's chances of a spontaneous vaginal birth were also increased and there was no difference in the number of caesarean sections. Women were less likely to experience preterm birth or stillbirth. In addition, women were more likely to be cared for in labour by midwives they already knew. The review identified no adverse effects compared with other models and a trend towards lower costs. The majority of included studies reported a higher rate of maternal satisfaction in midwife-led continuity models of care. The review concluded that most women should be offered 'midwife-led continuity of care' but that it cannot be assumed that this applies to women with existing serious pregnancy or health complications, as these women were not included in the evidence assessed.
- The WHO recommends midwife led continuity of care as a health system intervention to improve the utilisation and quality of antenatal care.<sup>22</sup>

## What's happening?

- The Maternity Care Classification System (MaCCS) was recently developed as part of the National Maternity Data Development Project to classify, record and report data about different maternity models of care operating in Australia.<sup>19</sup> It is anticipated that it will enable data to be collected nationally to facilitate meaningful analysis and comparisons of maternal and perinatal outcomes associated with different models of care. Collection of data under the MaCCS is not compulsory and strategies are in place to encourage its use. The AIHW is currently developing a report that will outline progress to date on the MaCCS, detailing the data that has been captured, the outcome of the data evaluation process, how the data was validated, data quality issues, data gaps and future work.
- Advice from jurisdictions indicates that the majority now have policy developed to enable privately practising midwives to access public maternity services although implementation remains a challenge in some locations. All but two report that they have at least one publicly funded homebirth model in operation. Some jurisdictions indicate plans to expand the availability of midwifery group practice and homebirth models.

## Preconception care

Preconception care consists of interventions that aim to identify and modify biomedical, behavioural and social risks to a woman's health or pregnancy outcome through prevention and management.<sup>23</sup> It also provides an opportunity to screen for genetic conditions. Preconception care is largely provided by GPs in the primary health care setting. Other health care professionals (such as obstetricians, infertility specialists and midwives) may also be presented with an opportunity to assess and counsel a woman before a planned pregnancy.<sup>23</sup>

## What does the evidence tell us?

- There is some evidence that preconception health promotion interventions are associated with positive maternal behavioural change.<sup>24</sup>
- There is a lack of randomised controlled trial evidence on the effectiveness of preconception care in improving outcomes for women who are overweight or obese<sup>25</sup> or women with diabetes.<sup>26</sup>

## What's happening?

- The RACGP provides guidance on preventive activities prior to pregnancy.<sup>23</sup>

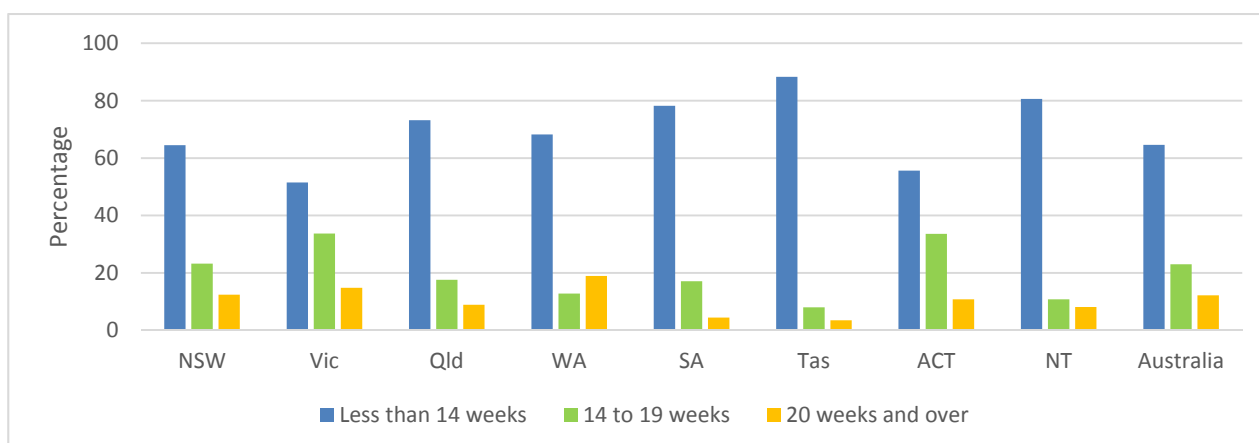
## Pregnancy care

Antenatal care is a planned series of contacts between a pregnant woman and a midwife or doctor to assess and improve the wellbeing of the mother and baby throughout pregnancy.<sup>4</sup> Antenatal care generally begins following confirmation of the pregnancy by a GP or midwife, who will ideally discuss with the woman the various options available in the local area and refer as required and agreed. For many women, the GP remains an important link both before, during and after the birth of the child even though they may have limited direct involvement in care during pregnancy.

### What does the evidence tell us?

- The Australian Pregnancy Guidelines<sup>8</sup> recommend that the schedule of antenatal contacts is determined based on the individual woman's need, that the first antenatal contact occur within the first 10 weeks of pregnancy due to the high information needs in early pregnancy and that first-time mothers with an uncomplicated pregnancy attend 10 contacts (7 contacts for subsequent uncomplicated pregnancies).
- Nationally, in 2015, 47% of mothers attended at least one antenatal contact in the first 10 weeks of pregnancy, the majority of women attended antenatal care in the first trimester (before 14 weeks) across jurisdictions and at a national level and 12% began antenatal care after 20 weeks gestation (see Figure 18).<sup>4</sup>

Figure 18: Women who gave birth, by duration of pregnancy at first antenatal contact and state/territory, 2015



Source: AIHW analysis of National Perinatal Data Collection

- Almost all women (99.9%) who gave birth in Australia in 2015 had at least one antenatal contact, with 95% of women attending 5 or more contacts, 87% attending 7 or more contacts and 58% attending 10 or more contacts.<sup>4</sup>
- Differences in uptake of antenatal care suggest that it is least accessible for women living in low socioeconomic or remote areas, Aboriginal and Torres Strait Islander women (see page 18) and women from culturally and linguistically diverse backgrounds (see page 19).<sup>4</sup>
- A 2012 survey of access to public antenatal care found that, as well as geographical challenges, maintaining a sufficient workforce was an issue, with limited numbers of midwives and GP obstetricians.<sup>20</sup>

## What's happening?

- Module I of the (then) antenatal care guidelines was released in 2012,<sup>27</sup> with Module II following in 2014.<sup>28</sup> Both Modules were endorsed by AHMAC. Feedback from all states and territories indicated that they were using the guidelines to inform policy development and clinical decisions. Selected topics have recently been updated and the topic of substance use added. Updated guidelines were approved by NHMRC in 2017 and publicly released in February 2018 under the title Clinical Practice Guidelines; Pregnancy Care.<sup>8</sup> Reviews of other topics are currently underway and another update is expected to be released in 2019.

## Postnatal care

The median length of stay in a maternity unit is 2 days following a non-instrumental vaginal birth, 3 days following an instrumental vaginal birth and 4 days following caesarean section.<sup>6</sup> Postnatal care is provided in the acute or community health care setting or in the woman's home. Postnatal care includes clinical care of the woman and her baby, support for infant feeding and ongoing provision of information and support. Referral to early childhood or maternal and child health nurses and GPs usually occurs 1 to 6 weeks after birth.

## What does the evidence tell us?

- A woman's ability to care for her infant and the formation of secure infant attachment is associated with positive social, cognitive, and behavioural outcomes in the child.<sup>29</sup>
- Some women may experience distress or symptoms of depression in the early postnatal period.<sup>30</sup> The early postnatal period is also the time when symptoms of postpartum psychosis can emerge. It is also a time of high risk of relapse of severe mental illnesses including schizophrenia and psychotic disorders and bipolar disorder. Early intervention, in the form of support or specific care, can help women to adjust to these emotional changes and prevent more serious mental health conditions from developing (see page 20).<sup>30</sup>
- In Australia, it is recommended that infants are exclusively breastfed until around 6 months of age when solid foods are introduced, and that breastfeeding is continued until 12 months of age and beyond, for as long as the mother and child desire.<sup>31</sup> While Australia's breastfeeding initiation rate is currently high at 92%, only one-quarter of infants are exclusively breastfed to around 6 months, around two-thirds to at least 4 months of age and three-quarters to at least 2 months of age. The proportion still receiving breastmilk decreased to two-fifths of children aged 7–12 months and one-fifth at 13–24 months.<sup>32</sup> Health professionals have a vital role in supporting breastfeeding, along with governments, industry and the whole community.<sup>31</sup>

## What's happening?

- On behalf of AHMAC, the Department of Health is developing a high-level enduring strategy to incorporate recent research on effective strategies to support breastfeeding in Australia and to target key issues that are relevant to the current environment.<sup>33</sup> A key focus of the enduring strategy will be addressing barriers to women establishing and maintaining breastfeeding.

# Maternity services for Aboriginal and Torres Strait Islander women and families

Aboriginal and Torres Strait Islander culture takes a more holistic view of wellbeing and has many strengths that provide a positive influence on wellbeing and resilience for Aboriginal and Torres Strait Islander women and their families.<sup>8</sup> These include a supportive extended family network and kinship, connection to country, and active cultural practices in language, art and music.

## What does the evidence tell us?

- In 2015, 4.3% of all women who gave birth in Australia identified as being Aboriginal and/or Torres Strait Islander.<sup>4</sup> These women were more likely to be adolescent and to live in remote or disadvantaged areas than non-indigenous mothers.
- In recent years, more Aboriginal and Torres Strait Islander women have been attending five or more antenatal contacts but the average number of contacts is slightly lower than among non-indigenous mothers and Aboriginal and Torres Strait Islander women are slightly less likely to attend their first antenatal contact in the first trimester.<sup>3</sup>
- Fewer Aboriginal and Torres Strait Islander women smoke during pregnancy than previously but rates are nearly 4 times those in non-indigenous women.<sup>4</sup>
- Aboriginal and Torres Strait Islander babies are almost twice as likely to be born preterm and to be of low birth weight and 1.5 times more likely to be admitted to a special care nursery or neonatal intensive care unit.
- Aboriginal and Torres Strait Islander women are 3 times more likely to die during pregnancy or in the 6 weeks after birth than other Australian women<sup>3</sup> and Aboriginal and Torres Strait Islander babies are 1.4 times more likely to die in the perinatal period than non-indigenous babies.<sup>4</sup>
- One-fifth of Aboriginal and Torres Strait Islander women live more than an hour's drive from a hospital with a public birthing unit.<sup>34</sup>
- Service models that are culturally sensitive, provide continuity of care and involve partnerships with Aboriginal health staff improve outcomes for mothers and babies.<sup>8</sup>
- In Australia in 2015, there were 3,187 employed registrants in nursing and midwifery who identified as an Aboriginal or Torres Strait Islander. This represents 1.1% of all employed nurses and midwives who provided their indigenous status.<sup>35</sup>

## What's happening?

- Strategies under the National Aboriginal and Torres Strait Islander Health Plan 2013–2023<sup>36</sup> (the Health Plan) include improving access to maternity services and birthing options, increasing rates and duration of breastfeeding and improving data systems.
- Goals under the Implementation Plan for the Health Plan<sup>37</sup> include that by 2023, smoking during pregnancy is decreased to 37%, attendance of at least one antenatal contact is increased to 60% and attendance of at least five antenatal care contacts is increased to 90%.
- The National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families notes that the primary goal of all maternity services should be to ensure that Aboriginal and Torres Strait Islander women are engaged early in their pregnancy and receive the optimal level and type of care according to their individual needs.

- The national pregnancy care guidelines<sup>8</sup> include a chapter on optimising antenatal care for Aboriginal and Torres Strait Islander women, with a focus on providing holistic care to meet spiritual, emotional, social and cultural needs as well as physical and healthcare needs.
- The Characteristics of Culturally Competent Maternity Care for Aboriginal and Torres Strait Islander Women<sup>38</sup> report contains valuable information to assist health services in providing culturally sensitive maternity care to Aboriginal and Torres Strait Islander women and their families.
- The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) is the representative body for Aboriginal and Torres Strait Islander nurses and midwives in Australia. CATSINaM's primary function is to implement strategies to increase the recruitment and retention of Aboriginal and Torres Strait Islander peoples into nursing and midwifery professions.<sup>39</sup>
- AHMAC has endorsed Guiding Principles for 'Birthing on Country' Service Model and Evaluation Framework. CATSINaM and the Australian College of Midwives have issued a joint position statement on Birthing on Country.<sup>40</sup> There are four NHMRC Grants (in Queensland, NSW, Victoria and WA) examining differing aspects of Birthing on Country.
- The Nursing and Midwifery Board of Australia and CATSINaM have published a joint statement on culturally safe care.<sup>41</sup> RANZCOG has released guidance on cultural competency for its membership.<sup>42</sup>

## Maternity services for culturally and linguistically diverse families

While many women from culturally and linguistically diverse (CALD)<sup>†</sup> backgrounds experience healthy pregnancies, for migrants and refugees issues associated with resettlement can contribute to poorer perinatal outcomes than those experienced by women in general.

### What does the evidence tell us?

- One-quarter (25%) of mothers who gave birth in Australia in 2015 were born in a non-English speaking country, compared with 22% of women of child-bearing age in the population. The proportion of mothers born in a non-English speaking country has increased from 17% in 2005.<sup>4</sup>
- Mothers who were born in non-English-speaking countries were less likely to attend antenatal care in the first trimester. However, there was no difference in the proportion attending five or more antenatal contacts.<sup>4</sup>
- Babies of mothers born in non-English-speaking countries were almost twice as likely to be small-for-gestational age than babies whose mothers were born in Australia or other English-speaking countries.<sup>4</sup>

### What's happening?

- The Translating and Interpreting Service (TIS National) is an interpreting service provided by the Department of Home Affairs for people who do not speak English and for agencies and businesses that need to communicate with their non-English speaking clients. Medical practitioners (defined as general practitioners and medical specialists) are eligible for the Department of Social Services' Free Interpreting Service and access to the Doctors Priority Line when providing services that are Medicare-rebateable, delivered in private practice and provided to non-English speakers who have a Medicare card.

<sup>†</sup> The term 'culturally and linguistically diverse (CALD)' is used in this discussion paper to refer both to women who are voluntary migrants and women who come to Australia as refugees, humanitarian entrants or asylum seekers. These groups are also referred to as migrant and refugee people, people from non-English-speaking backgrounds or people who speak a language other than English. It also includes those who may have been born in Australia to parents who were migrants or refugees.

- Interpreters accredited by NAATI (National Association of Accreditation for Translators and Interpreters) have been assessed as having a high level of technical competence in both English and one or more other languages and are bound by a code of ethics including strict confidentiality. However, there is a shortage of accredited interpreters, particularly for languages of new and emerging communities. While involvement of female interpreters is preferable in maternity care, their availability may also be limited.
- In many states and territories, roles such as multicultural health workers have been developed. Multicultural health workers (also known as bicultural health workers) assist people from migrant and refugee communities to access health services.

## Perinatal mental health

Perinatal mental health refers to a woman's emotional wellbeing during pregnancy and in the first 12 months after the birth. A woman's mental health at this time increases the risk of obstetric and neonatal complications and can affect her ability to bond with her baby and the infant's psychological adaptation over the longer term.<sup>30</sup>

### What does the evidence tell us?

- Up to one in ten women experience depression during pregnancy<sup>42</sup> and one in six experience it in the first postnatal year.<sup>43</sup> Around one in five women experience an anxiety disorder in late pregnancy<sup>44</sup> and one in six in the postnatal period.<sup>45</sup> Anxiety and depression frequently occur together.<sup>46</sup>
- As perinatal screening for depression and anxiety increases identification of women at risk of depression and anxiety,<sup>47</sup> recent Australian clinical practice guidelines recommend that all women are screened twice in pregnancy and twice in the postnatal period.<sup>30</sup> They also recommend assessment of psychosocial risk. Available data on rates of assessment indicate that these are lower in the private sector than in the public maternity sector.<sup>48</sup>
- Psychological therapy is effective in treating mild to moderate depression and anxiety and pharmacological treatments may be indicated for women moderate to severe mental health conditions based on the risks and benefits for the individual woman.<sup>30</sup>
- Mental health conditions such as bipolar disorder and schizophrenia are less common than depression and anxiety but are associated with a high risk of relapse across the perinatal period.<sup>49-51</sup> Women with diagnosed schizophrenia or bipolar disorder are more likely than women in the general pregnant population to have obstetric complications (e.g. pre-eclampsia, gestational diabetes).<sup>52,53</sup>
- In 2012–2014 in Australia, there were five maternal deaths by suicide (8% of all maternal deaths), two of which were in women with no known pre-existing mental health condition<sup>3</sup>

### What's happening

- New Australian clinical practice guidelines on perinatal mental health<sup>30</sup> were approved by the NHMRC and released by the Centre of Perinatal Excellence (COPE) in 2017.
- MBS items for the planning and management of pregnancy (16590 and 16591) and for a postnatal attendance between 4 and 8 weeks after birth (16407), include a mental health assessment of the woman (including screening for drug and alcohol use and domestic violence). A mental health assessment must be offered to each woman and any assessment undertaken documented in her medical record. The guidelines recommend repeat screening during pregnancy and in the postnatal period.
- Approaches to screening and assessment vary between jurisdictions and pathways to mental health care are limited outside of tertiary centres (e.g. in maternity centres in regional, rural, remote areas).

- The number of publicly funded mother-baby unit beds providing care seven days a week for women with a severe postnatal episode is currently 4 each in New South Wales and Queensland, 6 in SA, 16 in WA, 18 in Victoria, with none in the ACT, NT or Tasmania. These units are all in metropolitan areas. There are 15 mother-baby unit beds in Victoria that provide care from Monday to Friday in regional areas. There are mother-baby units providing psychiatric care in private hospitals in New South Wales, Victoria, Queensland, the ACT and Tasmania.
- Specialist community based perinatal mental health services are available in some states for women with moderate to severe mental health issues.
- Perinatal mental health assessment is not currently reported nationally.<sup>54</sup> Data collection varies by jurisdiction, despite there now being nationally recognised and recommended screening methods.
- Currently there is a recommendation for perinatal mental health service access in Level 4 maternity hospitals within the current Maternity Framework. However, the definition of what this constitutes in terms of level of expertise, workforce, integration into antenatal care and accessibility for women is not clearly defined or articulated. There is no current accredited training for psychiatry in perinatal mental health and as such there are also challenges in defining and planning an appropriate expert workforce to meet needs particularly for moderate to severe mental disorders.

## Family violence

'Family violence' may involve partners, siblings, parents, children and people who are related in other ways. It includes violence in many family contexts, including violence by a same sex partner, violence by young people against parents or siblings, elder abuse, and violence by carers in a domestic setting against those for whom they are responsible.<sup>55</sup> It is also referred to as domestic violence.

'Intimate partner violence' includes any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship, including physical aggression, psychological abuse, forced intercourse and other forms of sexual or reproductive coercion, and various controlling behaviours.<sup>57</sup>

### What the evidence tells us?

- The Australian Bureau of Statistics (ABS) estimates that 17% of all women aged 18 and over have experienced intimate partner violence (from either a current or previous partner) since the age of 15.<sup>57</sup>
- Among women who were pregnant at some time during a relationship and experienced violence with their current partner, 22% reported that they were pregnant at the time of the violence and 13% reported that violence occurred for the first time during pregnancy.<sup>57</sup>
- Women who experience intimate partner violence during pregnancy are four times more likely to report depressive symptoms and ten times more likely to report anxiety symptoms during pregnancy.<sup>58</sup> These symptoms frequently persist in the postnatal period<sup>43</sup> and affect a woman's ability to form secure infant attachment.<sup>29</sup>
- Women who experience violence during pregnancy are at increased risk of miscarriage,<sup>59</sup> preterm labour and birth<sup>60</sup> and having low birthweight infants.<sup>60-63</sup> Women physically assaulted during pregnancy also have higher risks of placental abruption, caesarean section, haemorrhage and infection than women without a history of being assaulted.<sup>61</sup> In addition, violence before pregnancy is a major independent risk factor for hypertension, oedema, vaginal bleeding, placental problems, severe nausea and vomiting, dehydration, diabetes, kidney infection and/or urinary tract infection, as well as premature rupture of membranes.<sup>62</sup>
- The most commonly recognised barrier to screening for health professionals is lack of training.<sup>64-76</sup>



## What's happening?

- The Pregnancy Care Guidelines<sup>9</sup> recommend that health professionals enquire about each woman's exposure to family violence but only when alone with the woman.
- The RACGP 'White Book' provides guidance on identifying and responding to family violence, including among specific population groups.<sup>78</sup>
- [DV-Alert Lifeline](http://www.dvalert.org.au/) (<http://www.dvalert.org.au/>) offers nationally recognised training and non-accredited training across all states and territories in Australia. DV-alert is funded by the Department of Social Services and is free for front-line community and health workers.

## When a baby dies

While Australia is one of the safest places in the world to give birth, some pregnancies end in the death of the baby early in pregnancy (miscarriage), in the second half of pregnancy (still birth) or within 28 days of birth (neonatal death). The loss of a baby is a tragic and traumatic event for women and their families.

### What does the evidence tell us?

- In 2015, there were 7 stillbirths per 1,000 births and 2 neonatal deaths per 1,000 live births (see Figure 7, page 9).
- Between 1993 and 2012, neonatal deaths decreased (3.2 to 2.4 deaths per 1,000 live births) and the stillbirth rate increased (6.4 to 7.2 deaths per 1,000 births).<sup>77</sup>
- In 2011-12, the stillbirth rate for babies of teenage mothers and mothers older than 45 was more than twice that for mothers aged 30–34 (13.9 and 17.1 versus 6.4 deaths per 1,000 births).<sup>77</sup>
- During 2011 and 2012, congenital anomaly was the leading cause of stillbirths and neonatal deaths. Extreme prematurity was the leading condition contributing to deaths in the neonatal period.<sup>77</sup>
- In 2015, most stillborn babies were preterm (85%) and the mean birthweight of stillborn babies (1,125 g) was far lower than for live-born babies (3,342 g). Four in five stillborn babies were low birthweight, and more than half (65%) were extremely low birthweight (< 1,000 grams).
- A Cochrane review found that women who received midwife-led continuity of care less likely to experience fetal loss at less than 24 weeks and neonatal death than women receiving other models of care were (still births were not reported specifically due to differences in definitions).<sup>21</sup>
- Throughout the experience of stillbirth, information and emotional support should be provided with sensitivity, clarity, genuineness and consideration of individual needs for care.<sup>78</sup>

## What's happening?

- The pregnancy care guidelines<sup>9</sup> include a summary of recent evidence on assessment of fetal growth and monitoring of babies who are identified as small-for-gestation age.
- The pregnancy care guidelines<sup>9</sup> also summarise the evidence on caring for women with decreased fetal movements, based on guidelines developed by the Centre of Research Excellence in Stillbirth.<sup>79</sup>
- Guidelines have been developed by Perinatal Society of Australia and New Zealand (PSANZ) to improve maternity and newborn care for bereaved parents and families and to improve the quality of data on causes of stillbirth and neonatal deaths through appropriate investigation (including autopsy), audit and classification.<sup>80</sup>



- In Australia, while a national perinatal audit program is yet to be implemented, state committees produce regular reports on rates and causes of perinatal mortality and in Victoria and Western Australia health departments routinely undertake perinatal mortality audits.<sup>80</sup>
- Autopsy status is not a mandatory item in the state/territory perinatal data collections and performance of an autopsy is not obligatory for stillbirths, unless the death is referred to a coroner. In 2011-12, autopsies were conducted in 42.3% of stillbirths in Victoria, Queensland, Western Australia, South Australia, Tasmania and the Australian Capital Territory.<sup>77</sup>
- The Centre of Research Excellence in Stillbirth is conducting research into improving care and outcomes for women with risk factors for stillbirth, developing new approaches to identifying women at risk of stillbirth, implementing best practice care after stillbirth and in subsequent pregnancies and improving knowledge of causes and contributors to stillbirth and the actions that might be effective in reducing deaths (including information on fetal movements and sleep position in pregnancy).<sup>81</sup>
- Support for families experiencing stillbirth or neonatal death is provided by maternity care providers in the initial period and non-government organisations in the longer term.
- Financial support is available through Centrelink to help parents whose baby has died via the Stillborn Baby Payment. Similar arrangements are available for parents whose baby died after birth.
- The Scottish Awareness of Fetal movements and Focussing Interventions Reduce Fetal Mortality (AFFIRM) study, is assessing whether rates of stillbirth may be reduced by introducing an interventional package of care, with the aim of increasing a pregnant women's awareness of the need for prompt reporting of decreased fetal movements.<sup>82</sup> This will be followed by a care management plan to identify any possible placental issues, with timely delivery in confirmed cases.

## What about workforce?

### What is currently happening?

- The staffing and employment conditions of the workforce are issues that are dealt with through the various arrangements with the relevant employers. Nationally work looking at both the obstetric and the midwifery workforce through the National Medical Training Advisory Network (NMTAN) and the National Nursing and Midwifery Education Advisory Network (NNMEAN) is being undertaken. This work will provide a general national perspective on workforce numbers, which may or may not reflect local experience. The national work is expected to be completed during 2018.
- The National Maternity Services Capability Framework was endorsed by AHMAC in 2010 and published in 2013.<sup>83</sup> It provides a methodology to assist in woman-centred maternity service planning and to improve risk management in maternity care.

### Workforce skills

- Anecdotal evidence indicates that the availability of services that routinely provide access to vaginal breech deliveries has been linked to the skill level within the workforce (see page 7).
- Services such as epidural anaesthesia can also be limited if suitably skilled staff are not available.

## Leadership and collaboration

- Collaboration between key professional groups was identified as an area for improvement in the last NSMP and is one of the recommendations under which there was little achievement. Good collaborative working relationships that acknowledge and respect what each profession can contribute can improve the quality of care and enhance the relationship with the individual woman. The WHO has identified that competent and motivated health-care professionals who effectively communicate with each other and women has a positive impact on the quality of care provided.<sup>1</sup>
- Leadership by relevant individuals and professional bodies is an important aspect of ensuring that the workforce is functioning collaboratively and cohesively in order to deliver quality care. In the United Kingdom, a Maternal and Neonatal Safety Collaborative is in progress to promote collaboration in quality improvement across different professions and organisations.<sup>84</sup>

## Insurance

- All medical practitioners and midwives are required to hold medical indemnity insurance in order to practice privately, as a condition of their professional registration. The Department of Health is undertaking a First Principles Review (FPR) of all the Commonwealth-funded schemes under the Indemnity Insurance Fund (including the midwife professional indemnity schemes) and a thematic review of all legislation underpinning the Fund's schemes. Currently endorsed midwives in private practice have an exemption for the intrapartum care associated with homebirth which is due to expire in 2019. Future decisions regarding this will need to take account of the outcomes of the medical indemnity review.
- Some private health insurance providers have indicated that they note changes in demand with the various changes that occur in private health insurance over time. The availability of private insurance to cover private midwifery services is limited and there is no insurance product available for intrapartum care for birth at home.
- The Commonwealth is currently undertaking a review of the Medical Benefits Schedule which will include items related to the provision of obstetric and midwifery care.

# Appendix A: Advisory Group membership

## Co-Chairs

Professor of Obstetrics & Gynaecology and Director of Nursing and Midwifery Services

## Representation

- Australian College of Midwives (ACM)
- Australian College of Rural and Remote Medicine (ACRRM)
- Australian Indigenous Doctors' Association (AIDA)
- Australian Medical Association (AMA)
- Australian and New Zealand College of Anaesthetists (ANZCA)
- Australian Nursing and Midwifery Federation (ANMF)
- Australian Private Hospitals Association (APHA)
- Centre of Perinatal Excellence (COPE)
- Congress Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM)
- Council of Remote Area Nurses plus (CRANAPlus)
- Ethicist
- Federation of Ethnic Communities Councils of Australia (FECCA)
- Health Economist
- Homebirth Australia
- Maternity Choices Australia
- Maternity Consumer network
- Midwifery and Maternity Provider Organisation Australia
- Murdoch Children's Research Institute
- My Midwives
- National Association of Specialist Obstetricians and Gynaecologists (NASOG)
- Obstetrician and Quality expert (Safer Care Victoria)
- Perinatal Society Australia New Zealand (PSANZ)
- Royal Australian College of General Practitioners (RACGP)
- Royal Australian New Zealand College of Obstetricians & Gynaecologists (RANZCOG)
- Rural Doctors Association of Australia (RDAA)
- Safe Motherhood for All Inc
- Women's Healthcare & Children's Healthcare Australasia

# Appendix B: Consultation input template

Please provide input on the NSAMS using the following template.

Name:

I am responding on behalf of an organisation

*Please indicate name of Organisation*

Or as an individual

## Demographics

If you are responding as an individual please select one of the following:

Consumer	GP Obstetrician
Midwife	GP
Obstetrician	Other ( <i>please specify</i> )
Nurse	

If you are responding on behalf of an organisation please select one of the following:

Medical Organisation/College	GP Obstetrician
Midwifery Organisation/College	GP
Nursing Organisation/College	Other ( <i>please specify</i> )
Public Service Provider	

## Consultation questions

1. Can you in one or a few brief sentences provide what you think would be an overarching key outcome statement for the NSAMS?

1. Do you think there should be a set of values that underpin the NSAMS? If so, could you list the top four values you would like to see included?

3. Can you outline three or four positive aspects of maternity services in Australia?

4. What do you think are the three or four key gaps or issues for maternity services in Australia?

Of these which is most important to you?

5. What four to six key improvements would you like to see in maternity services in Australia?

Please consider these from a national perspective.

6. Are there specific strategies that you could suggest for rural and remote services and/or, Aboriginal and Torres Strait Islander women and/or, women from culturally and linguistically diverse backgrounds?

7. How will success be measured or how will we know if strategies are being successful?

# Appendix C: Successes of National Maternity Services Plan 2010–2015

## National Core Maternity Indicators

Priority 1 of the Plan included AHMAC endorsing the first 10 national core maternity indicators (NCMIs).

- As at June 2016 (when the Plan concluded), 12 NCMIs had been fully developed and published.
- The NCMIs provide a baseline for monitoring changes in practice and outcomes of maternity services across Australia using nationally agreed clinical indicators.
- The NCMIs assist with improving the quality of maternity services in Australia by establishing baseline data for future monitoring and evaluation of practice change.

## Expanding the range of maternity models of care

Priority 1 of the Plan included increasing access to local maternity care by expanding the range of models of care available to Australian women and their families. This included increasing access to midwifery managed and continuity of carer programs, and investigating options for providing publicly funded homebirth and considering the implementation of publicly funded homebirth models.

- Midwifery managed models of care and continuity of carer programs increased during the lifetime of the plan. Models ranged from caseload/team models of midwifery managed care to continuity of carer programs that incorporate antenatal and postnatal care.
- Considerable progress was also made in relation to investigating and implementing publicly funded homebirth models. Most states and territories now offer publicly funded homebirth as an option for low risk women.

## Pregnancy, Birth and Baby Helpline

Priority 1 included expanding the National Pregnancy Support Helpline to provide round the clock information, counselling and referral.

- The Pregnancy, Birth and Baby helpline replaced the National Pregnancy Support Helpline on 1 July 2010.
- The Pregnancy, Birth and Baby Helpline offers a more comprehensive service, providing evidence-based information and advice on pregnancy, birthing, postnatal care and the early parenting period, regardless of geographic location. The helpline can be accessed 24 hours a day, seven days a week and is supported by a complementary web portal.

## Pregnancy Care Guidelines (formerly known as Antenatal Care Guidelines)

Priority 2 included the Australian Health Ministers' Advisory Council (AHMAC) endorsing national evidence-based antenatal care guidelines.

- Module 1 of the Antenatal Care Guidelines<sup>27</sup> was released in 2012 with Module 228 following in 2014.
- The Guidelines provide evidence-based recommendations to support high quality, safe antenatal care and contribute to improved outcomes for all mothers and babies.

- The Guidelines are intended for all health professionals who contribute to antenatal care including midwives, obstetricians, general practitioners, practice nurses, maternal and child health nurses, Aboriginal and Torres Strait Islander health workers and allied health professionals.
- Feedback from all states and territories indicated that they were using the guidelines to inform policy development and clinical decisions.
- Selected topics within the guidelines have recently been updated. The new topic of substance use has also been added.
- Updated guidelines were publicly released in February 2018 under the title Clinical Practice Guidelines; Pregnancy Care.<sup>8</sup>
- Reviews of other topics are currently underway and another update is expected to be released in 2019.

## Culturally competent maternity care

Priority 2 of the Plan included identifying the characteristics of culturally competent maternity care for Aboriginal and Torres Strait Islander people. This was based on knowledge that the cultural competence of health services plays a crucial role in helping to ensure that Aboriginal and Torres Strait Islander peoples access services; and are treated in a respectful and culturally safe manner that secures their trust in the capacity of the service to meet their needs.

- The Characteristics of Culturally Competent Maternity Care for Aboriginal and Torres Strait Islander Women<sup>38</sup> report contains valuable information to assist health services in providing culturally sensitive maternity care to Aboriginal and Torres Strait Islander women and their families.
- Maternity service providers now have access to this important resource when planning quality maternity services that better meet the needs of Aboriginal and Torres Strait women.

## Birth on Country

Priority 2 of the Plan included undertaking research on international evidence-based examples of birthing on country programs and developing a framework for birthing on country programs.

- A literature review was completed in 2012 and published as *Birthing on Country, Maternity Service Delivery Models: A review of literature*.
- This review examined the international evidence on culturally competent maternity services for Aboriginal and Torres Strait Islander communities. It investigated the components of maternity service delivery models; effective models; and the barriers and facilitators of the successful implementation and sustainability of these models. The review included research from Australia, New Zealand, Canada, and the United States.
- Following completion of the literature review, the Guiding Principles for Developing a Birthing on Country Service Model and Evaluation Framework (the Framework)<sup>85</sup> was endorsed by AHMAC in September 2016. This was informed by the literature review and a Birthing on Country Workshop held in Alice Springs in July 2012.
- The Framework was developed to guide the establishment of birthing on country models of care. However, assessment of capability in rural and remote areas would require careful consideration prior to States and Territories implementing Birthing on Country pilot programs.



## Appendix D: Guiding documents

- Australian College of Midwives (2017) Delivering Continuity of Care to Australian Women: A Handbook for Hospitals and Health services (4th edition). Australian College of Midwives: Canberra.
- Australian Commission on Safety and Quality in Health Care: The Second Atlas of Healthcare Variation Chapter 3 Women's health and maternity
- Australian Health Ministers Advisory Council: Final Report on the National Maternity Services Plan 2012-2015
- Australian Institute of Health and Welfare: National Core Maternity Indicators and Australia's Mothers and Babies
- Care Quality Commission: Maternity Services survey 2017
- UK National Health Service: National Maternity Review
- The Australian Charter of Healthcare Rights
- The Respectful Maternity Care Charter: The Universal Rights of Childbearing Women (RMC)
- The National Safety and Quality Health Care Standard: Partnering with Consumers
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists: Maternity Care in Australia
- World Health Organisation: Framework for Quality of Care and as it applies for pregnant women and newborns; Standards for Improving Quality of Maternal and Newborn Care in Health Facilities and the standards in brief.
- WHO (2016) WHO Recommendations: Intrapartum Care for a Positive Childbirth Experience.
- Previous National Maternity Services plan and outcomes

## Abbreviations and acronyms

<b>ABS</b>	Australian Bureau of Statistics	<b>MCPWG</b>	Maternity Care Policy Working Group
<b>ACSQHC</b>	Australian Commission on Safety and Quality in Health Care	<b>MIM</b>	Maternity Information Matrix
<b>ADHA</b>	Australian Digital Health Agency	<b>MSIJC</b>	Maternity Services Inter Jurisdictional Committee
<b>AG</b>	Advisory Group	<b>MRFF</b>	Medical Research Future Fund
<b>AHMAC</b> Advisory	Australian Health Ministers' Committee	<b>NAATI</b>	National Association of Accreditation for Translators and Interpreters
<b>AIHW</b> Health	Australian Institute of Health and Welfare	<b>NCMI</b>	National Core Maternity Indicator
<b>ARBI</b>	Australian Rural Birthing Index	<b>NHMRC</b>	National Health and Medical Research Council
<b>CEC</b>	Clinical Excellence Commission (NSW)	<b>NMDS</b>	National Minimum Data Set
<b>GP</b>	General Practitioner	<b>NPDC</b>	National Perinatal Data Collection
<b>HSPC</b>	Health Services Principle Committee	<b>NSAMS</b>	National Strategic Approach to Maternity Services
<b>IHPA</b> Pricing	Independent Hospital Authority	<b>OECD</b>	Organisation for Economic Development and Cooperation
<b>MaCCS</b>	Maternity Care Classification System	<b>PRG</b>	Project Reference Group
<b>MBS</b>	Medicare Benefits Schedule	<b>WHO</b>	World Health Organization

## References

1. WHO. Maternal, newborn, child and adolescent health. Quality of care 2018. Accessed: 4 April 2018.
2. ACSQHC, AIHW. The Second Australian Atlas of Healthcare Variation. Sydney: Australian Commission on Safety and Quality in Health Care; 2017.
3. AIHW. Maternal Deaths in Australia 2012–2014. Canberra: Australian Institute of Health and Welfare; 2017.
4. AIHW. Australia's Mothers and Babies 2015 - In Brief. Canberra: Australian Institute of Health and Welfare; 2017.
5. WHO. WHO Statement on caesarean section rates. Geneva: World Health Organization; 2015.
6. AIHW. National Perinatal Data Collection 2017. Accessed: 25 March 2018.
7. Committee on Practice B-O. Practice Bulletin No. 184: Vaginal Birth After Cesarean Delivery. *Obstet Gynecol.* 2017; 130(5): e217-e33.
8. Department of Health. Clinical Practice Guidelines: Pregnancy Care. Canberra: Australian Government Department of Health; 2018.
9. Women's Healthcare Australasia. WHA National Collaborative: reducing harm from third and fourth degree perineal tears 2018. Accessed: 23 March 2018.
10. ACSQHC. Patient-reported outcomes 2017. Accessed: 25 March 2018.
11. Thompson C, Sansoni J, Morris D et al. Patient-reported Outcome Measures: an Environmental Scan of the Australian Healthcare Sector. Sydney: Australian Commission on Safety and Quality in Health care; 2016.
12. AIHW. Australia's Mothers and Babies 2012. Canberra: Australian Institute of Health and Welfare; 2014.
13. Burgess A, Curie M, Davis D. National Survey of the Availability of Access to a Midwifery Carer for Postnatal Care Outside of the Hospital Setting 2015. Canberra: Prepared on behalf of the Maternity Services Inter-Jurisdictional Committee for the Australian Health Ministers' Advisory Council; 2015.
14. University Centre for Rural Health. The Australian Rural Birthing Index Toolkit 2017. Accessed: 23 March 2018.
15. Australian Government Department of Health. Telehealth: Specialist video consultations under Medicare 2014. Accessed: 12 April 2018.
16. Department of Health. Midwives NHWDS 2016 Fact Sheet. Canberra: Department of Health; 2017.
17. ADHA. What is My Health Record? Australian Digital Health Agency 2018. Accessed: 23 April 2018.
18. Donnelly N, Butler-Henderson K, Chapman M et al. The development of a classification system for maternity models of care. *Health Inf Manag.* 2016; 45(2): 64-70.
19. AHMAC. National Survey of Access to Public Antenatal Care Services 2012. Canberra: Commonwealth of Australia; 2013.
20. Sandall J, Soltani H, Gates S et al. Midwife-led continuity models versus other models of care for childbearing women. *The Cochrane database of systematic reviews.* 2016; 4: CD004667.

21. WHO. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organization; 2016.
22. RACGP. Guidelines for Preventive Activities in General Practice 9th edition Melbourne: Royal Australian College of General Practitioners; 2016. Accessed: 23 October 2017.
23. RANZCOG. Pre-pregnancy Counselling. Melbourne: Royal Australian and New Zealand College of Obstetricians and Gynaecologists; 2017.
24. Whitworth M, Dowswell T. Routine pre-pregnancy health promotion for improving pregnancy outcomes. Cochrane Database Syst Rev. 2009; (4): CD007536.
25. Opray N, Grivell RM, Deussen AR et al. Directed preconception health programs and interventions for improving pregnancy outcomes for women who are overweight or obese. Cochrane Database Syst Rev. 2015; (7): CD010932.
26. Tieu J, Middleton P, Crowther CA et al. Preconception care for diabetic women for improving maternal and infant health. Cochrane Database Syst Rev. 2017; 8: CD007776.
27. Australian Health Ministers' Advisory Council. Clinical Practice Guidelines: Antenatal care — Module I. Canberra: Australian Government Department of Health; 2012.
28. Australian Health Ministers' Advisory Council. Clinical Practice Guidelines: Antenatal care — Module II. Canberra: Australian Government Department of Health; 2014.
29. 1st 1001 Days APPG. Building Great Britons. Conception to Age 2. London: First 1001 Days All Parties Parliamentary Group; 2015.
30. Austin M-P, Hight N, Expert Working Group. Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline. Melbourne: Centre of Perinatal Excellence; 2017.
31. NHMRC. Infant Feeding Guidelines. Canberra: National Health and Medical Research Council; 2012.
32. ABS. Health Service Usage and Health Related Actions, Australia, 2014-15. Canberra: Australian Bureau of Statistics; 2017.
33. Department of Health. Breastfeeding 2017. Accessed: 23 March 2018.
34. AIHW. Spatial Variation in Aboriginal and Torres Strait Islander Women's Access to 4 Types of Maternal Health Services. Canberra: Australian Institute of Health and Welfare; 2017.
35. AIHW. Aboriginal and Torres Strait Islander Health Performance Framework 2017. Accessed: 12 April 2018.
36. Australian Government. National Aboriginal and Torres Strait Islander Health Plan 2013–2023. Canberra: Australian Government Department of Indigenous Health; 2013.
37. Department of Health. Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013-2023. Canberra: Australian Government; 2015.
38. Kruske S. Characteristics of Culturally Competent Maternity Care for Aboriginal and Torres Strait Women. Canberra: Prepared on behalf of MSIJC for AHMAC; 2013.
39. CATSINaM. The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives 2015. Accessed: 12 April 2018.

40. CATSINaM. Birthing on Country position statement. Canberra: Congress of Aboriginal and Torres Strait Islander Nurses and Midwives; 2016.
41. NMBA, CATSINaM. NMBA and CATSINaM joint statement on culturally safe care. Melbourne: Nursing and Midwifery Board of Australia; 2018.
42. RANZCOG. Cultural Competency. Melbourne: Royal Australian College of Obstetricians and Gynaecologists; 2014.
43. Buist A, Bilsztra J. The beyondblue National Postnatal Screening Program, Prevention and Early Intervention 2001–2005, Final Report. Vol 1: National Screening Program. Melbourne: beyondblue; 2006.
44. Woolhouse H, Gartland D, Hegarty K et al. Depressive symptoms and intimate partner violence in the 12 months after childbirth: a prospective pregnancy cohort study. *BJOG*. 2012; 119(3): 315-23.
45. Giardinelli L, Innocenti A, Benni L et al. Depression and anxiety in perinatal period: prevalence and risk factors in an Italian sample. *Arch Womens Ment Health*. 2012; 15(1): 21–30.
46. Fairbrother N, Janssen P, Antony MM et al. Perinatal anxiety disorder prevalence and incidence. *J Affect Disord*. 2016; 200: 148–55.
47. Wisner KL, Sit DK, McShea MC et al. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. *JAMA Psychiatry*. 2013; 70(5): 490–8.
48. O'Connor E, Rossom RC, Henninger M et al. Primary care screening for and treatment of depression in pregnant and postpartum women: evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2016; 315(4): 388-406.
49. Reilly N, Harris S, Loxton D et al. Disparities in reported psychosocial assessment across public and private maternity settings: a national survey of women in Australia. *BMC Public Health*. 2013; 13: 632.
50. Cohen LS, Altshuler LL, Harlow BL et al. Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment. *JAMA*. 2006; 295(5): 499–507.
51. Viguera AC, Nonacs R, Cohen LS et al. Risk of recurrence of bipolar disorder in pregnant and nonpregnant women after discontinuing lithium maintenance. *Am J Psychiatry*. 2000; 157(2): 179–84.
52. Viguera AC, Whitfield T, Baldessarini RJ et al. Risk of recurrence in women with bipolar disorder during pregnancy: prospective study of mood stabilizer discontinuation. *Am J Psychiatry*. 2007; 164(12): 1817–24; quiz 923.
53. Nguyen TN, Faulkner D, Frayne JS et al. Obstetric and neonatal outcomes of pregnant women with severe mental illness at a specialist antenatal clinic. *Med J Aust*. 2013; 199(3 Suppl): S26–9.
54. Judd F, Komiti A, Sheehan P et al. Adverse obstetric and neonatal outcomes in women with severe mental illness: to what extent can they be prevented? *Schizophr Res*. 2014; 157(1-3): 305-9.
55. AIHW. Enhancing Maternity Data Collection and Reporting in Australia: National Maternity Data Development Project Stage 3 and 4—Working paper. Canberra: Australian Institute of Health and Welfare; 2017.
56. Royal Commission into Family Violence Victoria. Summary and recommendations. *Parl Paper No*. 2016; 132 (2014–16).
57. WHO. Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines. Geneva: World Health Organization; 2013.

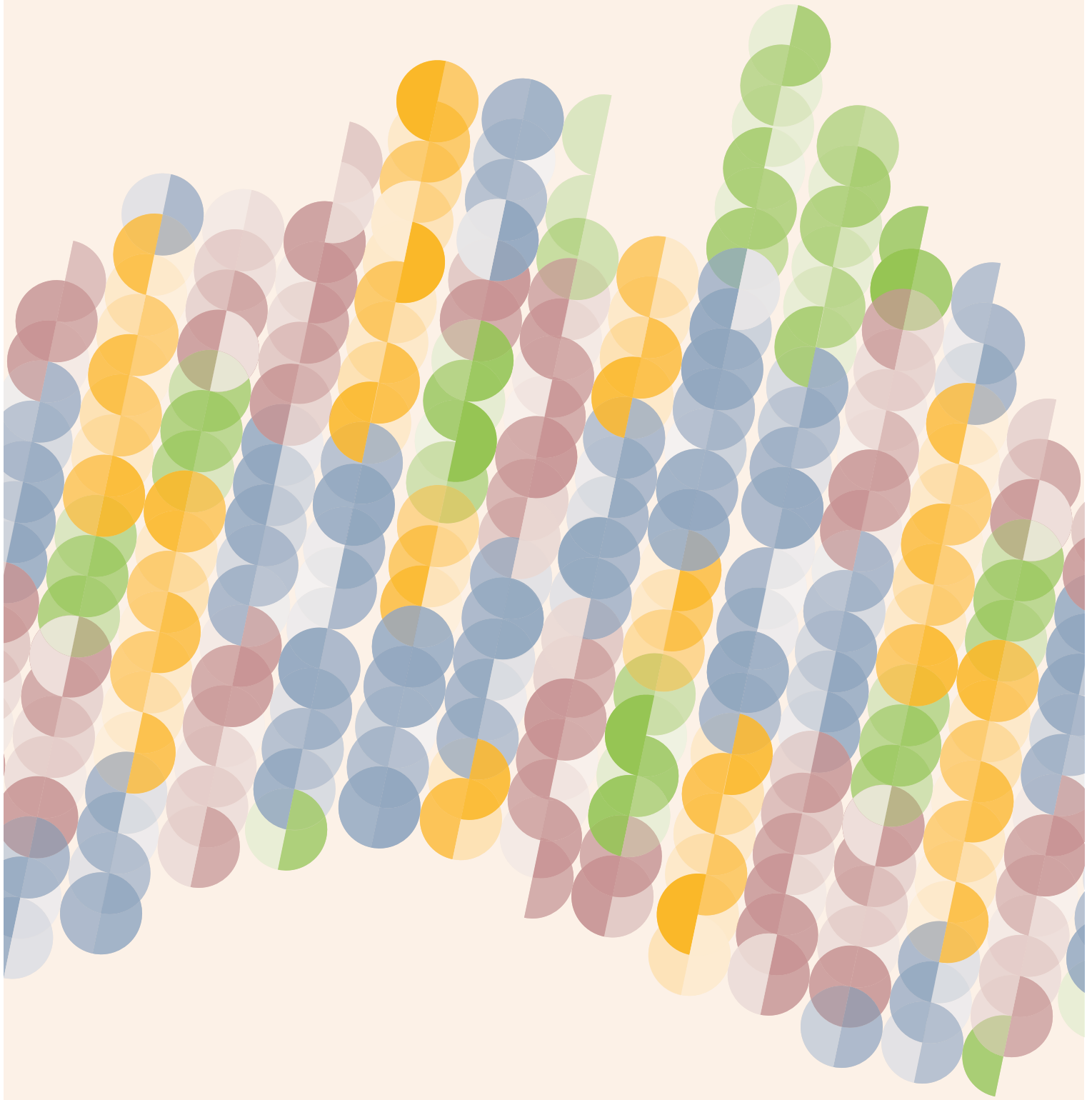
58. ABS. Personal safety, Australia, 2012. Canberra: Australian Bureau of Statistics; 2013.
59. Brown SJ, McDonald EA, Krastev AH. Fear of an intimate partner and women's health in early pregnancy: findings from the Maternal Health Study. *Birth*. 2008; 35(4): 293-302.
60. Morland LA, Leskin GA, Block CR et al. Intimate partner violence and miscarriage: examination of the role of physical and psychological abuse and posttraumatic stress disorder. *J Interpers Violence*. 2008; 23(5): 652-69.
61. Shah PS, Shah J, Knowledge Synthesis Group on Determinants of Preterm LBWB. Maternal exposure to domestic violence and pregnancy and birth outcomes: a systematic review and meta-analyses. *J Womens Health (Larchmt)*. 2010; 19(11): 2017-31.
62. El Kady D, Gilbert WM, Xing G et al. Maternal and neonatal outcomes of assaults during pregnancy. *Obstetrics and gynecology*. 2005; 105(2): 357-63.
63. Silverman JG, Decker MR, Reed E et al. Intimate partner violence victimization prior to and during pregnancy among women residing in 26 U.S. states: associations with maternal and neonatal health. *American journal of obstetrics and gynecology*. 2006; 195(1): 140-8.
64. Yost NP, Bloom SL, McIntire DD et al. A prospective observational study of domestic violence during pregnancy. *Obstetrics and gynecology*. 2005; 106(1): 61-5.
65. DeBoer MI, Kothari R, Kothari C et al. What are barriers to nurses screening for intimate partner violence? *J Trauma Nurs*. 2013; 20(3): 155-60; quiz 61-2.
66. Garcia M, Fisher WA. Obstetrics and Gynaecology Residents' Self-Rated Knowledge, Motivation, Skill, and Practice Patterns in Counselling for Contraception, STI Prevention, Sexual Dysfunction, and Intimate Partner Violence and Sexual Coercion. *Journal of Obstetrics and Gynaecology Canada*. 2008; 30(1): 59-66.
67. Kulkarni SJ, Lewis CM, Rhodes DM. Clinical Challenges in Addressing Intimate Partner Violence (IPV) with Pregnant and Parenting Adolescents. *Journal of Family Violence*. 2011; 26(8): 565-74.
68. Lazenbatt A, Taylor J, Cree L. A healthy settings framework: an evaluation and comparison of midwives' responses to addressing domestic violence. *Midwifery*. 2009; 25(6): 622-36.
69. Baird KM, Saito AS, Eustace J et al. An exploration of Australian midwives' knowledge of intimate partner violence against women during pregnancy. *Women Birth*. 2015; 28(3): 215-20.
70. Infanti JJ, Lund R, Muzrif MM et al. Addressing domestic violence through antenatal care in Sri Lanka's plantation estates: Contributions of public health midwives. *Soc Sci Med*. 2015; 145: 35-43.
71. Lutgendorf M, Busch J, Magann EF et al. Domestic violence screening in a military setting: provider screening and attitudes. *J Miss State Med Assoc*. 2010; 51(6): 155-7.
72. Mauri EM, Nespoli A, Persico G et al. Domestic violence during pregnancy: Midwives experiences. *Midwifery*. 2015; 31(5): 498-504.
73. Roelens K. Intimate partner violence. The gynaecologist's perspective. *Verh K Acad Geneesk Belg*. 2010; 72(1-2): 17-40.
74. Salcedo-Barrientos DM, Miura PO, Macedo VD et al. How do primary health care professionals deal with pregnant women who are victims of domestic violence? *Revista Latino-Americana de Enfermagem*. 2014; 22(3): 448-53.

75. Shamu S, Abrahams N, Temmerman M et al. Opportunities and obstacles to screening pregnant women for intimate partner violence during antenatal care in Zimbabwe. *Cult Health Sex.* 2013; 15(5): 511-24.
76. Spangaro J, Poulos RG, Zwi AB. Pandora doesn't live here anymore: normalization of screening for intimate partner violence in Australian antenatal, mental health, and substance abuse services. *Violence Vict.* 2011; 26(1): 130-44.
77. Chang JC, Buranosky R, Dado D et al. Helping women victims of intimate partner violence: comparing the approaches of two health care settings. *Violence Vict.* 2009; 24(2): 193-203.
78. RACGP. *Abuse and Violence: Working with our Patients in General Practice*, 4th edn. Melbourne: Royal Australian College of General Practitioners; 2014.
79. AIHW. *Perinatal Deaths in Australia, 1993–2012*. Canberra: Australian Institute of Health and Welfare; 2016.
80. Peters P, Riitano D, Lisy K et al. *Providing Care for Families who have Experienced Stillbirth: a Comprehensive Systematic Review*. Adelaide: Prepared by the Joanna Briggs Institute for the Stillbirth Foundation Australia; 2014.
81. Gardener G, Daly L, Bowring V et al. *Clinical practice guideline for the care of women with decreased fetal movements*. Brisbane: The Centre of Research Excellence in Stillbirth; 2017.
82. PSANZ Care around the time of stillbirth and neonatal death guidelines group. *Clinical Practice Guideline for Care Around Stillbirth and Neonatal Death*. Version 3. Brisbane: NHMRC Centre of Research Excellence in Stillbirth; 2018.
83. Centre of Research Excellence in Stillbirth. *Research program 2018*. Accessed: 28 March 2018.
84. University of Edinburgh. *AFFIRM study 2017*. Accessed: 10 April 2018.
85. AHMAC. *National Maternity Services Capability Framework 2012*. Canberra: Commonwealth of Australia; 2013.
86. NHS. *Maternal and neonatal health safety collaborative 2018*. Accessed: 5 April 2018.
87. Kildea S, Lockey R, Roberts J et al. *Guiding Principles for Developing a Birthing on Country Service Model and Evaluation Framework, Phase 1*. 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.









All information in this publication is correct as at May 2018