Australian Government



Australian Institute of Health and Welfare



Maternity models of care

Published 11 October, 2023

A maternity model of care describes how a group of women are cared for during pregnancy, birth, and the postnatal period; that is, how maternity care is provided. In developing *Women-centred care: strategic directions for Australian maternity services*, the authors note that women want continuity of care and to be able to choose a model of care that meets their needs and is close to home. The values of safety, respect, choice, and access underpin these strategic directions that aim to see the range of maternity models of care available across Australia expanded (COAG 2019).

Around 300,000 women give birth in Australia each year. The maternity period is a time of interaction with the health care system. Women may access maternity care through the public health system or privately, and care may involve midwives, obstetricians, general practitioners (GPs) and other health care providers (Healthdirect 2022). Sometimes a woman will see the same provider throughout the maternity period – known as continuity of care – and sometimes they will see different providers, for example, have some appointments with a GP and others with a midwife.

Maternity services are provided by state and territory health departments and private providers and may vary both within and between jurisdictions (Rolfe et al. 2017). Reporting on models of care will help to answer important questions about maternity care, such as which models of care are available to women across Australia, whether these provide continuity of care, and whether there are differences in outcomes by the model of care used.

This report looks at the maternity models of care available to women across Australia – the model categories they fall into and the extent of continuity of carer within them. It also uses Queensland perinatal data to explore, for the first time, the models of care women are using. This preliminary analysis suggests that the model of care used varies by maternal characteristics such as age, socioeconomic area, usual residence, Indigenous status, and country of birth. It also suggests that while outcomes for most women and babies are good across all model categories, there are differences in some antenatal, labour and birth outcomes by model of care.



Around 1,000 models of care are in use across 251 maternity services in Australia



The most common are public hospital maternity care (41% of models), shared care (15%), midwifery group practice caseload care (14%) and private obstetrician specialist care (11%)

29% of models have continuity of carer across the whole maternity period

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Around 4 in 10 (39%) women giving birth in Queensland in 2021 used *public hospital maternity care*; 41% used a model with continuity of carer across the whole maternity period





Key findings



Around 1,000 maternity models of care were reported as being in use across 251 maternity services in Australia in 2023, and these fall into 11 different model categories.

Most of these models of care (81%) fall into 4 model categories. Around 4 in 10 models (41%) are classified as *public hospital maternity care*. This is followed by *shared care* (15% of models), midwifery group practice caseload care (14% of models), and private obstetrician specialist care (11% of models). Over two-thirds of public maternity services (69%) have at least one public hospital maternity care model of care, 60% have a shared care model of care, and 49% a *midwifery group practice caseload care* model of care.



Around 29% of models have continuity of carer for the whole maternity period, meaning a single named carer provides or coordinates care for the antenatal, intrapartum (labour and birth), and postpartum periods; nearly three-quarters (73%) of maternity services in Australia have at least one model of care with continuity of carer for the whole maternity period. Just over one-third of models (35%) have continuity of carer for part of the maternity period, for example the antenatal period only, or the antenatal and postpartum periods, and a similar proportion (36%) have no continuity of carer in any stage of the maternity period.



Most women giving birth in Queensland in 2021 (94%) used one of the following models of care: public hospital maternity care (39%), private obstetrician specialist care (22%), midwifery group practice caseload care (18%), or shared care (15%). A small proportion used public hospital high risk maternity care (2.7%) and just 3.8% used a model of care that fell into another model category.



Around 41% of women giving birth in Queensland in 2021 used a model of care with continuity of carer across the whole maternity period, largely reflecting the use of *private obstetrician* specialist care and midwifery group practice caseload care. A further 21% used a model of care with continuity of carer for part of the maternity period, and 38% a model of care with no continuity of carer in any stage of the maternity period.



The model of care used by women giving birth in Queensland varies by maternal characteristics.

- Women aged 35 to 39, or 40 years and over were more likely to use private obstetrician specialist care (33% and 35% respectively, compared with 22% overall), as were women in the least disadvantaged socioeconomic areas (42%, compared with 22% overall).
- Women aged under 20 and those living in the most disadvantaged socioeconomic areas were more likely to use *public hospital maternity care* (49% and 53% respectively, compared with 39% overall).
- Aboriginal and Torres Straight Islander (First Nations) women were less likely to use private obstetrician specialist care than non-Indigenous women (2.5%, compared with 23%) and more likely to use midwifery group practice caseload care (34%, compared with 17%).
- Women born in Australia were more likely to use *midwifery group practice caseload care* than • those born overseas (20%, compared with 14%); those born overseas were more likely to use *shared care* (21%, compared with 12%).



Antenatal, labour and birth outcomes for most women and babies in Queensland are good across all model categories; there are however some differences across them.

- Just over half (52%) of women giving birth in Queensland had a non-instrumental vaginal birth; this was higher in those using *midwifery group practice caseload care* (68%) and lower in those using *private obstetrician specialist care* (34%), or *public hospital high risk maternity care* (42%).
- Around 38% of women giving birth had a caesarean section; this was higher in those using *private obstetrician specialist care* (56%) or *public hospital high risk maternity care* (52%), and lower in those using *midwifery group practice caseload care* (23%).
- A higher proportion of babies born to women using *public hospital high risk maternity care* had poorer outcomes across some indicators, for example being born pre-term, or with a low birthweight, compared with other models of care. This is not surprising as these models of care are designed to support women with known medical high risk or complex pregnancies.

A note about data sources, quality, and coverage

This report explores the maternity models of care available to women across all jurisdictions using the latest service-level information from the Model of Care National Best Practice Data Set (MoC NBPDS). It also uses person-level models of care information from the most recent National Perinatal Data Collection (NPDC) to report on the number of women using different models of care in Queensland in 2021. There are two things to note about these data sets.

- 1. The Australian Institute of Health and Welfare (AIHW) has service-level models of care information from most (96%) maternity services where women birth in Australia. A national baseline for every model of care is not yet available because providing this information is voluntary. As data are generally collected at the maternity service level, there may also be a gap in the collection of models of care classified as *private midwifery care*, where this care is not attached to a maternity service.
- 2. Person-level models of care information from the 2021 NPDC are included for women giving birth in Queensland only. This is the first perinatal models of care data to be assessed as being suitable for reporting. Queensland is used as a case study to show how models of care information from the MoC NBPDS and the NPDC can be used together. Person-level information from other jurisdictions will be available in future years once these items are routinely collected in their perinatal collections.

This report is accompanied by supplementary tables (Tables S1–S15) available at: <u>https://www.aihw.gov.au/reports/mothers-babies/maternity-models-of-care-in-focus/data</u>

What is a maternity model of care?

A maternity model of care describes how a group of women are cared for during pregnancy, birth, and the postnatal period; that is, how maternity care is provided. This includes identifying the women a model is designed for, the maternity carers involved and the role they play, and aspects of how and where care is provided. Models of care in different services and locations may be similar to or different from each other with respect to these characteristics, but every model of care in Australia can be classified into one of 11 overarching model categories. This makes it possible to report on the range of models of care available to women using common terminology. These categories broadly describe the intent of the model of care, although not all women in a model will necessarily follow the same journey or receive the same care pathway as the model was designed for.

How we collect information about models of care

Maternity models of care are identified and described at the maternity service level using the Maternity Care Classification System (see 'About the data' for more information). Every model of care gets a unique model of care number and the information collected about each model makes up the MoC NBPDS.

Collecting this service-level information has facilitated the inclusion of model of care data items into the NPDC. Two model of care data items, the *primary model of care* and the *model of care at the onset of labour or non-labour caesarean section*, were added to the Perinatal National Best Endeavours Data Set (NBEDS) in July 2020. These are voluntary items jurisdictions are working towards providing as part of their perinatal data and jurisdictions are at different stages with respect to collecting these. Counts of women using different models of care will be available once these items are routinely collected in the NPDC.

For more information about these AIHW collections see <u>Maternity models of care in Australia, 2023</u> and <u>Australia's mothers and babies</u>.

Why report on models of care?

Australian women have some choice around health providers and the care they receive during the maternity period, but this may depend on where they live and their individual circumstances. Recent Australian Government reports have recommended ways to improve maternity services, choices for women and the range of models of care available to them (DoHA 2009; AHMC 2011; COAG 2019).

Classifying the models of care available to women provides a picture of how maternity care is provided across Australia and monitoring this over time will inform whether the range of models of care available to women is expanding. Joining data from the MoC NBPDS and the NPDC will provide information on the number and characteristics of women using different models of care to inform health policy and maternity service provision. It will also enable health services, jurisdictions, and the Commonwealth to look at outcomes for mothers and babies under different models of care and to examine the influence of different model characteristics on these outcomes (Donnolley et al. 2016).

How many models of care are there?

In 2023, around 1,000 maternity models of care were reported as being in use across 251 maternity services in Australia. Most (90%) of these models of care are in public maternity services (Table S1). Over one-third (37%) of maternity services have 1 model of care, 16% have 2 models of care, 19% have 3 to 5 models of care, and just over one-quarter (28%) have 6 or more models of care (Table S5). The median number of models of care across all maternity services is 2; this is higher in public services (4 models of care) than private services (1 model of care).

What are the most common models of care?

The most common model of care is *public hospital maternity care* with around 400 (41%) models of care in Australia falling into this category (Table S2); over two-thirds (69%) of public maternity services have at least one model of care in this category (Table S6). This is not surprising as it is the broadest model category and includes models of care in which antenatal care is provided by midwives and/or doctors in onsite or outreach clinics and intrapartum (labour and birth) and postnatal care is provided in a hospital by midwives in collaboration with doctors as needed. Nearly two-thirds (64%) of models classified as *public hospital maternity care* have a public midwife as the designated or main carer; a further 27% have a public obstetrician as the designated carer and three-quarters (75%) of these target a specific group of women. *Public hospital maternity care* is the most common model of care in all states and territories except the Northern Territory, where *shared care* and *remote area maternity care* are as common (Table S2).

Other common models of care in Australia include *shared care* (15% of models), *midwifery group practice caseload care* (14% of models), and *private obstetrician specialist care* (11% of models). A *shared care* model is one in which antenatal care is provided by a community service provider (doctor and/or midwife) in collaboration with hospital medical and/or midwifery staff. It occurs in the community and in hospital outpatient clinics and usually includes an agreed schedule of antenatal care between the two providers. Intrapartum and early postnatal care is in a hospital by midwives and doctors, often in conjunction with the community provider. Around 60% of public maternity services have at least one *shared care* model.

Midwifery group practice caseload care is a model of care in which antenatal, intrapartum, and postnatal care is provided within a publicly funded caseload model by a known primary midwife, and collaboration with doctors where needed. Antenatal and postnatal care is provided in the hospital, community, or home, with intrapartum care in a hospital, birth centre or home. This model of care has a public midwife as the designated or main carer and continuity of carer across the whole maternity period. It is more likely to target women with a low risk or normal pregnancy (35% of models in this category, compared with 19% of models overall) and to include residential postnatal visits as part of the model (100%, compared with 75% of models overall). Around half (49%) of public maternity services have at least one model in this category.

Less common models of care include *public hospital high risk maternity care* (5.3% of models), *general practitioner* (GP) *obstetrician care* (3.9%), *remote area maternity care* (3.9%), *combined care* (2.8%), *private midwifery care* (1.9%), *team midwifery care* (1.6%), and *private obstetrician and privately practising midwife joint care* (0.2%).

Do they have continuity of carer?

The extent of continuity of carer is a measure of the one-to-one care provided by the same named caregiver across the whole maternity period; that is, the antenatal (before birth), intrapartum (labour and birth) and postnatal (after birth) periods. Nearly three-quarters (73%) of maternity services in Australia have at least one model of care with continuity of carer for the whole maternity period, meaning a single carer provides or coordinates care for the antenatal, intrapartum, and postpartum periods (Table S7). This is higher in private maternity services (97%) than public ones (65%). Overall, 29% of models of care have continuity of carer for the antenatal and postpartum periods. Over one-third of models (36%) have no continuity of carer in any stage of the maternity period, so no named carer is assigned, and care is given by different providers (Table S3).

The extent of continuity of carer varies by model category (Table S4). All models classified as *midwifery group practice caseload care* or *private midwifery care* have continuity of carer across the whole maternity period, as do most (90%) models classified as *private obstetrician specialist care*.

The models of care more likely to have no continuity of carer across any stage of the maternity period include those classified as *team midwifery care* (100%), and over half the models of care classified as *public hospital maternity care* (56%) or *public hospital high risk maternity care* (54%).

Figure 1 summarises the maternity models of care available to women in Australia, the model categories they fall under, and the extent of continuity of carer within them.

Figure 1: Maternity models of care in Australia

Maternity services, by jurisdiction, Australia, 2023

Jurisdiction	Total services	Services with at least one model with whole maternity period continuity of carer ^(a)		Public services	Public services with at least one MGP caseload care model ^(b)	
NSW	77		62%	64		39%
Vic	56		66%	41		32%
Qld	54		91%	38		84%
WA	28		75%	21		38%
SA	23		70%	20		50%
Tas	5		100%	3		100%
NT	5		60%	4		50%
ACT	3		100%	2		100%
Australia	251		73%	193		49%

(a) Whole maternity period continuity of carer is one-to-one care provided by the same named caregiver across the antenatal (before birth), intrapartum (birthing) and postpartum (after birth) periods.

(b) Midwifery Group Practice (MGP) caseload care is where antenatal, intrapartum and postpartum care are provided within a publicly funded caseload model by a known primary midwife. It has whole maternity period continuity of carer.



Proportion of models, by model category, Australia, 2023



Proportion of models, by continuity of carer ^(a), Australia, 2023



(a) Continuity of carer is a measure of the one-to-one care provided by the same named caregiver across the antenatal, intrapartum and postpartum periods.

Source: AIHW—Model of Care National Best Practice Data Set (MoC NBPDS). Supplementry tables S2, S3, S6 and S7.

How many women use different models of care?

Collecting service-level information on the models of care available at each maternity service has facilitated the inclusion of model of care data items into jurisdictional perinatal collections. Two model of care data items – the *primary maternity model of care* and the *maternity model of care at the onset of labour or non-labour caesarean section* – were added to the Perinatal NBEDS in July 2020. This means person-level models of care information will be collected for every woman giving birth in Australia. The primary model of care is the model of care used for most of a pregnancy, based on the number of antenatal visits, while the model of care at the onset of labour or non-labour caesarean section will be born. For most women, the model of care at the onset of labour or non-labour caesarean section will be the same as their primary model of care. In some cases a model of care will change and be different from the primary model of care, for example, if a woman moves to a different area or if there are complications later in a pregnancy.

Jurisdictions are at different stages with respect to adding the model of care data items to their perinatal collections. While the AIHW has service-level information for most (96%) maternity services where women birth in Australia in the MoC NBPDS, only some jurisdictions have started collecting person-level models of care information as part of their perinatal collections. Queensland submitted complete data for these items in 2021 and is used as a case study in this report to show how models of care data from the different collections can be used together; around 99% of women giving birth in Queensland had their model of care recorded and could be linked with information from the MoC NBPDS.

Queensland *primary maternity model of care* data are used to explore the models of care women in Queensland are using, whether these vary by maternal characteristics, and selected antenatal, labour and birth outcomes by the model of care used. Analyses using the *model of care at the onset of labour or non-labour caesarean section* are not included, as there are only small differences in the proportion of women in each model category when this item is used.

What models of care do women in Queensland use?

Most women giving birth in Queensland in 2021 (94%) used one of the following models of care as their primary model of care: *public hospital maternity care* (39%), *private obstetrician specialist care* (22%), *midwifery group practice caseload care* (18%), or *shared care* (15%).

Around 4 in 10 women (39%) used a model of care classified as *public hospital maternity care* (Figure 2). This is not surprising as it is the broadest model category and includes a range of clinics, from those led by midwives that target low risk women, to those led by public specialist obstetricians for women with obstetric complexities such as gestational diabetes, multiple pregnancy, or next birth after caesarean section. Around half of these women (52%) had a public midwife as the designated or main carer, one-third (31%) had a public obstetrician as the designated carer, and the rest a multidisciplinary team.

Other models of care commonly in use were *private obstetrician specialist care* (used by 22% of women in Queensland), *midwifery group practice caseload care* (18%), and *shared care* (15%). A small proportion of women in Queensland (2.7%) used *public hospital high risk maternity care*. This is provided to women with medical high risk or complex pregnancies by public hospital specialist obstetricians or maternal-fetal medicine subspecialists, in collaboration with midwives and other specialists. It involves multidisciplinary specialists for complex maternal, medical, and fetal conditions.

Just 3.8% of women in Queensland used a model of care that fell into one of the following model categories: combined care; general practitioner (GP) obstetrician care; private midwifery care; private obstetrician and privately practising midwife joint care; remote area maternity care; and team midwifery care.

Figure 2: Women who gave birth in Queensland, by primary model of care, 2021



Note: 'Other model' includes the following model categories: combined care; general practitioner (GP) obstetrician care; private midwifery care; private obstetrician and privately practising midwife joint care; remote area maternity care; and team midwifery care. Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Things to note when looking at perinatal models of care data

State and territory governments in collaboration with public and private health services plan and provide maternity services and these may be affected by the needs of communities, geographic location, and workforce availability. Local contextual factors will affect the models of care available to women in a community (COAG 2019). While there may be some choice around the health providers and care women receive during the maternity period, the model of care used may depend on the maternity services available locally, individual resources, and whether there are complexities surrounding the pregnancy, for example the level of obstetric input required. There may be differences in outcomes by model category and the extent of continuity of carer and in looking at this data it is important to be aware that:

- 1. Models of care may target different women. For example, models classified as:
 - *Midwifery group practice caseload care* may target women with a low risk or normal pregnancy and exclude those with a high-risk pregnancy, while *public hospital high risk maternity care* will target women with medical high risk or complex pregnancies only.
 - *Public hospital maternity care* include a range of models of care from those led by midwives that have no target group or that target low risk women, to those led by public specialist obstetricians for women with specific obstetric complexities such as gestational diabetes, multiple pregnancy, or next birth after caesarean section.
 - *Private obstetrician specialist care* may not target a specific group of women, but there will be a financial cost for this type of care, and most women who choose this will have private health insurance to help cover this cost.
- 2. The continuity of carer within a model largely reflects the model category it falls into.
 - Models classified as *midwifery group practice caseload care* or *private obstetrician specialist care* have a high degree of continuity of carer across the whole maternity period; women using these models of care in Queensland make up 97% of those having continuity of carer across the whole maternity period.
 - Women using *shared care* models of care in Queensland make up 62% of those having some continuity of carer, followed by women using *public hospital maternity care* (30%).
 - Women using *public hospital maternity care* make up 86% of those having no continuity of carer, followed by women using *public hospital high risk maternity care* (6%).

Does the model of care vary by maternal characteristics?

The model of care used by women giving birth in Queensland in 2021 varies by maternal characteristics such as age, socioeconomic area, usual residence, Indigenous status and country of birth (Figure 3 and Table S8). For example, women giving birth in Queensland:

- aged 35 to 39, or 40 years and over were more likely to use *private obstetrician specialist care* (33% and 35% respectively, compared with 22% overall); those under 20 were more likely to use *public hospital maternity care* (49%, compared with 39% overall) or *midwifery group practice caseload care* (34%, compared with 18% overall)
- in the least disadvantaged socioeconomic areas were more likely to use *private obstetrician specialist care* (42%, compared with 22% overall); those in the most disadvantaged areas were more likely to use *public hospital maternity care* (53%, compared with 39% overall)
- in *Remote* and *Very remote* areas were more likely to use *midwifery group practice caseload care* (41% and 40% respectively, compared with 18% overall) and less likely to use *private obstetrician specialist care* (14% respectively, compared with 22% overall)
- in Western Queensland Primary Health Network (PHN) and Northern Queensland PHN were more likely to use *midwifery group practice caseload care* (54% and 30% respectively, compared with 18% overall) and less likely to use *private obstetrician specialist care* (15% and 17% respectively, compared with 22% overall); those in Central Queensland and Sunshine Coast PHN, and Darling Downs and West Moreton PHN, were more likely to use *public hospital maternity care* (57% and 48% respectively, compared with 39% overall)
- who identified as Aboriginal and/or Torres Strait Islander (First Nations) women were more likely to use *midwifery group practice caseload care* (34%) than non-Indigenous women (17%) and less likely to use *private obstetrician specialist care* (2.5%, compared with 23%)
- born in Australia, New Zealand, the United Kingdom and Ireland, and Canada and the United States of America were more likely to use *midwifery group practice caseload care* (around 20%) than those born in the Philippines (10%), India (5.0%), Vietnam (4.6%), Nepal (4.4%) and China (2.7%); those born overseas were more likely to use *shared care* than those born in Australia (21%, compared with 12%)
- born in Vietnam, Nepal, the Philippines, and India were more likely to use *public hospital maternity care* (57%, 53%, 48% and 44% respectively, compared with 39% overall); those born in China, South Africa, and Canada and the United States of America were more likely to use *private obstetrician specialist care* (50%, 34%, and 31% respectively, compared with 22% overall).

Figure 3: Women who gave birth in Queensland, by selected maternal characteristics and primary model of care, 2021

Maternal characteristic	Public hospital maternity care	Public hospital high risk maternity care	Midwifery group practice caseload care	Shared care	Private obstetrician specialist care	Other model ^(a)	Total ^(b)
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Number
Women giving birth in Qld							
Total	39.0	2.7	18.3	14.5	21.7	3.8	61,578
Age							
Under 20	49.2	1.5	34.2	9.9	0.8	4.5	1,450
20–34 years	40.3	2.4	19.8	14.7	18.8	3.9	46,135
35–39 years	32.9	3.5	12.2	14.8	33.2	3.4	11,597
40 years and over	36.2	4.6	8.8	12.4	34.6	3.4	2,396
Socioeconomic area ^(c)							
Quintile 1 (most disadvantaged)	53.5	3.1	21.5	9.7	8.8	3.5	13,013
Quintile 2	44.4	2.4	21.1	12.5	17.3	2.3	10,249
Quintile 3	38.6	2.2	20.7	13.5	19.9	5.1	15,513
Quintile 4	32.6	2.8	14.4	18.4	27.3	4.4	14,747
Quintile 5 (least disadvantaged)	20.9	3.2	12.4	19.4	41.6	2.5	8,025
Remoteness area ^(d)							
Major cities	36.8	2.9	14.6	17.5	24.2	4.0	39,855
Inner regional	52.9	1.3	18.6	6.6	17.9	2.7	11,390
Outer regional	33.1	3.9	30.4	12.8	17.0	2.7	8,480
Remote	32.7	1.6	40.8	3.6	14.0	7.4	1,014
Very remote	19.5	2.2	39.6	8.4	14.1	16.2	810
Indigenous status ^(e)							
Indigenous	41.3	2.7	34.2	10.5	2.5	8.9	4,552
Non-Indigenous	38.8	2.7	17.1	14.8	23.2	3.4	56,999
Country of birth ^(f)							
Australia	38.6	2.5	20.0	12.1	22.7	4.1	44,551
Overseas	40.1	3.4	13.8	20.8	19.0	3.0	17,002
New Zealand	45.7	3.4	19.6	16.5	10.3	4.5	3,062
India	43.7	4.4	5.0	33.0	12.3	1.6	1,874
United Kingdom and Ireland	36.9	2.5	20.3	14.7	21.2	4.4	1,820
Philippines	47.9	4.9	10.1	24.4	11.0	1.7	819
China	24.2	2.4	2.7	19.0	50.2	1.5	789
South Africa	32.0	1.8	14.7	13.6	34.2	3.8	685
Canada and USA	29.7	2.8	18.8	14.0	30.7	4.0	579
Vietnam	57.0	n.p.	4.6	24.8	11.4	n.p.	351
Nepal	53.1	n.p.	4.4	27.7	9.3	n.p.	343
Other countries	38.5	3.5	14.0	21.5	19.9	2.6	6,680
Primary Health Network ^(g)							
Brisbane North	37.4	2.9	14.1	17.0	26.8	1.8	11,744
Brisbane South	34.3	3.1	16.5	20.1	24.1	1.8	15.271
Gold Coast	29.3	1.7	13.5	18.1	24.0	13.4	7.248
Darling Downs and West Moreton	48.3	3.7	14.6	11.5	18.9	2.9	7.845
Western Queensland	21.2	1.2	54.4	3.9	14.8	4.5	1.023
Central Queensland and Sunshine Coast	56.7	0.3	19.7	4.9	14.9	3.5	9,267
Northern Queensland	33.6	4.4	29.5	12.5	16.9	3.1	8.698
Outside Queensland	11.5	4.6	4.6	10.8	65.2	3.3	454

Notes

(a) 'Other model' includes combined care; general practitioner (GP) obstetrician care; private midwifery care; private obstetrician and privately practising midwife joint care; remote area maternity care; and team midwifery care.

- (b) Totals include records with a known primary model of care. They exclude a small number of records (1.4%) in Queensland, where the primary model of care was unknown or not applicable.
- (c) Socioeconomic area is derived by applying the ABS 2016 Socio-Economic Index For Areas Index of Relative Socio-Economic Disadvantage (SEIFA IRSD). It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.
- (d) Remoteness area is derived by applying the ABS 2016 Australian Statistical Geography Standard (ASGS) to the area of mother's usual residence. It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.
- (e) Excludes a small number of records with 'not stated' Indigenous status.
- (f) Data were mapped to the ABS 2016 Standard Australian Classification of Countries (SACC).
- (g) Primary Health Network is derived from Statistical Area Level 2 (SA2) of the ABS Australian Statistical Geography Standard Edition 2016. It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.

Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Models of care by socioeconomic area

The model of care used varies by the socioeconomic area of a woman's usual residence (Figure 4). Women living in the most disadvantaged areas of Queensland were more likely to have their care through the public health system than those in the least disadvantaged areas. The use of *public hospital maternity care* decreased across socioeconomic areas and was lowest in the least disadvantaged areas (21%, compared with 39% overall); the use of private obstetrician specialist care increased across socioeconomic areas and was highest in the least disadvantaged areas (42%, compared with 22% overall).



Note: Socioeconomic area is derived by applying the ABS 2016 Socio-Economic Index For Areas Index of Relative Socio-Economic Disadvantage (SEIFA IRSD). It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'. Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Figure 4: Women who gave birth in Queensland, by primary model of care and socioeconomic



How many women in Queensland have continuity of carer?

Around 4 in 10 women giving birth in Queensland in 2021 (41%) used a primary model of care with continuity of carer across the whole maternity period, that is, the antenatal, intrapartum, and postpartum periods. Most of these women (97%) used either *private obstetrician specialist care* (52%) or *midwifery group practice caseload care* (45%); a small number used *private midwifery care*, *private obstetrician and privately practising midwife joint care*, or *GP obstetrician care*.

Around 2 in 10 women (21%) used a model of care with continuity of carer for part of the maternity period, for example the antenatal period only, or the antenatal and postpartum periods; nearly two-thirds (62%) of these women used a *shared care* model and 30% used *public hospital maternity care*. Nearly 4 in 10 women (38%) used a model of care with no continuity of carer across any stage of the maternity period; most of these women (86%) used *public hospital maternity care*.

Does continuity of carer vary by maternal characteristics?

The proportion of women using a model of care with continuity of carer across the whole maternity period varies by maternal characteristics, such as age, socioeconomic area, usual residence, and country of birth (Figure 5 and Table S9). For example, women giving birth in Queensland:

- aged under 20 were less likely to have continuity of carer across the whole maternity period (35%, compared with 41% overall), as were women living in the most disadvantaged socioeconomic areas (30%, compared with 41% overall)
- in *Remote* and *Very remote* areas were more likely to have continuity of carer across the whole maternity period (55% and 54% respectively, compared with 41% overall), while those in *Inner regional* areas were more likely to have no continuity of carer (52%, compared with 38% overall)
- in Western Queensland PHN and Northern Queensland PHN were more likely to have continuity of carer across the whole maternity period (70% and 46% respectively, compared with 41% overall); those living in Central Queensland and Sunshine Coast PHN were more likely to have no continuity of carer (62%, compared with 38% overall)
- born in Australia were more likely to have continuity of carer across the whole maternity period than those born overseas (44%, compared with 33%); those born overseas were more likely to have continuity of carer for part of the maternity period than those born in Australia (28%, compared with 18%)
- born in the Philippines, India, Vietnam or Nepal were less likely to have continuity of carer across the whole maternity period (21%, 17%, 15%, and 14% respectively, compared with 41% overall); those born in China, Canada and the United States of America, and South Africa were more likely to have continuity of carer across the whole maternity period (53%, 51%, and 51% respectively, compared with 41% overall).

Figure 5: Women who gave birth in Queensland, by selected maternal characteristics and the extent of continuity of carer within their primary model of care^(a), 2021

Maternal characteristic	Whole maternity period	Part of the maternity period	No continuity of carer	Total ^(b)
	Per cent	Per cent	Per cent	Number
Women giving birth in Qld				
Total	41.0	20.8	38.2	61,578
Age				
Under 20	35.4	22.9	41.7	1,450
20–34 years	39.7	20.9	39.4	46,135
35–39 years	46.4	20.4	33.2	11,597
40 years and over	44.3	18.5	37.1	2,396
Socioeconomic area ^(c)				
Quintile 1 (most disadvantaged)	30.4	21.4	48.2	13,013
Quintile 2	39.1	18.8	42.1	10,249
Quintile 3	41.6	16.1	42.4	15,513
Quintile 4	43.1	23.9	33.0	14,747
Quintile 5 (least disadvantaged)	55.9	25.5	18.6	8,025
Remoteness area ^(d)				
Major cities	40.1	24.7	35.2	39,855
Inner regional	36.8	11.4	51.8	11,390
Outer regional	48.1	15.7	36.2	8,480
Remote	55.2	11.3	33.4	1,014
Very remote	54.4	25.6	20.0	810
Indigenous status ^(e)				
Indigenous	37.5	26.2	36.2	4,552
Non-Indigenous	41.3	20.4	38.4	56,999
Country of birth ^(f)				
Australia	43.9	18.0	38.1	44,551
Overseas	33.4	28.2	38.4	17,002
New Zealand	30.7	25.5	43.8	3,062
India	17.4	40.1	42.5	1,874
United Kingdom and Ireland	42.4	20.3	37.4	1,820
Philippines	21.2	28.0	50.8	819
China	53.4	23.1	23.6	789
South Africa	50.7	18.2	31.1	685
Canada and USA	50.6	18.0	31.4	579
Vietnam	15.4	49.9	34.8	351
Nepal	13.7	34.7	51.6	343
Other countries	34.6	29.3	36.1	6,680
Primary Health Network ^(g)				
Brisbane North	42.6	18.8	38.6	11,744
Brisbane South	41.5	28.1	30.4	15,271
Gold Coast	38.1	18.3	43.6	7,248
Darling Downs and West Moreton	36.3	38.0	25.6	7,845
Western Queensland	69.7	8.4	21.9	1,023
Central Queensland and Sunshine Coast	34.8	3.7	61.5	9,267
Northern Queensland	46.3	17.2	36.5	8,698
Outside Queensland	72.9	12.6	14.5	454

Notes

- (a) The extent of continuity of carer is a measure of the one-to-one care provided by the same named caregiver across the continuum of maternity care, that is, the antenatal (before birth), intrapartum (birthing) and postpartum (after birth) periods.
- (b) Totals include records with a known primary model of care. They exclude a small number of records (1.4%) in Queensland, where the primary model of care was unknown or not applicable.
- (c) Socioeconomic area is derived by applying the ABS 2016 Socio-Economic Index For Areas Index of Relative Socio-Economic Disadvantage (SEIFA IRSD). It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.
- (d) Remoteness area is derived by applying the ABS 2016 Australian Statistical Geography Standard (ASGS) to the area of mother's usual residence. It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.
- (e) Excludes a small number of records with 'not stated' Indigenous status.
- (f) Data were mapped to the ABS 2016 Standard Australian Classification of Countries (SACC).
- (g) Primary health network is derived from Statistical Area Level 2 (SA2) of the ABS Australian Statistical Geography Standard Edition 2016. It is only calculated where geographic area of usual residence is provided and excludes those not usually resident in Australia and those whose state or territory of usual residence is 'not stated'.

Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Do antenatal, labour and birth outcomes vary by model of care?

A newborn baby's health can influence its health and wellbeing throughout life and the time between conception and birth, also known as the antenatal period, will affect pregnancy outcomes. We know that maintaining a healthy lifestyle and antenatal care during pregnancy contributes to better outcomes as antenatal care is designed to assess and improve the health of mothers and their babies during pregnancy. What is not clear is whether antenatal, labour and birth outcomes vary by the model of care a woman is under during pregnancy. There is some evidence to suggest women using midwife-led continuity of care models are less likely to experience interventions and more likely to be satisfied with their care compared to women using other models of care (Sandall et al. 2016). More work is needed to understand outcomes for mothers and babies under different models of care and which model characteristics affect these.

Antenatal, labour and birth outcomes for women in Queensland

The following explores selected antenatal, labour, and birth outcomes for women giving birth in Queensland in 2021 by their primary model of care. Outcomes for most women are good across all model categories, however, there are some differences across them (Tables S10 and S11). In looking at these indicators it is important to note that some models of care may target specific groups of women and differences may be related to the characteristics of the women these models of care were designed for. For example, models of care classified as *midwifery group practice caseload care* may target women with a low risk or normal pregnancy and exclude those with a high risk pregnancy, while *public hospital maternity care* includes a wider range of modes of care and some of these will target specific groups of women such as those with obstetric risk factors; *public hospital high risk maternity care* will target women with medical high risk or complex pregnancies only.

Antenatal care

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- Most women giving birth in Queensland (84%) had their first antenatal visit in the first trimester; this proportion was higher in those using *private obstetrician specialist care* (94%) and lower in those using *public hospital maternity care* (79%).
- Nearly all (97%) women giving birth at 32 weeks or more gestation had 5 or more antenatal visits; this proportion was highest in those using *private obstetrician specialist care* (99%) or *midwifery group practice caseload care* (98%).
- Around 40% of women giving birth had at least one antenatal risk factor, for example preexisting diabetes, pre-existing hypertension, gestational diabetes, gestational hypertension, a pre-pregnancy body mass index of 30 or more, or smoking after 20 weeks of pregnancy; this proportion was lower in those using *private obstetrician specialist care* (29%) or *midwifery group practice caseload care* (36%), and higher in those using *public hospital maternity care* (50%) or *public hospital high risk maternity care* (56%).

Labour



- Around 43% of women giving birth in Queensland had a spontaneous labour; this proportion was higher in those using *midwifery group practice caseload care* (60%) and lower in those using *private obstetrician specialist care* (24%), or *public hospital high risk maternity care* (25%).
- Around one-third of women giving birth (32%) had an induced labour; this proportion was higher in those using *public hospital high risk maternity care* (37%).
- One-quarter (25%) of women had no labour (a caesarean section was performed); this proportion was higher in those using *private obstetrician specialist care* (45%) and lower in those using *midwifery group practice caseload care* (11%).

Method of birth



There are differences in the method of birth by model of care (Figure 6).

- Just over half (52%) of women giving birth in Queensland had a non-instrumental vaginal birth; this proportion was higher in those using *midwifery group practice caseload care* (68%), and lower in those using *private obstetrician specialist care* (34%), or *public hospital high risk maternity care* (42%).
 - Nearly 4 in 10 (38%) women giving birth had a caesarean section; this proportion was higher in those using *private obstetrician specialist care* (56%) or *public hospital high risk maternity care* (52%), and lower in those using *midwifery group practice caseload care* (23%).

Birth outcomes

- Around 21% of women giving birth vaginally in Queensland had an intact perineum; this proportion was higher in those using *public hospital high risk maternity care* (30%) and *midwifery group practice caseload care* (24%).
- Around 20% of women giving birth vaginally had an episiotomy; this was higher in those using *shared care* (25%) and *private obstetrician specialist care* (23%) and lower in those using *midwifery group practice caseload care* (15%).
- Over three-quarters of women giving birth (79%) stayed in hospital for 3 days or less; this proportion was higher in those using *midwifery group practice caseload care* (94%) and *public hospital maternity care* (93%) and lower in those using *private obstetrician specialist care* (34%).

Figure 6: Women who gave birth in Queensland, by method of birth and primary model of care, 2021

Notes

- 1. 'Other model' includes combined care; general practitioner (GP) obstetrician care; private midwifery care; private obstetrician and privately practising midwife joint care; remote area maternity care; and team midwifery care.
- 2. For multiple births, method of birth of the first-born baby is used.

Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Babies born in Queensland

The following explores selected outcomes for babies born in Queensland in 2021, by the primary model of care used by their mothers during pregnancy. Outcomes for most babies are good across all model categories, including high risk models of care, however, a higher proportion of babies born to women using *public hospital high risk maternity care* did have poorer outcomes across some indicators, compared with other models of care (Figure 7 and Table S14). In looking at these outcomes it should be remembered that the number of babies born to women using this model of care is relatively small, and that differences are not surprising given that these models of care are designed to support women with known medical high risk or complex pregnancies. In Queensland in 2021:

- Nearly all (99%) babies were live born; this proportion was lower in babies born to women using *public hospital high risk maternity care* (96%).
- Around 8.4% of babies were born pre-term (less than 37 weeks' gestation); this proportion was higher in babies born to women using *public hospital high risk maternity care* (32%) and lower in babies born to women using *midwifery group practice caseload care* (5.3%), or *shared care* (6.0%).
- Most liveborn singleton babies (94%) were born with a normal birthweight (between 2,500 and 4,999 grams); this proportion was lower in babies born to women using *public hospital high risk maternity care* (82%).
- Around 4.9% of liveborn singleton babies had a low birthweight (less than 2,500 grams); this proportion was higher in babies born to women using *public hospital high risk maternity care* (17%), and lower in babies born to women using *midwifery group practice caseload care* (3.4%).
- Around 8.2% of liveborn singleton babies were small for gestational age; this proportion was higher in babies born to women using *public hospital high risk maternity care* (14%) and lower in babies born to women using *private obstetrician specialist care* (6.3%).
- Nearly all (98%) liveborn babies had an Apgar score of 7 or more (a clinical indicator of a baby's condition after birth that suggests the baby is adapting well to the environment); this proportion was lower in babies born to women using *public hospital high risk maternity care* (93%).
- Around 20% of liveborn babies were admitted to a special care nursery or neonatal intensive care unit; this proportion was higher in babies born to women using *public hospital high risk maternity care* (49%) and lower in babies born to women using *midwifery group practice caseload care* (14%) or *private obstetrician specialist care* (15%).
- Around one-quarter (24%) of liveborn babies had at least one active resuscitation method applied; this proportion was higher in babies born to women using *public hospital high risk maternity care* (47%) and lower in babies born to women using *midwifery group practice caseload care* (17%).
- Around three-quarters (74%) of liveborn babies stayed in hospital for 3 days or less; this proportion was lower in babies born to women using *public hospital high risk maternity care* (64%) or *private obstetrician specialist care* (33%).

Figure 7 summarises selected antenatal, labour and birth outcomes for mothers and babies in Queensland in 2021, by the primary model of care used. More detail, including outcomes by the extent of continuity of carer within a model of care, can be found in the supplementary tables S10–S15. The AIHW also reports on the characteristics and health of mothers and their babies in its annual web reports <u>Australia's mothers</u> and <u>babies</u>, and the <u>National Core Maternity Indicators</u>.

Figure 7: Mothers and babies in Queensland, by selected antenatal, labour and birth outcomes and primary model of care, 2021

Antenatal, labour and birth outcomes ^(a)	Public hospital maternity care	Public hospital high risk maternity care	Midwifery group practice caseload care	Shared care	Private obstetrician specialist care	Other model ^(b)	Total
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Antenatal care							
5 or more antenatal visits ^(c)	96.	4 96.	7 98.4	4 94.	7 98.	93.7	96.9
1st antenatal visit in the 1st trimester	79.3	87.6	80.6	86.5	93.	82.6	84.0
Antenatal risk factors							
At least 1 ^(d)	49.8	56.3	35.9	33.5	28.7	34.1	39.9
None	50.2	43.7	64.1	66.5	71.3	65.9	60.1
Labour and birth							
Vertex presentation at birth	94.	3 87.9	95.5	5 94.	3 90.8	94.8	93.6
Spontaneous labour	43.7	24.9	59.9	49.0	24.5	54.1	43.2
Induced labour ^(e)	35.6	36.5	29.1	31.2	30.3	28.2	32.4
No labour onset	20.7	38.6	11.0	19.8	45.3	17.7	24.5
Vaginal birth (non-instrumental) ^(f)	55.1	41.8	68.1	54.1	33.9	57.5	52.5
Vaginal birth (instrumental) ^(f)	9.4	6.3	8.4	11.4	9.7	9.6	9.5
Caesarean section ^(f)	35.4	51.9	23.4	34.5	56.4	32.9	38.0
Intact perineum ^(g)	20.9	29.5	23.7	17.7	20.6	19.5	21.1
Episiotomy	20.0	18.9	14.8	24.8	23.2	18.2	20.0
Parity ^(h)							
None	41.4	35.3	44.0	44.7	45.7	44.5	43.2
1	30.7	32.2	32.2	33.3	39.1	29.9	33.2
2 or more	27.9	32.5	23.7	22.0	15.2	25.7	23.6
Number of previous caesarean sec	tion ⁽ⁱ⁾						
None	68.9	59.6	80.2	70.1	50.4	69.6	67.0
1	22.3	26.9	15.9	23.2	39.2	21.9	24.9
2 or more	8.8	13.5	3.9	6.7	10.4	8.5	8.1
Postnatal length of stay (j)							
0 days	6.9	3.2	13.0	6.7	0.3	9.9	6.4
1-3 days	85.6	79.1	80.6	83.4	33.4	82.2	72.5
4-6 days	6.9	15.2	6.0	9.3	64.6	7.4	20.3
7 or more days	0.5	2.6	0.5	0.5	1.7	0.5	0.8
Baby outcomes ^(k)							
Live born	99.	3 96.3	3 99.5	5 99.	5 99.	5 99.4	99.3
Pre-term birth (less than 37 weeks)	9.1	31.7	5.3	6.0	8.6	6.9	8.4
Low birthweight (less than 2,500g) ^(I)	5.5	16.7	3.4	4.2	4.0	4.6	4.9
Small for gestational age ^(I)	8.9	13.9	7.5	8.9	6.3	8.6	8.2
Apgar score at 5 minutes 7-10 $^{(m)}$	97.	4 93.2	98.2	98.	98.	98.2	97.8
Active resuscitation required (m)	23.0	46.6	16.8	26.7	25.2	22.1	23.5
Admission to SCN/NICU ^{(m)(n)}	23.0	49.1	13.6	18.5	15.2	17.7	19.5

Notes

(a) Include records with a known primary model of care. They exclude a small number of records (1.4%) in Queensland, where the primary model of care was unknown or not applicable. All percentages are calculated based on the 'stated' records for each indicator, after excluding those with 'not stated' values.

(b) 'Other model' includes combined care; general practitioner (GP) obstetrician care; private midwifery care; private obstetrician and privately practising midwife joint care; remote area maternity care; and team midwifery care.

(c) Number of antenatal visits is based on women who gave birth at 32 weeks' or more gestation only.

(d) An antenatal risk factor includes at least one of the following: pre-existing diabetes; pre-existing hypertension; gestational diabetes; gestational hypertension; a pre-pregnancy BMI of 30 or more or smoking after 20 weeks of pregnancy.

(e) May include cases where induction of labour was attempted but labour did not result.

(f) For multiple births, method of birth of the first-born baby is used.

(g) Based on women who gave birth vaginally. For multiple births, the perineal status after the first-born baby is used.

(h) Number of previous pregnancies resulting in live births or stillbirths, excluding the current pregnancy.

(i) Based on women with a previous pregnancy resulting in a live birth or stillbirth.

(j) Based on women who gave birth in a hospital and were discharged home.

(k) These indicators are based on counts of babies.

(l) Based on live born singleton babies only.

(m) Based on live born babies only.

(n) Babies transferred between hospitals and subsequently admitted to an SCN or NICU may not be included as 'admitted'.

Source: AIHW analyses of the National Perinatal Data Collection and the Model of Care National Best Practice Data Set.

Conclusion

This report looks at the maternity models of care available to women across Australia. Queensland perinatal data is also used to explore, for the first time, the models of care women giving birth in Queensland in 2021 used.

Around 1,000 maternity models of care were available across 251 maternity services in Australia in 2023. Most of these (81%) fall into 4 model categories – *public hospital maternity care* (41% of models), *shared care* (15% of models), *midwifery group practice caseload care* (14% of models) and *private obstetrician specialist care* (11% of models). Most women giving birth in Queensland in 2021 (94%) used a model of care that fell into these 4 categories, with 39% using *public hospital maternity care*, 22% *private obstetrician specialist care*, 18% *midwifery group practice caseload care* and 15% *shared care*.

The exploratory analysis in this report suggests that the models of care women in Queensland use vary by maternal characteristics such as age, socioeconomic area, usual residence, Indigenous status and country of birth. It also suggests that antenatal, labour and birth outcomes for most women and babies across all model categories are good, although there are differences in some outcomes by the model of care used. In looking at these it is important to remember that some models of care will target specific groups of women and differences may be related to the characteristics of the women these models of care are designed for.

The model of care affects whether a woman has continuity of carer during the maternity period. Around 41% of women giving birth in Queensland used a model of care with continuity of carer across the whole maternity period, largely reflecting the use of *private obstetrician specialist care* and *midwifery group practice caseload care*; a further 21% used a model of care with continuity of carer for part of the maternity period. Nearly 4 in 10 women (38%) used a model of care with no continuity of carer in any stage of the maternity period.

The AIHW plans to add models of care information to the *Australia's mothers and babies* web report and to report on the models of care women use in other jurisdictions, as data becomes available. Having models of care information for all women giving birth will allow us to explore whether there are differences in the models of care used across Australia and by different population groups, including women in remote and rural areas, Aboriginal and Torres Straight Islander (First Nations) women and those from culturally and linguistically diverse backgrounds. It will also allow us to explore whether different models of care are associated with better outcomes. This will inform maternity care policy and service provision and support the monitoring and evaluation of the strategic directions for Australian maternity services.

More information

This report is accompanied by supplementary tables: <u>https://www.aihw.gov.au/reports/mothers-babies/</u><u>maternity-models-of-care/data.</u>

For more information on maternity models of care, please see <u>Maternity models of care in Australia, 2023.</u>

For more information on mothers and babies, please see <u>Australia's mothers and babies</u>.

About the data

This report uses 'woman' and 'women' to mean 'female' when referring to data collected in the NPDC as these data sources are based on sex. Information on gender is not recorded in this data collection. 'Woman' and 'women' typically refer to people aged 18 years and over, however people who were pregnant or gave birth aged under 18 are included. The terms 'mother' and 'mothers' refer to females who were pregnant and within the scope of the NPDC. It is acknowledged that this report includes people who do not identify as women or mothers, and that individual parents and families may use different words to those used in this report. This may include women, transgender men, intersex people, non-binary and gender diverse people.

Maternity model of care national best practice data set

The MoC NBPDS is a national collection of data on the models of maternity care available to pregnant and birthing women in Australia. This collection enables maternity care providers to classify their models of care using the Maternity Care Classification System (MaCCS).

Summary information for each model of care in the MoC NBPDS is available by maternity service at the <u>MaCCS website</u>. This includes the model ID number, name, and the model category it falls under. The unique model ID numbers that identify models of care in the MoC NBPDS can be used by maternity services to populate the 2 model of care data items in their perinatal collection, so they are collected for all women giving birth. These model ID numbers can also be used to join model-specific information from the MoC NBPDS with perinatal data from the NPDC.

Information on each data item collected in the MoC NBPDS can be found on <u>METEOR</u>.

More information on completeness and other aspects of data quality can be found in this <u>data quality</u> <u>statement.</u>

What is the Maternity Care Classification System?

The MaCCS is a standardised nomenclature for maternity models of care that underpins AIHW models of care data. It was developed by the National Perinatal Epidemiology and Statistics Unit at the University of New South Wales and the AIHW, and involved consultation with a range of stakeholders (AIHW 2014a, 2014b, 2016a, 2016b, 2018).

The scope of this data set is the models of maternity care available to pregnant and birthing women. Maternity services identify and describe each model of care they offer and the data items in the collection describe the characteristics of each model of care around 3 domains:

- the women a model is designed for
- the carers working within the model
- how care is commonly provided.

National Perinatal Data Collection

Person-level models of care information for women giving birth in Queensland in 2021 are available from the NPDC. The NPDC collects national information on the pregnancy and childbirth of mothers, and the characteristics and outcomes of their babies. The data are based on births reported to perinatal data collections in each state and territory in Australia. Data supplied for the NPDC consist of the Perinatal National Minimum Data Set (Perinatal NMDS) and additional data items. The 2 model of care data items – the *primary maternity model of care* and the *maternity model of care at the onset of labour or non-labour caesarean section* – are not in the Perinatal NMDS but are part of the Perinatal NBEDS, which are voluntary items jurisdictions are working towards providing. More information on the NPDC is available at <u>Australia's mothers and babies</u>, Data sources - Australian Institute of Health and Welfare (aihw.gov.au) and in the data quality statement at <u>National Perinatal Data Collection</u>, 2021: Quality Statement (aihw.gov.au)

Glossary

antenatal: The period covering conception up to the time of birth. Synonymous with prenatal.

continuity of carer: Where care is provided, or led, over the full length of a maternity period by the same named carer. Other caregivers may be involved in the provision of care, either as a backup to the named carer or to collaborate in the provision of care; however, the named carer continues to coordinate and provide ongoing care throughout. The MaCCS looks at the extent of continuity of carer across the continuum of maternity care (the antenatal, intrapartum, and postpartum periods) within each model of care. There are 6 categories to describe the extent of continuity of carer within a model, ranging from no continuity of carer across any stage of the maternity period, to continuity of carer across the whole duration of maternity period – antenatal, intrapartum, and postpartum periods.

Indigenous status: People who identify as being of Aboriginal and/or Torres Strait Islander origin, non-Indigenous or not stated.

intrapartum: The period from the commencement of labour and including the birth.

midwifery group practice caseload care: A model category in which antenatal, intrapartum, and postnatal care are provided within a publicly funded caseload model by a known primary midwife with secondary backup midwives providing cover and assistance, and collaboration with doctors in the event of identified risk factors. Antenatal and postnatal care are provided in the hospital, community, or home with intrapartum care in a hospital, birth centre or home. A key aspect of caseload midwifery practice that differentiates it from team midwifery models is that women have a named midwife. Caseload midwives have a self-managed workload that is outside of a traditional roster structure and provides a high level of continuity of carer across the continuum of maternity care.

model category: This is the overarching major category or group that a maternity model of care belongs to. It describes the intent of a model of care. While there may be differences between models of care, each one can be grouped into one of 11 model categories based on its specific characteristics. See this <u>AIHW</u> web report for a description of each model category.

postnatal: The 6-week period immediately after birth. The terms postpartum and postnatal are used interchangeably in this report, but 'postpartum' refers to the woman and 'postnatal' refers to the baby.

private obstetrician specialist care: A model category in which antenatal care is provided by a private specialist obstetrician. Intrapartum care is provided in either a private or public hospital by the private specialist obstetrician in collaboration with hospital midwives. Postnatal care is provided in the hospital by the private specialist obstetrician and hospital midwives and care by midwives may continue in the home, hotel, or hostel.

public hospital high risk maternity care: A model category in which antenatal care is provided to women with medical high risk/complex pregnancies by public hospital maternity care providers (specialist obstetricians and/or maternal-fetal medicine subspecialists in collaboration with midwives). Hospital doctors and midwives provide intrapartum and postnatal care. Postnatal care may continue in the home or community by hospital midwives. This category is not used for specialised obstetric-led clinics, such as those specifically for women with diabetes or with obstetric risk factors such as high body mass index.

public hospital maternity care: A model category in which antenatal care is provided in hospital outpatient clinics (either onsite or outreach) by midwives and/or doctors and may include specific clinics, for example diabetes clinics, and Next Birth After Caesarean clinics. A multidisciplinary team could also provide care. Intrapartum and postnatal care is provided in a hospital by midwives in collaboration with doctors as required. Postnatal care may continue in the home or community by hospital midwives.

shared care: A model category in which antenatal care is provided by a community maternity service provider (doctor and/or midwife) in collaboration with a hospital medical and/or midwifery staff under an established agreement and can occur both in the community and in hospital outpatient clinics. This would usually include an agreed schedule of antenatal care between the two providers. 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).

For a full list of definitions of terms used in this report please see:

Maternity models of care in Australia, 2023 and Australia's mothers and babies.

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Acknowledgements

This report was written by Rebecca Rodgers of the Australian Institute of Health and Welfare. The author gratefully acknowledges contributions from various staff in the Maternal and Perinatal Health Unit and the Perinatal Data Unit, in particular, Siamak Gholizadehsangesaraki, Aaron Perrett, Jessica Jeffrey, and Polly Evans.

The AIHW would like to thank and acknowledge the maternity services and jurisdictions that contribute to the maternity models of care data collection and the NPDC. AIHW maternal and perinatal health committee members and in particular Queensland Health are also thanked for their contribution and review of this report. The AIHW would also like to acknowledge the funding provided by the Australian Government Department of Health and Aged Care for this work, as part of the National Maternity Data Development Project.

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Suggested citation

Australian Institute of Health and Welfare 2023. Maternity modes of care. Cat. no. PER 123. Canberra: AIHW.

ISBN 978-1-923085-16-13 (Online) ISBN 978-1-923085-16-14 (Print) DOI: 10.25816/fdjq-zc08

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