South Australian Perinatal Practice Guideline

Prolonged Pregnancy

Note:

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

SA Health does not accept responsibility for the quality or accuracy of material on websites linked from this site and does not sponsor, approve, or endorse materials on such links.

Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate, and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements, and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Note: The words woman/women/mother/she/her have been used throughout this guideline as most pregnant and birthing people identify with their birth sex. However, for the purpose of this guideline, these terms include people who do not identify as women or mothers, including those with a non-binary identity. All clinicians should ask the pregnant person what their preferred term is and ensure this is communicated to the healthcare team.

"**Aboriginal and Torres Strait Islander recognition statement:** We use the term 'Aboriginal' to refer to people who identify as Aboriginal, Torres Strait Islander, or both Aboriginal and Torres Strait Islander. We do this because the people indigenous to South Australia are Aboriginal and we respect that many Aboriginal people prefer the term 'Aboriginal'. We also acknowledge and respect that many Aboriginal South Australians prefer to be known by their specific language group(s)."

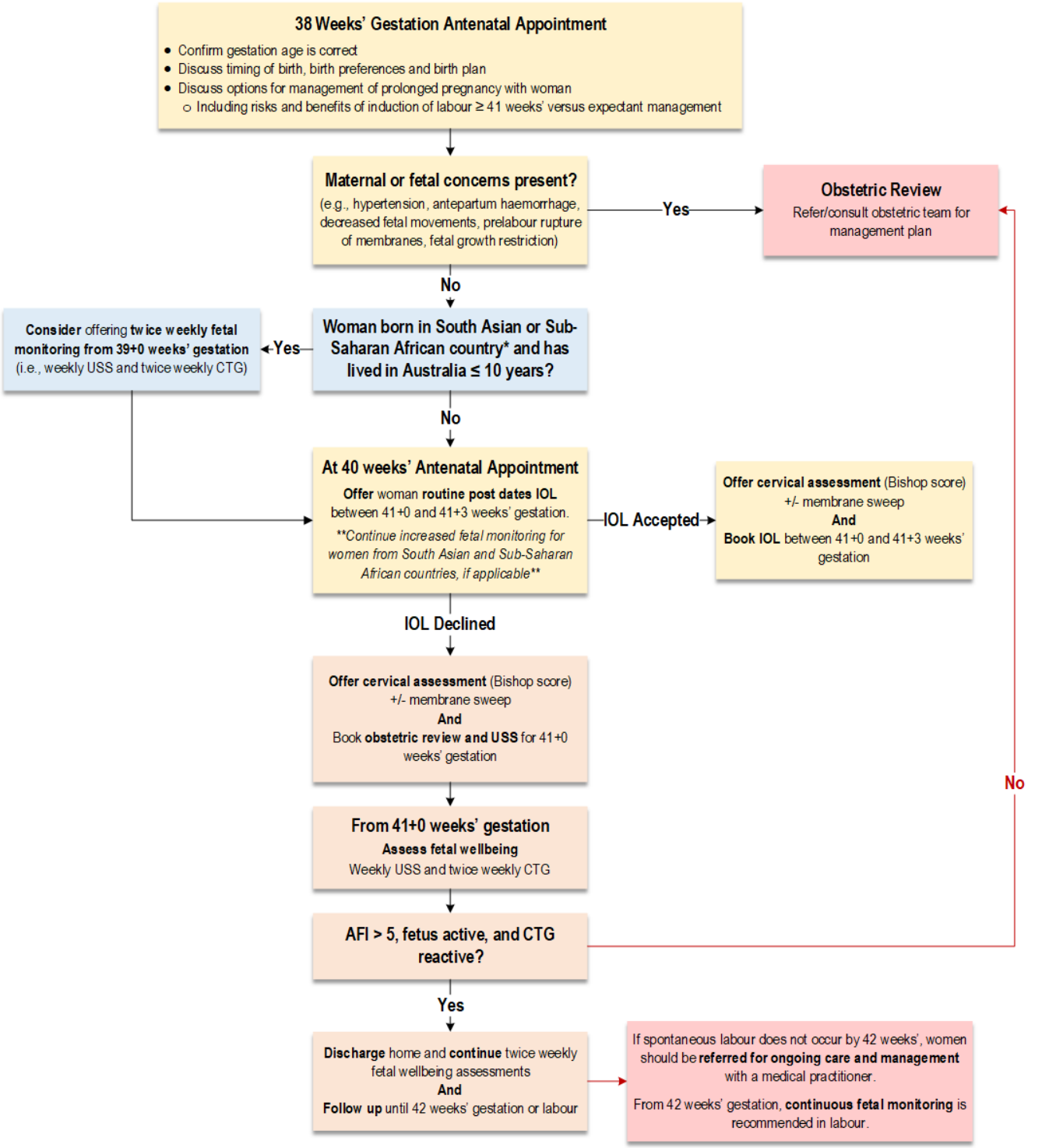
Australian Aboriginal Culture is the oldest living culture in the world, yet Aboriginal people continue to experience the poorest health outcomes when compared to non-Aboriginal Australians. In South Australia, Aboriginal women are 2–5 times more likely to die in childbirth and their babies are 2–3 times more likely to be of low birth weight. The accumulative effects of stress, low socio-economic status, exposure to violence, historical trauma, culturally unsafe and discriminatory health services, and health systems are all major contributors to the disparities in Aboriginal maternal and birthing outcomes. Despite these unacceptable statistics, the birth of an Aboriginal baby is a celebration of life and an important cultural event bringing family together in celebration, obligation, and responsibility. The diversity between Aboriginal cultures, language and practices differ greatly and so it is imperative that perinatal services prepare to respectfully manage Aboriginal protocol and provide a culturally positive health care experience for Aboriginal people to ensure the best maternal, neonatal and child health outcomes.

Explanation of the Aboriginal artwork: The Aboriginal artwork used symbolises the connection to country and the circle shape shows the strong relationships amongst families and the Aboriginal culture. The horseshoe shape design shown in front of the generic statement symbolises a woman and those enclosing a smaller horseshoe shape depicts a pregnant woman. The smaller horseshoe shape in this instance represents the unborn child. The artwork shown before the specific statements within the document symbolises a footprint and demonstrates the need to move forward together in unison.

Aim and Scope of PPG

The purpose of this guideline is to assist clinicians in the management of prolonged pregnancy, beyond 41^{+0} weeks' gestation, among women with low risk and singleton pregnancies. Recommendations are provided on accuracy of dating, identification of risk factors, and antenatal and intrapartum fetal surveillance.

Flowchart 1| Prolonged Pregnancy Management



***Countries by Region**

South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka.

Sub-Saharan Africa: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Cote d'Ivoire, Congo, Comoros, Djibouti, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Mali, Malawi, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Reunion, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, South Africa, South Sudan, St Helena, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

Table of Contents

Summary of Practice Recommendations

First trimester ultrasound scan (USS) should be undertaken as part of first trimester screening to accurately **establish an expected date of birth** (EDB) and prevent misdiagnosis of a post-term pregnancy.

Consider individual risks of prolonged pregnancy. See section on Risk Factors Associated with Prolonged Pregnancy.

Women without obstetric or medical complications should be offered induction of labour at 41^{+0} to 41^{+3} weeks gestation.[1]

Women should be counselled about the risks and benefits of induction of labour (IOL) and timing of birth. See section on Informed Decision Making.

Extending pregnancy beyond 42 weeks' gestation is **not** recommended.

Discuss benefits and risks of sweeping membrane to induce labour.

Acupuncture, acupressure, primrose oil, intercourse, breast stimulation and homeopathy have **not** been proven to induce labour, though are not harmful.

Ultrasound for assessment of Amniotic Fluid Index (AFI) and, twice weekly cardiotocography (CTG) from 41^{+0} weeks' gestation is recommended.

Consider dopplers for women electing expectant management.

Women of South Asian or Sub-Saharan African descent (see table 3) may benefit from earlier fetal surveillance and planned induction of labour to prevent prolonged pregnancy.[2]

Women declining postdates IOL should be referred to a medical practitioner for ongoing management[3] and require continuous monitoring in labour at or beyond 42 weeks' gestation.

Aboriginal women should be consulted about any decisions in the first instance and referred to their nominated Aboriginal Health Professional

Abbreviations

>	Greater than
≥	Greater than or equal to
<	Less than
≤	Less than or equal to
AFI	Amniotic fluid index
BMI	Body mass index
CTG	Cardiotocography
DVP	Deepest vertical pocket/pool
EDB	Expected date of birth
IOL	Induction of labour
LMP	Last menstrual period
MSL	Meconium-stained liquor
NICU	Neonatal Intensive Care Unit
NNTT	Number needed to treat
p	P-value or statistical significance
RCT	Randomised controlled trial
RR	Relative risk
SIDS	Sudden infant death syndrome
USS	Ultrasound scan

Definitions

Oligohydramnios	Amniotic fluid index (AFI) < 5 cm or deepest vertical pocket/pool (DVP) ≤ 2 cm.[4]
Prolonged pregnancy	Pregnancy lasting 42+^{0} weeks or more (294 days or more) from the first day of the last menstrual period (LMP).[5]
Shared decision making	Shared decision making involves discussion and collaboration between a consumer and their healthcare providers. It is about bringing together the consumer's values, goals, and preferences with the best available evidence about benefits, risks and uncertainties of screening, investigations, and treatment, to reach the most appropriate healthcare decisions for that person.

Literature Review

Routine induction of labour, for women with uncomplicated, low risk and singleton pregnancies, at less than 41 weeks' gestation is **not** recommended.[1] Induction of labour is recommended for women who are known with certainty to have reached 41 weeks.[1, 5-10] There is a lower risk of perinatal mortality associated with birth at 41 weeks compared to 42 weeks, however, absolute risks remain small.[7, 8, 10, 11] A subgroup analysis showed improved perinatal outcomes in pregnancies induced at 41 weeks compared with expectant management until 42 weeks. Benefits were primarily seen in nulliparous women; whereas for multiparous woman the incidence of mortality and morbidity was statistically insignificant.[7]

Bi-weekly fetal surveillance for South Asian women birthing at three metropolitan hospitals in Victoria, was associated with a 64% reduction in stillbirth; without increasing neonatal morbidity.[2]

Women of higher BMI induced post-dates are not associated with higher rates of caesareans or instrumental deliveries compared with expectant management.[12]

See Induction and *Augmentation of Labour PPG* found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal for a discussion on the evidence relating to potential risks and harm of induction of labour using both RCT and population-based data.

Introduction

'Prolonged pregnancy', 'post-term', 'late-term', and 'post-dates' are often used interchangeably to refer to a pregnancy continuing beyond 41 weeks' gestation.

Induction of labour (IOL) is recommended to prevent adverse outcomes associated with prolonged pregnancy, however there are currently no agreed international standards for the optimal timing of induction.[1] Whilst absolute risk is low, the relative risk of perinatal death and severe neonatal morbidity gradually increases from 41 weeks' of pregnancy, with a steeper increase from 42 weeks (table 1).[5-7, 13]

For more information see the *Induction and Augmentation of Labour PPG* found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal

Incidence

Globally, the incidence of prolonged pregnancies is between 5% and 15%.[5] However, the reported percentage of pregnancies extending beyond 42 weeks varies significantly across different clinical settings, mainly due to differing recommendations for managing pregnancies between 40 and 42 weeks.[5] National data shows 8.3% of all births occurred between 41^{+0} and 41^{+6} weeks' gestation, and 0.5% of babies born at 42 weeks and beyond.[14] In 2021,10.1% of all IOL occurring in South Australia were indicated for prolonged pregnancy.[14]

Risk Factors Associated with Prolonged Pregnancy

- Inaccurate dating of pregnancy
- Nulliparity
- Previous prolonged pregnancy
- Overweight and obesity
- Cephalopelvic disproportion
- Fetal anomaly
- Increased maternal age (> 40 years).[5, 15, 16]

Adverse Outcomes

Prolonged pregnancy is associated with increased adverse maternal, fetal and neonatal outcomes:[5, 8, 9, 15, 16]

Maternal

- Late-onset hypertensive disorders
- Anaemia
- Increased IOL rates
- Labour dystocia
- Perineal trauma (related to macrosomia)

Fetal and Neonatal

- Stillbirth (see table 1 and table 2 for national and state rates)
- Intrapartum fetal compromise
- Neonatal morbidity (e.g., meconium-stained liquor (MSL), meconium aspiration syndrome, neonatal acidaemia)
- Macrosomia, with associated increased rates of shoulder dystocia and birth injury
- Oligohydramnios
- Low Apgar score < 7 at 5 minutes
- Asphyxia
- SIDS

Table 1: Gestational age-specific risk of stillbirths in Australia per 1,000 births.[14]

Gestational age (e.g., weeks$^{+0 - +6}$)	Rate of stillbirths per 1,000 births* (AIHW data for 315,705 births in 2021)[14]
36–37	0.5
38–39	0.5
40 or more	0.7

Note: *The gestational age-specific risk of stillbirth is the likelihood of a stillbirth occurring within a specified gestation interval. It is the number of stillbirths occurring within a gestational interval, per 1,000 babies remaining in utero at the start of that interval.*

*Stillbirth rate = 1,000 x Number of stillbirths/Total number of births.

Table 2: Stillbirth prevalence in South Australia by gestation at birth (≥ 37 weeks) per 10,000 births.[17]

Gestation by week (e.g., weeks$^{+0 - +6}$)	Rate of stillbirths per 10,000 births** (SA POU data for 180,110 births ≥ 37 weeks for 2012–2021 inclusive)[17]
37	3.3
38	2.2
39	3.6
40	4.7
41	9.1
42+	22.2

Note: *Risk of stillbirth is stated as* ***per 10,000 births*** *rather than per 1000 births to facilitate ease of discussion with women.*

**Stillbirth rate = 10,000 x Number of stillbirths/Total number of births.

Preventative Measures

Importance of Accurate Pregnancy Dating

- Accurately establishing an estimated date of birth (EDB) is essential in preventing misdiagnosis of a post-term pregnancy.
- Gestational age should be determined early in pregnancy.
  - Amongst women with regular menstrual cycles, an EDB can be reliably calculated based on their last menstrual period (LMP).[18]
- Routine use of a first trimester ultrasound with measurement of the crown rump length (ideally between 8 and 14 weeks) can be used to support accurate dating in combination with the woman's reported LMP.[5, 19]

- For guidance to calculate EDB, see *Antenatal Care. Routine Care in Pregnancy* PPG found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.

Membrane Sweeping

- Membrane sweeping may cause the release of endogenous prostaglandins, increasing the chance of spontaneous labour.[16]
- Sweeping of membranes is recommended from 40^{+0} weeks' of gestation.[15]
- For more information see the *Induction and Augmentation of Labour* PPG found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.

Management

Racial and Ethnic Considerations

Migrant and refugee women living in high income countries, particularly those born in Sub-Saharan African and South Asian countries, experience significantly higher risks of stillbirth, preterm birth and low Apgar scores compared to women born in the country of resettlement, such as Australia.[2, 20-22] In New South Wales (NSW), a study found that women born in the Philippines, India, the Middle East, Sub-Saharan African and other Asian countries (except China and Hong Kong), had an increased stillbirth risk between 15.4% and 48.1% compared to women born in Australia, with African-born women experiencing highest incidence of stillbirth at 5.5 per 1000 births.[23] Similarly, a NSW study reported elevated risks of stillbirth among women born in South Asian, Oceanian (excluding Australia and New Zealand) and African countries, with adjusted odds ratios (aOR) of 1.42 (95% CI 1.24–1.62), 1.45 (95% CI 1.17–1.80) and 1.46 (95% CI 1.19–1.80), compared to Australian and New Zealand-born women.[24]

In South Australia, an 18-year retrospective cohort study found that women born in Southern Asia, and of Aboriginal/Torres Strait Islander status also faced elevated risks of stillbirth, with adjusted odds ratios of 1.58 (95% CI, 1.19–2.10) and 1.50 (95% CI, 1.20–1.88), respectively.[25] This is further supported by a Victorian study showing increased odds of perinatal mortality (aOR1.83, 95 % CI 1.47, 2.28), small for gestational age births (SGA) (aOR 1.59 95 % CI 1.46, 1.74), very low birthweight (aOR1.33, 95 % CI 1.11, 1.58) and very preterm birth (aOR1.55, 95 % CI 1.27, 1.90), among women born in East African countries (Eritrea, Ethiopia, Somalia and Sudan) compared to Australian-born mothers.[26] The increased risk of stillbirth and preterm birth is particularly notable among recently migrated women, especially for those who have been in Australia less than two years.[27]

The elevated risk of perinatal mortality and morbidity are substantial highlighting the need for targeted interventions such as the implementation of migrant-specific antenatal care. Such care may include increased fetal monitoring, group antenatal care programs and additional training for midwives caring for migrant women. A systematic review and meta-analysis comparing migrant-specific antenatal care with standard care found that women receiving tailored care had significantly lower odds of stillbirth (OR 0.60 95% CI 0.37–0.97, $p = 0.04$, $I^2 = 0\%$).[27] Furthermore, increased fetal surveillance from 39 weeks' gestation has been shown to significantly reduce stillbirth rates among South Asian-born women. In Victoria, for instance, the implementation of more frequent fetal monitoring resulted in a 64% reduction in term stillbirths, from 2.3 per 1000 births to 0.8 per 1000 births. Additionally, rates of neonatal death (3.1/1000 vs 1.3/1000; $p = .03$) and special care nursery admissions (16.5% vs 11.1%; $p < .001$) also decreased.[28]

Therefore, to mitigate this risk without increasing neonatal morbidity or obstetric interventions, consideration should be given to twice weekly fetal surveillance from 39+0 weeks' gestation for pregnant women born in Southern Asian and Sub-Saharan African countries (table 3), who have resided in Australia ≤ 10 years, as an alternative to routine earlier induction of labour.[2, 29]

Aboriginal women should be consulted about any decisions in the first instance if requested an Aboriginal Health Professional should be consulted.

Table 3: Countries by region*

Southern Asia	Sub-Saharan Africa
Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka.	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Cote d'Ivoire, Congo, Comoros, Djibouti, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Equatorial Guinea, Kenya, Lesotho, Liberia, Madagascar, Mali, Malawi, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Reunion, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, South Africa, South Sudan, St Helena, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

*Source: Australian Bureau of Statistics, Standard Australian classification of countries (SACC), 2016.[30]

Induction of Labour

- Women without obstetric or medical complications should be offered induction of labour at 41^{+0} weeks gestation.[1, 7, 8]
- See *Induction and Augmentation of Labour* PPG found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.

***Note**: Recommendations for timing of birth for conditions other than prolonged pregnancy can be found in individual PPGs in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.*

When determining timing of birth, consider:

- favourability of the cervix
- gestational age
- maternal preference
- maternal risk factors.

Expectant Management

- Consultation with a medical practitioner should occur for all women electing expectant management beyond 41 weeks' gestation.[3]
- International guidelines recommended increased antenatal surveillance from 41 weeks. As such, consensus and expert opinion in South Australia recommend:
  - twice weekly assessment from 41 weeks' gestation, at a minimum, to assess fetal wellbeing.
- Assessment should include:[15, 16, 18]
  - USS to estimate maximum AFI
    - < 5 cm or DVP < 2 cm indicate oligohydramnios.
  - twice weekly CTG
    - monitoring only gives a snapshot of the current situation and cannot predict reliably any changes after monitoring ends. Adverse events (including stillbirth), and where these events might happen, cannot be predicted reliably or prevented.[31]
    - there is limited evidence showing improved outcomes with increased surveillance.

- If spontaneous labour does not occur by 42 weeks, women should be referred for ongoing care and management with a medical practitioner.[3]
- Benefits and risks of expectant management must be discussed with the woman.
- Continuous monitoring in labour is recommended at or beyond 42 weeks' gestation.
  - For more information see *Fetal Surveillance (*Cardiotocography) PPG found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.

***Note**: Acupuncture, acupressure, primrose oil, intercourse, breast stimulation and homeopathy have not been proven to induce labour*

Informed Decision Making

Informed decision-making is a fundament aspect of providing respectful and evidence-based maternity care. A NSW Parliamentary Inquiry into birth trauma and an ACT Legislative Assembly Inquiry into maternity services highlight that women receive inadequate or biased information about their maternity care options, leaving them feeling uninformed and disempowered.[32, 33, 34, 35]

Australian research, with a national survey indicates that while 72.8% of women reported receiving enough information to make informed decisions during antenatal care, this dropped to 67.8% in the postnatal period.[36] Alarmingly, 56.4% of women felt coerced into making decisions for themselves of their babies' at least once.[36] Coercion is linked to psychological harm which must be avoided through clear, unbiased communication and woman-centred care. In the context of prolonged pregnancy this means offering balanced information about the risks and benefits or expectant management versus IOL, acknowledging women's preferences, and fostering open dialogue throughout the care continuum.[32]

Aboriginal women should be referred to an Aboriginal Health Professional as soon as practicable.

The recommendation for IOL in post-term pregnancies should be discussed with women in advance. All women should be counselled on the risks, benefits and different methods of IOL, tailored to their individual circumstances, including their preferences and values.[1]

See *Induction and Augmentation of Labour* PPG found in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.

***Note**: Recommendations for timing of birth for conditions other than prolonged pregnancy can be found in individual PPGs in the A-to-Z index at www.sahealth.sa.gov.au/perinatal.*

Resources

Australian Charter of Healthcare Rights: (www.safetyandquality.gov.au)
Australian Charter of Healthcare Rights | Australian Commission on Safety and Quality in Health Care

Australian Government Pregnancy, Birth and Baby: (www.pregnancybirthbaby.org.au)
Pregnancy, Birth and Baby | Pregnancy Birth and Baby (pregnancybirthbaby.org.au)

Medicines Information: (sahealthlibrary.sa.gov.au)
https://sahealthlibrary.sa.gov.au/friendly.php?s=SAPharmacy

Safer Baby Bundle: Let's Talk Timing of Birth Consumer Brochure
saferbaby.org.au/wp-content/uploads/2023/05/Lets-Talk-Timing-Brochure-A5.pdf

SA Health Pregnancy:
Pregnancy | SA Health

SAPPGs Web-based App:
Practice Guidelines (sahealth.sa.gov.au)

Pathology Tests Explained: (https://pathologytestsexplained.org.au/)
Pathology Tests Explained

References

1. World Health Organization. WHO recommendations on induction of labour, at or beyond term. Geneva: World Health Organization,; 2022.
2. Davies-Tuck ML, Davey M-A, Hodges RL, Wallace EM. Fetal surveillance from 39 weeks' gestation to reduce stillbirth in South Asian-born women. American Journal of Obstetrics & Gynecology. 2023;229(3):286.e1-.e9.
3. Australian College of Midwives. National Midwifery Guidelines for Consultation and Referral2021. Available from: https://www.midwives.org.au/common/Uploaded%20files/_ADMIN-ACM/National-Midwifery-Guidelines-for-Consultation-and-Referral-4th-Edition-(2021).pdf.
4. Khalil A, Sotiriadis A, D'Antonio F, Da Silva Costa F, Odibo A, Prefumo F, et al. ISUOG Practice Guidelines: performance of third-trimester obstetric ultrasound scan. Ultrasound in Obstetrics & Gynecology. 2024;63(1):131-47.
5. Latif S, Aiken C. Prolonged pregnancy. Obstetrics, Gynaecology & Reproductive Medicine. 2021;31(6):170-4.
6. Ravelli ACJ, van der Post JAM, de Groot CJM, Abu-Hanna A, Eskes M. Does induction of labor at 41 weeks (early, mid or late) improve birth outcomes in low-risk pregnancy? A nationwide propensity score-matched study. Acta Obstetricia et Gynecologica Scandinavica. 2023;102(5):612-25.
7. Alkmark M, Keulen JKJ, Kortekaas JC, Bergh C, van Dillen J, Duijnhoven RG, et al. Induction of labour at 41 weeks or expectant management until 42 weeks: A systematic review and an individual participant data meta-analysis of randomised trials. PLoS Med. 2020;17(12):e1003436.
8. Wennerholm U-B, Saltvedt S, Wessberg A, Alkmark M, Bergh C, Wendel SB, et al. Induction of labour at 41 weeks versus expectant management and induction of labour at 42 weeks (SWEdish Post-term Induction Study, SWEPIS): multicentre, open label, randomised, superiority trial. BMJ. 2019;367:l6131.
9. Middleton P, Shepherd E, Morris J, Crowther CA, Gomersall JC. Induction of labour at or beyond 37 weeks' gestation. Cochrane Database Syst Rev. 2020;7(7):Cd004945.
10. Middleton P, Shepherd E, Crowther CA. Induction of labour for improving birth outcomes for women at or beyond term. Cochrane Database Syst Rev. 2018;5(5):Cd004945.
11. Jeer B, Haberfeld E, Khalil A, Thangaratinam S, Allotey J. Perinatal and maternal outcomes according to timing of induction of labour: A systematic review and meta-analysis. Eur J Obstet Gynecol Reprod Biol. 2023;288:175-82.
12. Lauth C, Huet J, Dolley P, Thibon P, Dreyfus M. Maternal obesity in prolonged pregnancy: Labor, mode of delivery, maternal and fetal outcomes. J Gynecol Obstet Hum Reprod. 2021;50(1):101909.
13. Muglu J, Rather H, Arroyo-Manzano D, Bhattacharya S, Balchin I, Khalil A, et al. Risks of stillbirth and neonatal death with advancing gestation at term: A systematic review and meta-analysis of cohort studies of 15 million pregnancies. PLoS Med. 2019;16(7):e1002838.
14. Australian Institute of Health and Welfare. Australia's mothers and babies. Canberra: AIHW; 2024.

15. Living Evidence for Australian Pregnancy and Postnatal Care (LEAPP). Australian Pregnancy Care Guidelines. 2024.
16. Head of Obstetrics. Prolonged pregnancy: Care beyond 40 weeks gestation. Clinical Practice Guideline: King Edward Memorial Hospital, Government og Western Australia North Metropolitan Health Service.; 2022. Available from: https://www.kemh.health.wa.gov.au/~/media/HSPs/NMHS/Hospitals/WNHS/Documents/Clinical-guidelines/Obs-Gyn-Guidelines/Prolonged-Pregnancy.pdf?thn=0.
17. Prevention and Population Health Branch, Wellbeing SA, Government of South Australia. Maternal and Perinatal Mortality in South Australia 2012-2021 data supplied by Pregnancy Outcome Unit2024.
18. Norwitz ER. Patient education: Postterm pregnancy (Beyond the Basics)2024 August 2024. Available from: https://www.uptodate.com/contents/postterm-pregnancy-beyond-the-basics#disclaimerContent.
19. ISUOG Practice Guidelines: ultrasound assessment of fetal biometry and growth2019; 53:[715-23 pp.].
20. Jardine J, Walker K, Gurol-Urganci I, Webster K, Muller P, Hawdon J, et al. Adverse pregnancy outcomes attributable to socioeconomic and ethnic inequalities in England: a national cohort study. The Lancet. 2021;398(10314):1905-12.
21. Bowman A, Sullivan T, Makrides M, Flenady V, Shepherd E, Hawke K, et al. Lifestyle and sociodemographic risk factors for stillbirth by region of residence in South Australia: a retrospective cohort study. BMC Pregnancy Childbirth. 2024;24(1):368.
22. Ahmed I, Ali SM, Amenga-Etego S, Ariff S, Bahl R, Baqui AH, et al. Population-based rates, timing, and causes of maternal deaths, stillbirths, and neonatal deaths in south Asia and sub-Saharan Africa: a multi-country prospective cohort study. The Lancet Global Health. 2018;6(12):e1297-e308.
23. Choi SK, Henry A, Hilder L, Gordon A, Jorm L, Chambers GM. Adverse perinatal outcomes in immigrants: A ten-year population-based observational study and assessment of growth charts. Paediatric and perinatal epidemiology. 2019;33(6):421-32.
24. Berman Ye, Ibiebele I, Patterson JA, Randall D, Ford JB, Nippita T, et al. Rates of stillbirth by maternal region of birth and gestational age in New South Wales, Australia 2004–2015. Australian and New Zealand Journal of Obstetrics and Gynaecology. 2020;60(3):425-32.
25. Bowman A, Sullivan T, Makrides M, Flenady V, Shepherd E, Hawke K, et al. Lifestyle and sociodemographic risk factors for stillbirth by region of residence in South Australia: a retrospective cohort study. BMC Pregnancy and Childbirth. 2024;24(1):368.
26. Belihu FB, Davey M-A, Small R. Perinatal health outcomes of East African immigrant populations in Victoria, Australia: a population based study. BMC pregnancy and childbirth. 2016;16:1-11.
27. Weerasingha S, Tindal K, Palmer K, Ellery SJ, Davies-Tuck M. Do Antenatal Interventions Improve Maternal and Perinatal Outcomes for Migrant Women Living in High-Income Countries and What Guidelines Exist for Migrant Women? A Systematic Review and Meta-Analysis. Birth. 2025.
28. Davies-Tuck ML, Davey MA, Hodges RL, Wallace EM. Fetal surveillance from 39 weeks' gestation to reduce stillbirth in South Asian-born women. Am J Obstet Gynecol. 2023;229(3):286.e1-.e9.
29. Tully E, Truong M, Fooladi E, Davey M-A, Hodges R, Davies-Tuck ML. South-Asian women's experiences of earlier additional, fetal monitoring to reduce stillbirth: An exploratory qualitative study. Women and Birth. 2023;36(2):e213-e8.
30. ABS. Standard Australian Classification of Countries (SACC). In: Statistics ABo, editor. Canberra2016.
31. National Institute for Health and Care Excellence. Inducing labour. NICE guideline [NG207]2021 September 2023. Available from: https://www.nice.org.uk/guidance/ng207.
32. NSW. Birth Trauma - Report No.1. online; 2024.
33. ACT. Report on inquiry into maternity services in the Act - Report No.10. Canberra; 2020.
34. Oelhafen S, Trachsel M, Monteverde S, Raio L, Cignacco E. Informal coercion during childbirth: risk factors and prevalence estimates from a nationwide survey of women in Switzerland. BMC Pregnancy and Childbirth. 2021;21(1):369.
35. Coates R, Cupples G, Scamell A, McCourt C. Women's experiences of induction of labour: Qualitative systematic review and thematic synthesis. Midwifery. 2019;69:17-28.
36. Medway P, Hutchinson AM, Orellana L, Sweet L. Does maternity care in Australia align with the national maternity Strategy? Findings from a national survey of women's experiences. Women and Birth. 2024;37(6):101664.

Acknowledgements

The South Australian Perinatal Practice Guidelines gratefully acknowledge the contribution of clinicians and other stakeholders who participated throughout the guideline development process particularly:

Write Group Lead

Dr Magda Walc
Dr Linda McKendrick

Write Group Members

Monica Diaz
Stephanie Flak
Rebecca Smith

Other Major Contributors

Dr Michael McEvoy
Belinda Nitschke
Dr Anthia Rallis
Diana Raschella
Ginny Wilkinson

SAPPG Management Group Members

Dr Michael McEvoy (Chair)
Monica Diaz (SAPPG EO)
Dr Elizabeth Allen
Elise Bell
Dr Angela Brown
Marnie Campbell
John Coomblas
Dr Danielle Crosby
Imogen Downard John
Kate Greenlees
Luke Grzeskowiak
Kathryn Hansen
Dr Gemma Hardi
Dr Susie Keynes
Belinda Nitschke
Dr Angela Mathew
Dr Scott Morris
Dr Amanda Poprzeczny
Dr Anthia Rallis
Amy Rigano
Dr Shruti Tiwari
Sally Wadsworth
Allison Waldron

Suggested citation:

Walc M, McKendrick, L. Nitschke, B. Prolonged Pregnancy [Internet]. Adelaide (AU): South Australian Perinatal Practice Guideline; SA Health, Government of South Australia. 2025. 14 p. Guideline No.: PPG254. Available from: http://www.sahealth.sa.gov.au/perinatal.

OFFICE USE ONLY

Document Ownership & History

Developed by: Maternal, Neonatal and Gynaecology Strategic Executive Leadership Committee
Contact: HealthCYWHSPerinatalProtocol@sa.gov.au
Approved by: Clinical Guidelines Domain Custodian
Next review due: 09/07/2030
CGSQ reference: PPG254
Guideline history: Is this a new perinatal practice guideline (V1)? **N**
Does this perinatal practice guideline amend or update and existing perinatal practice guideline? **Y**
If so, which version? **V4.1**
Does this perinatal practice guideline replace another perinatal practice guideline or policy with a different title? **N**
If so, which perinatal practice guideline or policy (title)?

Approval Date	Version	Who approved New/Revised Version	Reason for Change
09/07/2025	V5	Clinical Guidelines Domain Custodian	Formally reviewed in line with 1–5 yearly scheduled timeline for review.
14/05/2020	V4.1	Chair, SA Maternal, Neonatal & Gynaecology Community of Practice	Re-templated, risk-assessed and extended for 2 years
06/03/2017	V4	SA Health Safety and Quality Strategic Governance Committee	Reviewed in line with schedule
17/01/2012	V3	SA Maternal and Neonatal Clinical Network	Reviewed in line with schedule
22/04/2008	V2	SA Maternal and Neonatal Clinical Network	Reviewed in line with schedule
19/01/2004	V1	SA Maternal and Neonatal Clinical Network	Original SA Maternal and Neonatal Clinical Network approved version.