



# Induction of Labour Policy

## 1. Purpose

Rates of induction of labour (IOL) have risen in Australia averaging from 27.7% in 2015 to 34.0% in 2023. For healthy low risk primiparous women IOL rates have risen significantly from 33.4% in 2015 to 44.3% in 2023 <sup>1</sup>.

There is unexplained variation in induction of labour rates across WACHS from 8 to 39 percent; this is even more significant for selected low risk primigravida's with a range of 12 – 55 percent (Women's Health Care Australia 2022/23 report).

According to the World Health Organization (WHO), IOL should be considered when the risk–benefit analysis indicates that interrupting the pregnancy is a safer option for the baby, the mother or both, rather than continuing in the absence of other clear indications for elective caesarean section or contraindications to vaginal birth. There remains no one point in time that suits every woman, and decisions around optimal timing of births are multifactorial <sup>2</sup>.

This policy aims to support evidence-based decision making involving reasonable clinical judgement that aligns with the wishes of the woman. It is hoped that this would reduce unwarranted variation in clinical practice whilst continuing to provide high standards of care that is women centred.

The policy provides guidance on timing, planning and methodology for induction of labour. Where induction of labour is planned, the risk profile of the woman and her unborn baby and the appropriate induction method must be within the defined scope of practice for that maternity unit.

## 2. Policy

### 2.1 Timing of Labour and Birth

WACHS staff will follow the Women and Newborn Health Service (WNHS) [Clinical Practice Guideline for Induction of Labour: Methods](#) and WNHS [Clinical Practice Guideline for Labour and Birth: Planned Birth Timing](#) with additional considerations where indicated.

The impetus to avoid iatrogenic 'early term' births (before 39 weeks) without evidence based clinical indication includes:

- consideration that fetal brain and organ development is a continuum to 40 weeks.
- the association with long term adverse cognitive effects including increased risk of cerebral palsy, attention deficit hyperactivity disorder (ADHD) and poorer school performance <sup>6</sup>.
- an increased risk of neonatal respiratory distress syndrome and Neonatal Intensive care Unit (NICU) admission directly related to later prematurity which further increases long-term neurodevelopment <sup>7, 8, 9</sup>.

The Australian Preterm Birth Prevention Alliance draws attention to Australian research that has shown that a trend towards planned births occurring earlier than 39 weeks'

gestation is associated with short, medium and long-term risks for the baby. This includes higher rates of nursery admission for breathing disorders, feeding difficulties, behavioural and learning problems in school aged children <sup>3</sup>.

Current recommendations are that:

- the timing of any planned births should be delayed to 39 weeks or later for women with risk factors where it is safe to do so <sup>3</sup>.
- women with uncomplicated pregnancies should not be routinely offered induction before 41 completed weeks.
- care should be individualised with each woman and her baby considering maternal and fetal risk factors balanced against the risk of harms including short, medium and long term impacts for the child.

## 2.2 Consent and Shared Decision Making

Shared decision making is a collaborative and individualised process used to inform the consent discussion with the woman. Clinicians work together with the woman, sharing the best available evidence, personalised to the woman and their situation in order to empower them to make decisions about care that is individualised and right for them at that time. When supporting women in their decision making, also consider risk and safety in the cultural, social, emotional, and financial context and include relevant team members where applicable <sup>11, 12, 13, 14</sup>.

Informed choice is based both on evidence and on the woman's individual preferences, beliefs and values and ensures the woman understands the risks, benefits and possible consequences of different options through discussion and information sharing <sup>14</sup>.

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) <sup>15</sup> [Induction of Labour](#) consumer information brochure must be provided to the woman, consent obtained as per the WACHS [Consent to Treatment Policy](#) and documented on the [MR30A WACHS Patient consent to treatment or investigation - Adult or Mature Minor](#).

When discussing the chance of a complication with women:

- clinicians should use the absolute risk or chance (i.e.1:1000 chance), in preference to relative risk (i.e.1.3 times more likely or 30% increase or double the chance), to ensure the actual chance is well understood by the woman <sup>14</sup>
- discuss risks, benefits and consequences in the context of a woman's **individual** circumstances and what matters to them <sup>13, 14</sup>
- personalise information on risks, benefits and consequences as much as possible. Make it clear to the woman how the information provided applies to them personally <sup>14</sup>.

When discussing and documenting IOL with the woman this must include:

- sufficient time for the woman, and their significant others, to process the induction information and their individual risks (24-48 hours where safe to do so)
- indication
- confirmation and agreement of the most accurate expected due date
- factual, non-biased presentation of the evidence without intentional use of fear
- the evidence for benefit from induction
- the risks of not inducing
- the risks of the induction process and each different method

- the alternatives to induction including risks and benefits
- when, where and how the induction would be done
- recommended fetal monitoring and options for this
- pain relief options
- options if IOL is unsuccessful, declined or if expectant management is preferred
- the potential for postponement of planned induction if another woman has a time-critical need and how the baby's wellbeing will be assessed [Cardiotocograph (CTG) +/- Ultrasound (USS)] if the induction is postponed
- provision of written evidence based information tailored to the needs of the individual woman
- consideration of the woman's individual health literacy needs.

Women who decline IOL must have their decision documented, by the Obstetric doctor, using the [MR8B.2 WACHS Discussion and Partnership Care Plan: Declining Recommended Maternity Care](#) after informed discussion of the risks, benefits and alternatives.

### 2.3 Importance of Accurate Gestation

Current recommendations are that:

- accurate pregnancy dating in first trimester reduces the need for IOL at post-term by approximately 40% and allows accurate timing of planned birth when indicated <sup>4</sup>
- a standardised approach is therefore recommended to estimate gestational age and the estimated date of birth (EDB) <sup>2</sup>
- the last normal menstrual period (LNMP) with the addition of 280 days (Naegele's Rule) and/or ultrasound measurement in the first trimester are the preferred and considered the most accurate method/s to calculate the EDB <sup>2</sup>
- when using an electronic gestational age calculators in clinical practice ensure they function using a 280 day calculation for standardisation.

**Table 1: Accurate calculation of estimated date of birth (EDB) <sup>10</sup>**

LNMP / Ultrasound	Calculation Method for EDB
USS between 6 and 13 weeks	If the two dates differ by 5 days or less use the LNMP estimated birth date If the EDB differs by more than 5 days use the USS EDB
USS between 13 and 24 weeks	If the two dates differ by 10 days or less use the LNMP EDB If the dates differ by more than 10 days use the USS EDB
No USS between 6 and 24 weeks	Use the LNMP EDB
If the LNMP was not certain, or menstruation irregular	Use the EDB estimate from the first USS performed between six and 24 weeks

## 2.4 Planning the Induction of Labour

### Indications for Planned Birth

The accepted clinical indications for induction of labour are listed in [Appendix A](#).

**Do not** routinely offer IOL to women in these circumstances:

- diet-controlled gestational diabetes without other complications
- to avoid stillbirth / previous stillbirth without other clinical indication
- to avoid a born before arrival (BBA) or history of rapid labour
- psychological factors
- maternal request / partner fly-in-out
- term with favourable cervix
- maternal age 35 - 39 without other clinical indication
- body mass index (BMI) >35
- maternal smoking
- decreased fetal movements before 39 wks without further investigation (i.e. CTG or ultrasound)
- to avoid caesarean section in low-risk pregnancy
- ethnicity
- active antepartum haemorrhage before 39 wks without evidence of maternal / fetal compromise
- In vitro fertilisation (IVF) without other clinical indication

### Contraindications for Induction of Labour

Contraindications to IOL are consistent with the contraindications for vaginal birth and are either absolute or relative. Discussion with a consultant obstetrician is required for those with relative contraindications.

Absolute contraindications:

- placenta or vasa praevia
- malpresentation (including oblique or transverse lie)
- proven cephalopelvic disproportion
- acute fetal compromise
- cord presentation or prolapse
- previous classical caesarean section or myometrial surgery unless approved by a consultant obstetrician after review of the surgical notes.

Relative contraindications:

- vaginal birth after caesarean section
- breech presentation
- low lying placenta (less than 2cm from internal os)
- active genital herpes
- human immunodeficiency virus (HIV) positive women – require consultation with Maternal Fetal Medicine (MFM) consultant and WACHS Paediatric consultant
- maternal or fetal condition requiring tertiary care.

## Efficacy of Membrane Sweeping (Stretch and Sweep)

Cervical membrane sweeping is a relatively simple practice that seeks to promote the spontaneous onset of labour and reduce the need for formal induction of labour <sup>16, 17, 18</sup>. Prior to booking IOL, consider offering a vaginal examination for membrane sweeping for all women. Offer membrane sweeping from 39+0 weeks and prior to formal IOL <sup>16, 17, 18</sup>.

Membrane sweeping informed consent discussion must include:

- advantageous in promoting spontaneous labour and reduces the need for a formal IOL
- in order for one IOL to be avoided, eight (8) women would require sweeping of membranes (number needed to treat or NNT 1:8) <sup>16, 17, 19</sup>
- potential for discomfort, vaginal bleeding and irregular contractions when offering membrane sweeping <sup>20, 21</sup>
- not associated with an increased risk of maternal or neonatal infection, even if a Group B Strep (GBS) carrier <sup>22, 23, 24</sup>.
- associated with a shortened time to birth interval and less need for and shorter durations of oxytocin infusion when performed at the onset of formal induction <sup>24, 25, 26</sup>
- there is no clear evidence on the frequency of membrane sweeping per woman and if spontaneous labour does not occur after the first sweep, additional membrane sweeps may be offered in collaboration with the woman <sup>18</sup>.

## 2.5 Induction of Labour

WACHS staff will follow the WNHS [Clinical Practice Guideline for Induction of Labour: Methods](#) and WNHS [Clinical Practice Guideline for Labour and Birth: Planned Birth Timing](#) with additional considerations where indicated. These practice guidelines cover:

- pre-IOL assessment
- assessment of cervix
- methods
- failed induction management
- delayed induction management
- transcervical catheter
- prostaglandins
- artificial rupture of membranes (ARM)
- oxytocin.

After 41 weeks women must be offered increased surveillance as per WNHS [Clinical Practice Guideline Prolonged pregnancy: Care beyond 40 weeks gestation](#).

## Medical Information Required to Request an IOL

The requesting clinician must provide to the maternity manager / head of department (HOD):

- all evidence of the clinical indication for IOL (serial USS, bloods etc.)
- written consent must be taken prior to IOL procedure with the [MR30A WACHS Patient consent to treatment or investigation - Adult or Mature Minor](#)
- if the consent is not received, the IOL cannot commence (**no consent = no IOL**)
- confirmation of the current bishop score and required induction method (a bishop score of less than 8 may likely require cervical ripening)
- if the woman's bishop score changes to indicate cervical ripening no longer required, prior to planned induction, then the clinician must notify the maternity unit.

## Prior to Booking a Woman for IOL

Each site is required to have a site specific documented process for triaging and booking an IOL.

The admitting clinician and the Clinical Midwifery Manager (CMM) or Clinical Midwifery Specialist (CMS) or the most senior midwife out of hours, must agree that the clinical indication for IOL is appropriate and:

- It is not appropriate for the clinician/doctor and maternity manager discussion to occur in front of the woman when prioritising workload or resources.
- Each site and appropriate clinician may prefer to receive all induction requests via fax/email/phone call and then prioritise daily against all IOL requests before confirming a date/time back to the requesting clinician and /or woman. This is to be done in conjunction with the medical lead when required.
- The woman should be advised by the clinician that her IOL may need to be postponed if another woman has a more **urgent** clinical need. This will ensure there are the appropriate midwifery resources available for the provision of one-to-one care during the induction process.
- The woman is to be advised to phone ahead prior to attending the maternity unit to confirm her induction is proceeding i.e., sufficient midwifery staffing and bed availability to do so.

## Maternity Delegation to Accept IOL Request

During business hours:

- All IOL requests (except URGENT) must be made via the Clinical Midwifery Manager (CMM) or Clinical Midwifery Specialist (CMS) or senior midwife (only where the maternity manager is not a midwife)

After hours:

- Only IOL for URGENT clinical indications will be accepted via the most senior midwife on duty.

## Medical Handover of the IOL Booking

If the requesting doctor will not be the obstetric doctor supervising the induction, they are to discuss this with the on-call doctor for the planned induction day and prior to the patient's admission.

If consultant input is required, it is the requesting clinician's responsibility to ensure the consultant is available for the planned IOL day.

## Site Capacity for IOL

Each maternity unit is to determine how many inductions can be safely booked each day (including weekends) considering the available midwifery/theatre/paediatric resources and other planned activity i.e. elective lower uterine segment caesarean section (ELUSCS) / external cephalic version (ECV) etc.

If the maximum number of inductions are already booked, then the request must be escalated to the HOD.

## Admission for IOL

If unexpected high-risk factors are identified during admission, the IOL needs to be re-considered in relation to the WACHS [Maternity and Neonatal Consultation and Referral Guideline for Clinical Service Levels](#).

If there is no consensus between the midwife and managing obstetric doctor as to the care management plan at any point during care, then WACHS [Maternal and Newborn Care Collaboration and Escalation Policy](#) must be followed.

## IOL Requiring Postponement (additional to WNHS Practice Guidelines)

Where there are competing demands for available IOL places then the competing IOLs must be triaged by priority by consensus agreement between the specialist obstetrician/senior obstetric medical officer and Midwifery Manager (see [Appendix A](#) as a guide). Further considerations include:

- Prior to the decision to postpone, the women must have a normal CTG and normal maternal assessment.
- If IOL is deferred until later the same day:
  - the shift coordinator is to notify the admitting clinician as soon as possible.
  - the management plan must be discussed with the woman and documented in integrated progress notes.
- If the IOL is deferred to the following day and there is any concern regarding the wellbeing of mother or fetus:
  - the situation must be discussed with a consultant obstetrician / senior obstetric medical officer
  - consideration be given to an USS biophysical profile
  - if deemed unsafe to delay IOL and additional midwifery resourcing is not possible then expeditious transfer to an appropriately resourced maternity unit.

## 2.6 Induction of Labour Process

These WNHS clinical practice guidelines must be read in conjunction with the following included additional WACHS policy considerations:

- WNHS [Clinical Practice Guideline for Induction of Labour: Methods](#)
- WNHS [Clinical Practice Guideline for Labour and Birth: Planned Birth Timing](#)
- WNHS [Clinical Practice Guideline for Rupture of Membranes – Spontaneous](#)

## Transcervical Catheter

Transcervical catheter is the recommended first line cervical ripening method except where specific individual advantages are identified for a woman by use of vaginal Prostaglandins.

Following discussion with the senior obstetric medical officer, vaginal prostaglandins may be considered where a transcervical catheter has been unsuccessful and when, on the balance of risks, continuing with the IOL attempt is merited.

## Outpatient Transcervical Catheter IOL for Low risk Women

Available evidence suggests that outpatient cervical balloon ripening catheters may be a safe and acceptable option for women who are deemed low risk<sup>25-29</sup>.

Criteria for outpatient cervical balloon ripening include:

- more than 39 weeks and deemed low risk.
- woman is happy to go home and lives within 30mins of the hospital.
- woman has reliable transport to return to the hospital.
- more than one hour has elapsed after catheter insertion.
- maternal observations are within normal limits.
- the post-insertion CTG is normal.
- woman has had explained, consented to, and been provided with written consumer information on outpatient cervical balloon ripening (see [Appendix B](#)).

### **Prostaglandins (dinoprostone (PGE2) gel, e.g. Prostin E2®, or dinoprostone pessary, e.g. Cervidil®)**

Use of vaginal prostaglandins is a pharmacological method of IOL used where the bishop score is less than 8. Criteria for use in decision making includes:

- Vaginal prostaglandins must only be prescribed by the obstetric team and in maternity units with access to non-elective lower uterine segment caesarean section (NELUSCS).
- If postponing IOL attempt, the woman may be discharged **six hours** after insertion of dinoprostone (PGE2) gel or removal of a dinoprostone (PGE2) pessary, provided there is a normal CTG.
- The timing of prostaglandin IOL is to be decided by each WACHS maternity site taking into consideration:
  - staffing availability (midwifery and theatre)
  - the peak timing for risk of hyperstimulation occurs at 4-5 hours post-insertion.
- Insertion of the first dose of dinoprostone (PGE2) gel or a dinoprostone (PGE2) pessary may be administered by the midwife if it has been prescribed by the Obstetric doctor.
- Prior to second dose of dinoprostone (PGE2) gel, the woman's clinical situation must be considered by the maternity shift coordinator.
- The second dose of dinoprostone (PGE2) gel may be administered by a midwife if there are no regular contractions and previously prescribed by the Obstetric doctor.

### **Ideal Contraction Pattern with Oxytocic Use**

The ideal contraction pattern should mimic that of a spontaneous labour aiming for:

- three (3) to four (4) strong contractions in a 10-minute window
- contractions lasting for 60 seconds (maximum 90 secs) each
- with a minimum of 60 seconds rest between each contraction.

A continuous CTG must be applied once regular contractions are occurring.

### **Artificial Rupture of Membranes (ARM)**

Ideally the induction should commence as early as possible during daylight hours to:

- allow for effective use and appropriate time to establish then progress in labour
- minimise the risk of after-hours intervention (including transfer or NELUSCS).

The ARM could be performed by night staff (as close to 0600hrs where possible) and the oxytocin infusion commenced by morning staff following handover at 0800hrs.



Circumstances where ARM must only be performed by a consultant obstetrician or senior obstetric doctor and with immediate access to NELUSCS:

- high presenting fetal part (head 4/5 or above abdominally, or vaginal station minus 3 or more)
- polyhydramnios.

Evidence does suggest that primiparous women are unlikely to establish labour without the use of oxytocin<sup>32</sup>. If the woman and clinicians decide to await spontaneous onset of regular contractions after an ARM, then a management plan for use of oxytocin infusion must be documented so that:

- women with risk factors aim to have birth timed for daylight hours (when WACHS resources are more readily accessible)
- there is a documented time (if labour has not commenced/established) for the oxytocin infusion to commence.

## 2.7 Oxytocin Infusion

Oxytocin IOL should ideally be commenced in the early morning (0600 – 0800) to:

- allow for effective use and appropriate time to establish then progress in labour
- minimise the risk of after-hours intervention (including transfer or NELUSCS).

### Contraindications

Women with contraindication to oxytocin must not have it commenced without discussion with the consultant obstetrician or regional consultant obstetrician:

- Grand Multiparity - parity greater than 5
- Women with a previous uterine scar
- Multipara first stage augmentation in active first stage
- Multipara 2<sup>nd</sup> stage (absolute contraindication)
- No access to theatre and no access to caesarean section

### WACHS specific considerations for oxytocin use

Oxytocin infusion incremental increases are to occur 30 minutely. These increases should be clinically determined by the primary midwife based on:

- Manual palpation of less-than-ideal contraction pattern, and
- A normal fetal heart rate pattern
- 15 minutely increases may considered in the early latent phase of labour due to WACHS reduced on site theatre access. 15 minutes is only appropriate when:
  - Contractions have not commenced.
  - Contractions are irregular and weak.
  - Once active labour is reached (4cm dilation or more) the oxytocin rate must be returned to 30 minutely increments while maintaining the ideal contraction pattern.
- Particular attention must be paid to multigravidas.
- One-on-one midwifery care must be maintained once an oxytocin infusion is commenced
- The primary midwife must be careful to maintain the ideal contraction pattern (by manual abdominal contraction assessment) with care taken to avoid uterine hyperstimulation (more than four strong contractions in 10 minutes or less than 60 seconds rest period between contractions)

- Where contractions cannot be adequately assessed by external monitoring or manual palpation, the further use of oxytocin to stimulate labour must be reassessed by a consultant obstetrician / senior obstetric medical officer. The use of an intrauterine pressure transducer or other approved contraction monitoring devices may be considered if available.
- Once the maximum oxytocin dose (20 milliunits per minute = 60 mL per hour) has been running for 30 minutes and without the ideal contraction pattern being achieved, the situation must be discussed with the most senior available on call obstetric doctor prior to higher doses being administered. The overall maximum dose of oxytocin must not exceed 36 milliunits per minute (108 mL per hour).

### 3. Roles and Responsibilities

**Regional Medical Directors and Regional Directors of Nursing and Midwifery** are responsible for ensuring:

- that all Medical and Midwifery staff involved in provision of Maternity care have access to this policy.
- compliance with this policy.

**Medical and Midwifery staff** are responsible for:

- Having knowledge and understanding of the Induction of Labour Policy to ensure the best possible outcome for the patient.
- Working within their credentialed scope of practice in their assessment, management and transfer of care.

**All staff** are required to comply with the directions in WACHS policies and procedures as per their roles and responsibilities. Guidelines are the recommended course of action for WACHS and staff are expected to use this information to guide practice. If staff are unsure which policies procedures and guidelines apply to their role or scope of practice, and/or are unsure of the application of directions they should consult their manager in the first instance.

### 4. Monitoring and Evaluation

Monitoring of compliance with this policy is to occur via reviewing and reporting on:

- Regular feedback received from women experiencing and health providers implementing and performing IOL in the maternity setting.
- All concerns and complaints received from women, families and health providers regarding this policy.
- Adverse outcomes / incidents (maternal or newborn) where the oxytocin was identified as a contributing factor i.e. maternal postpartum haemorrhage (PPH), newborn requiring any resuscitation, NELUSCS for fetal compromise.
- Audit outcomes of compliance, correct use of, and evaluation of the feedback and effectiveness of IOL in maternity settings.

This policy will be evaluated by the Obstetric Leadership Group (OLG), Midwifery Advisory Forum and Obstetrics / Gynaecology Medical Forum to determine the effectiveness, relevance and currency. The OLG will also monitor and investigate IOL rates six monthly via the Obstetric dashboard.

The overall compliance will occur through continuous evaluation and review of audit outcomes as per the monitoring activities above. The site Maternity Manager and Obstetric lead are to:

- Evaluate, benchmark, investigate and escalate IOL for non-medical indications.
- Regularly evaluate IOL rates, trends and outcomes every six months via the perinatal report of clinical outcomes.

## 5. References

1. Women's Healthcare Australasia (WHA) (2021). "Trends in Maternity Care & Outcomes." [Internet]. [Accessed : 17 July 2024]. Available from: [Trends in Maternity Care & Outcomes – Women's Healthcare Australasia \(wcha.asn.au\)](https://www.wcha.asn.au)
2. World Health Organisation (WHO) (2022). "WHO recommendations on induction of labour, at or beyond term". Geneva: World Health Organization. [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.who.int/publications/i/item/9789241501156>
3. Australian Preterm Birth Prevention Alliance (n.d). Statement by the Australian Preterm Birth Prevention Alliance. [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.pretermalliance.com.au/Alliance-News/Latest-News/Statement-by-the-Alliance>
4. Whitworth, M., Bricker, L., Mullan, C. (2015). "Ultrasound for fetal assessment in early pregnancy". Cochrane Database Syst Rev. Issue 7. Art. No.: CD007058. DOI: 10.1002/14651858.CD007058.pub3.
5. White, S., Newnham, J. (2019). "Is it possible to safely prevent late preterm and early term births?". Seminars in Fetal and Neonatal Medicine. 24(1), 33-36.
6. Bentley, J., et al. (2017). "Born a bit too early: A study of early planned birth and child development at school age". International Journal for Population Data Science. 1(1).
7. Murray, S., et al. (2017). "Long term cognitive outcomes of early term (37-38 weeks) and late preterm (34-36 weeks) births: A systematic review". Wellcome Open Res 2:101.
8. Cluver, C., et al. (2017). "Planned early delivery versus expectant management for hypertensive disorders from 34 weeks gestation to term". Cochrane Database Syst Rev. Issue 1. Art. No.: CD009273. DOI: 10.1002/14651858.CD009273.pub2.
9. Middleton, P., et al. (2017). "Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)". Cochrane Database Syst Rev. Issue 1. Art. No.: CD005302. DOI: 10.1002/14651858.CD005302.pub3.
10. Australian Living Evidence Collaboration. (2023 version 1). Australian pregnancy care guidelines. [Internet]. [Accessed : 17 July 2024]. Available from: <https://leappguidelines.org/>
11. Elwyn, G., et al. (2010). "Implementing shared decision making in the NHS". BMJ; 341: c5146. doi: 10.1136/bmj.c5146

12. Murphy, M. (2016). 'Maternal Autonomy'. *British Journal of Midwifery*. May, Vol 24(5). [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.magonlinelibrary.com/doi/full/10.12968/bjom.2016.24.5.371>
13. American College of Nurse-Midwives (2022). "Clinical bulletin no. 18. Induction of Labor". *J Midwifery Women's Health*. 67(1), p.140-149. [Internet]. [Accessed : 17 July 2024]. Available from : <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jmwh.13337>
14. National Institute for Clinical Excellence (NICE) (2021). "Shared decision making (NG197)". [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.nice.org.uk/guidance/ng197>
15. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) (2021). "Induction of Labour". [Internet]. [Accessed : 17 July 2024]. Available from: [Induction of Labour](#)
16. Boulvain, M., Stan, C., Irion, O. (2005). "Membrane sweeping for induction of labour". *Cochrane Database Syst Rev*. Issue 1. Art. No.: CD000451. DOI: 10.1002/14651858.CD000451.pub2.
17. Carlson, N., Ellis, J., Page, K., Dunn Amore, A., Phillippi, J. (2021). "Review of Evidence-Based Methods for Successful Labor Induction". *J Midwifery Women's Health*. 66(4), p.459–469.
18. National Institute for Clinical Excellence (NICE) (2021). "Inducing labour (NG207)". [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.nice.org.uk/guidance/ng207>
19. Avdiyovski, H., Haith-Cooper, M., Scally, A. (2019). "Membrane sweeping at term to promote spontaneous labour and reduce the likelihood of a formal induction of labour for postmaturity: a systematic review and meta-analysis". *Journal of Obstetrics and Gynaecology*. 39(1), p.54-62.
20. Finucane, E., et al. (2020). "Membrane sweeping for induction of labour". *Cochrane Database Syst Rev*. Issue 2. Art. No.: CD000451. DOI: 10.1002/14651858.CD000451.pub3
21. Roberts, J., et al. (2020). "Women's information needs, decision-making and experiences of membrane sweeping to promote spontaneous labour". *Midwifery*. 83. doi.org/10.1016/j.midw.2019.102626.
22. Kabiri, D., et al. (2015). "Antepartum Membrane Stripping in GBS Carriers, Is It Safe? (The STRIP-G Study)". *PLOS ONE*. 10(12): e0145905. doi.org/10.1371/journal.pone.0145905
23. Heilman, E., Sushereba, E. (2015). "Amniotic membrane sweeping". *Semin Perinatol*. 39(6), p.466-70. doi: 10.1053/j.semperi.2015.07.010.
24. Queensland Health (2022). "Induction of labour. Guideline No. MN22.22-V9-R27". [Internet]. [Accessed : 17 July 2024]. Available from: <https://www.health.qld.gov.au/qcg/publications#maternity>

25. Liu, J., et al. (2018). “Membrane sweeping added to formal induction method to increase the spontaneous vaginal delivery: a meta-analysis”. Arch Gynecol Obstet. 297, p.623–630.
26. Al-Harmi, J., et al. (2015). “Is membrane sweeping beneficial at the initiation of labor induction?”. The Journal of Maternal-Fetal & Neonatal Medicine. 28(10), p.1214-1218.
27. Gidaszewski, B., Khajehei, M., McGee, T. (2018). “Outpatient cervical ripening: discomfort/pain during speculum and Foley catheter insertion”. Midwifery. 67, p.57-63.
28. Dideren, M., et al. (2018). “Safety of the balloon catheter for cervical ripening in outpatient care”. BJOG. 125(9), p.1086-1095.
29. Kelly, A., Alfirevic, Z., Ghosh, A. (2013). “Outpatient versus inpatient induction of labour for improving birth outcomes”. Cochrane Database Syst Rev. Issue 11. Art. No.: CD007372. DOI: 10.1002/14651858.CD007372.pub3
30. Henry, A., et al. (2013). “Outpatient Foley catheter versus inpatient prostaglandin E2 gel for induction of labour: a randomised trial”. BMC Pregnancy and Childbirth. 13(9). doi.org/10.1186/1471-2393-13-25.
31. Catarine, P., et al. (2017). “Outpatient versus inpatient cervix priming with Foley catheter: a randomised trial”. European Journal of O & G and Reproductive Biology. 210, p.1-6. doi: 10.1016/j.ejogrb.2016.11.026.
32. Selo-Ojeme, D., et al. (2009). A randomised controlled trial of amniotomy and immediate oxytocin infusion versus amniotomy and delayed oxytocin infusion for induction of labour at term. Arch Gynecol Obstet. 279(6), 813-20. doi: 10.1007/s00404-008-0818-x.

## 6. Definitions

Term	Definition
<b>Active phase of labour</b>	The active phase of labour is described as when there are painful, regular contractions and progressive cervical dilatation from 4cm: <ul style="list-style-type: none"> <li>• primigravida’s must also be 100% effaced</li> <li>• the active phase of labour is not the onset of labour.</li> </ul>
<b>Augmentation of labour</b>	The process of stimulating the uterus (oxytocin infusion or ARM) to increase the frequency, duration & intensity of contractions after the onset of <b>spontaneous</b> labour
<b>Bishop score</b>	Used to determine method for IOL prior to commencement of IOL. A score of 8 or more indicates a cervix is ready to dilate, and is associated with a high chance of spontaneous labour and responsiveness to induction interventions
<b>First stage of labour</b>	Includes both the latent and active phases of labour from onset of labour to 10cm dilated or head on view. <b>Latent first stage of labour</b> - a period of time, not necessarily continuous, when there: <ul style="list-style-type: none"> <li>• are painful contractions, and</li> </ul>

	<ul style="list-style-type: none"> <li>is cervical change, including cervical effacement and dilatation up to 4cm</li> </ul> <p><b>Active first stage of labour</b>, when there:</p> <ul style="list-style-type: none"> <li>are regular painful contractions, and</li> </ul> <p>is progressive cervical dilatation from 4cm</p>
<b>Hyperstimulation</b>	Excessive uterine activity (either related tachysystole or hypertonus) with a fetal heart rate abnormality.
<b>Hypertonus</b>	Contractions either lasting more than 90 seconds or occurring with less than a 60 second rest period between.
<b>Induction</b>	The process of artificially stimulating the uterus to start labour using prostaglandins, ARM or oxytocin infusion or a combination of each of those.
<b>Labour</b>	Includes both the latent and active phases of labour. Labour commences from the onset of the latent phase.
<b>Latent phase of labour</b>	From 0 – 4cm dilatation.
<b>Onset of labour</b>	From onset (time) of regular, painful contractions causing cervical effacement and/or dilation.
<b>Tachysystole</b>	Contractions occurring more frequently than 4 in 10 minutes ( <b>differs to the RANZCOG definition for frequency to ensure the minimum 60 second rest period between contractions is achievable in a 10-minute window</b> ).

## 7. Document Summary

<b>Coverage</b>	WACHS-wide
<b>Audience</b>	Clinical midwives and obstetric doctors
<b>Records Management</b>	Clinical: <a href="#">Health Record Management Policy</a>
<b>Related Legislation</b>	<a href="#">Health Services Act 2016</a> (WA)
<b>Related Mandatory Policies / Frameworks</b>	<ul style="list-style-type: none"> <li>• MP 0076/18 <a href="#">Cardiotocography (CTG) Monitoring Policy</a></li> <li>• MP 0175/22 <a href="#">Consent to Treatment Policy</a></li> <li>• <a href="#">Clinical Governance, Safety and Quality Framework</a></li> </ul>
<b>Related WACHS Policy Documents</b>	<ul style="list-style-type: none"> <li>• <a href="#">Consent to Treatment Policy</a></li> <li>• <a href="#">Credentialing requirements for Non-Specialist Obstetricians Guideline</a></li> <li>• <a href="#">Detection and Management of Fetal Growth Restriction (FGR) Policy</a></li> <li>• <a href="#">Electronic Fetal Heart Rate Monitoring Policy</a></li> <li>• <a href="#">Maternity and Neonatal Consultation and Referral Guideline for Clinical Service Levels</a></li> <li>• <a href="#">Maternal and Newborn Care Collaboration and Escalation Policy</a></li> </ul>
<b>Other Related Documents</b>	<ul style="list-style-type: none"> <li>• WNHS <a href="#">Clinical Practice Guideline for Labour and Birth: Planned Birth Timing</a></li> <li>• WNHS <a href="#">Clinical Practice Guideline for Induction of Labour: Methods</a></li> <li>• WNHS <a href="#">Clinical Practice Guideline for Rupture of Membranes – Spontaneous</a></li> <li>• WNHS <a href="#">Clinical Practice Guideline Prolonged pregnancy: Care beyond 40 weeks gestation</a></li> </ul>
<b>Related Forms</b>	<ul style="list-style-type: none"> <li>• <a href="#">MR8B.2 WACHS Discussion and Partnership Care Plan: Declining Recommended Maternity Care</a></li> <li>• <a href="#">MR30A WACHS Patient consent to treatment or investigation - Adult or Mature Minor</a></li> <li>• <a href="#">MR70A WACHS Antenatal Inpatient Care Plan</a></li> <li>• <a href="#">MR71 WACHS Labour and Birth Summary</a></li> <li>• <a href="#">MR72 WACHS Partogram</a></li> </ul>
<b>Related Training</b>	Nil
<b>Aboriginal Health Impact Statement Declaration (ISD)</b>	ISD Record ID: 3259
<b><a href="#">National Safety and Quality Health Service (NSQHS) Standards</a></b>	1.01b, 101c, 1.07a, 1.27a, 2.04, 2.07, 2.10, 4.13, 5.05, 5.06, 5.11, 6.01, 6.03, and 6.11
<b><a href="#">Aged Care Quality Standards</a></b>	Nil
<b><a href="#">Chief Psychiatrist's Standards for Clinical Care</a></b>	Nil
<b>Other Standards</b>	Nil

## 8. Document Control

Version	Published date	Current from	Summary of changes
3.00	10 September 2024	10 September 2024	<ul style="list-style-type: none"> <li>WACHS policy aligned with updated WNHS clinical practice guidelines</li> <li>Changes made to accommodate existing WACHS specific additions to WNHS clinical practice guidelines, policy text, oxytocin regime change, clinical indications for IOL and absolute/relative contraindications added</li> <li>references and Appendices updated</li> </ul>
3.01	16 September 2024	16 September 2024	<ul style="list-style-type: none"> <li>added link to Related Mandatory Policies</li> </ul>

## 9. Approval

<b>Policy Owner</b>	Executive Director Nursing and Midwifery Services
<b>Co-approver</b>	Executive Director Clinical Excellence
<b>Contact</b>	WACHS Coordinator of Midwifery
<b>Business Unit</b>	Nursing and Midwifery
<b>EDRMS #</b>	ED-CO-14-24719
<p><i>Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.</i></p>	

**This document can be made available in alternative formats on request.**



## Appendix A: Accepted Clinical Indications for Induction of Labour

Reference: Table adapted from “Promoting safe timing of birth through prevention or delay of iatrogenic preterm and early term birth” - Australian Preterm Birth Prevention Alliance (Dec, 2022)

Indication	Recommended Gestation
<b>Pre-existing Diabetes</b>	
Well controlled	From 38+0 wks
Complicated (unstable BSL's, FGR / macrosomia, maternal co-morbidity)	From 37+0 wks
<b>Gestational Diabetes</b>	
Diet, well controlled with adequate monitoring	Usual maternity care
Insulin / OHA, well controlled with adequate monitoring	From 39+0 wks
Insulin / OHA with suboptimal BSL control, or any other complications (FGR / macrosomia, maternal co-morbidity)	Individualised, aim for 38+0 wks
<b>Fetal Growth Restriction (AC or EFW &lt;10<sup>th</sup> centile)</b>	
Normal UA, PI, MCA PI Dopplers & DVP	From 38+0 wks (with close surveillance)
Raised UA PI >95 <sup>th</sup> centile (positive EDF)	From 37+0 wks (with close surveillance)
Any other Doppler / growth concerns eg: static growth, isolated MCA, oligohydramnios	Input from Obstetric Consultant
<b>Hypertensive Disease</b>	
Gestational HTN / pre-existing (well controlled, no signs of PET, normal growth, no renal involvement)	From 39+0 wks
PET diagnosed ≥38 wks	Deliver
PET diagnosed <38 wks	Input from Obstetric Consultant
<b>Obstetric Cholestasis</b>	
BA >100	From 37+0 wks (very close surveillance from 34 wks)
BA 40-100	From 38+0 wks
<b>Alloimmunisation</b>	
Titres <1 : 32 (except Kell)	Require Maternal Fetal Medicine Specialist input
Titre 1:32 or greater OR Kell	
<b>Disorders of Placental Site Adherence</b>	
Major Placenta Praevia (covering os), asymptomatic	From 37+0 wks (consider steroids)
Accreta, asymptomatic	Tertiary level care by 34+0 wks
Vasa Praevia, asymptomatic	Tertiary level care by 34+0 wks
<b>Preterm, Premature, Prolonged ROM</b>	
No evidence of Chorioamnionitis	From 37+0 wks
Signs of Chorioamnionitis – maternal or fetal	Deliver
<b>Advanced Maternal Age</b>	
>40 yrs	From 39+0 wks

## Appendix B: Information for Consumers – Cervical Balloon Catheter

**\* Please read all the information on this form \***

Please return to the maternity ward at \_\_\_\_\_ o'clock tomorrow morning

Call your midwife or hospital on \_\_\_\_\_ when:

- You or your partner are worried about anything at all
- Baby is not moving normally for you
- There is any bleeding or green vaginal discharge
- You think your waters may have broken
- You have smelly vaginal discharge
- You are feeling hot or you have a temperature of more than 37.4 °C
- Increasing or continuous abdominal pain
- You have difficulty doing a wee
- You feel unwell
- You have had regular tightening's or contractions for at least an hour

### What is it and what does it do?

This catheter is a thin tube placed inside your vagina and through your cervix into the uterus and a small balloon on the end is then filled with water.

The catheter stays in place and the outside part of the tube may be taped to your leg.

The balloon catheter is used to soften and put pressure on your cervix.

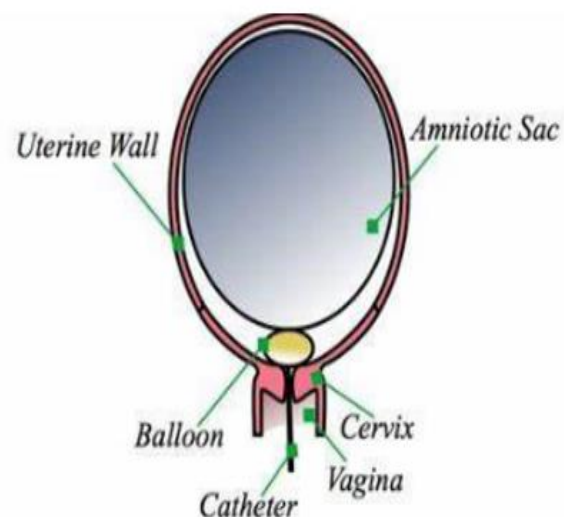
This helps to open it, getting it ready for your labour.

The catheter will be removed the following day unless it falls out by itself.

Your midwife will then talk to you about the next steps.

### What to expect and instructions for home

- You can move around normally while it's in place
- From the time the catheter is put in to when it is removed or falls out you may feel uncomfortable
- Irregular tightening's / contractions may start
- Small brownish/red vaginal discharge or a mucous show on your pad or when wiping
- You can shower as normal
- It is not advisable to have penetrative sex
- If the catheter falls out, return to hospital in the morning as planned
- If your waters break, contact your midwife or hospital



Modified from: The Royal Women's Hospital (2021) Balloon Catheter: Preparing for your Induction.  
<https://www.thewomens.org.au/health-information/fact-sheets#b>



WACHS version: July 2024