Intrapartum Care – Physiological Labour and Birth

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1. Purpose of guideline

The purpose of this guideline is to promote consistent evidence-based labour and birth care with women whose pregnancies are considered low risk by:

- Acknowledging:
  - That outcomes for low-risk women depend on where they birth and who provides their care (Birthplace in England Collaborative Group, 2011; Bailey, 2017; Grigg et al, 2017)
  - The importance of promoting and facilitating labour and birth as normal physiological events.
- Providing evidence-based labour and birth care guidelines that support staff and Lead Maternity Care (LMC) access holders to:
  - Promote and facilitate physiological birth
  - Only interfere with the physiological process if clinically or medically indicated and for a valid reason
  - Appropriately recognise deviation from the normal physiological process of labour and birth and refer as required (MOH, 2012).

2. Definitions

Physiological labour and birth includes the following (NZCOM, 2006; ACNM, 2013):

- Singleton pregnancy
- Vertex presentation
- Between 37 and 42 completed weeks gestation
- Spontaneous in onset and progression
- Preceded by a healthy pregnancy that is considered low risk in relation to both maternal and fetal condition
- Intact membranes or spontaneous rupture of membranes
- Supported by non-pharmacological measures to increase comfort, e.g. whānau/family support, water immersion, massage, meditation, karakia or prayer, music, heat, TENS, mobilisation, positioning, adequate hydration, continuity of competent practitioner
- If required, supported by low level forms of pharmacological measures to decrease labour pain, including paracetamol and nitrous oxide (Entonox®)
- Free of surgical or medical intervention, e.g. artificial rupture of membranes and oxytocin augmentation
- Free from complication throughout labour and birth
- Spontaneous vaginal birth of the infant and placenta
- Early skin-to-skin contact between the mother and infant
- Mother and infant who are in good condition following birth.
3. **Best practice recommendations for physiological labour and birth care**

The following have been shown to be effective and useful in supporting physiological labour and birth and should be encouraged (WHO Technical Working Group, 1997):

- A birth plan
- Risk assessment antenatally and throughout labour
- Respecting the woman’s informed choice and consent
- Respecting the right of women to privacy in the birthing place
- Empathetic support by caregivers during labour and birth
- Respecting the woman’s choice of companions during labour and birth
- Giving women as much information and explanation as they desire
- Non-invasive, non-pharmacological methods of pain relief during labour, such as massage and relaxation techniques
- Fetal monitoring with intermittent auscultation
- Freedom in position and movement throughout labour
- Encouragement of non-supine positions in labour
- Early skin to skin contact between mother and infant

3.1 **Latent first stage of labour of a physiological birth**

- Characterised by painful uterine contractions and variable changes of the cervix, including some degree of effacement and slower progression of dilatation **up to 5 cm** for first and subsequent labours (WHO, 2018).

3.2 **Active first stage of labour of a physiological birth**

- Characterised by regular painful uterine contractions, a substantial degree of cervical effacement and more rapid cervical dilatation **from 5 cm** until full dilatation for first and subsequent labours (WHO, 2018).

3.3 **Cervical dilatation threshold and normal labour progression**

- For pregnant women with spontaneous labour onset, the cervical dilatation rate threshold of 1 cm per hour during active first stage is inaccurate to identify women at risk of adverse birth outcomes and is therefore not recommended for this purpose.
- A minimum cervical dilatation rate of 1 cm per hour throughout active first stage is unrealistically fast for some women and is therefore not recommended for identification of normal labour progression.
- **A slower than 1 cm per hour cervical dilatation rate alone should not be a routine indication for obstetric intervention.**
- Labour may not naturally accelerate until a cervical dilatation threshold of **5 cm** is reached. Therefore, **the use of medical interventions to accelerate labour and birth (such as oxytocin augmentation or caesarean section) before this threshold is not recommended, provided fetal and maternal conditions are reassuring** (WHO, 2018).

There is evidence that the following practices should **only** be used where there is a clinical indication:

- Intravenous fluid infusion
- Insertion of intravenous cannula
• Use of supine position or stirrups during labour or birth
• Sustained, directed bearing down efforts (Valsalva manoeuvre) during second stage of labour
• Massaging and stretching the perineum during second stage
• Admission and/or continuous electronic fetal monitoring
• Bladder catheterisation
• Episiotomy
• Augmentation of labour
• Nasal or oral suctioning of the infant at birth

Practices for which there is insufficient evidence to support use:
• Routine amniotomy
• Manoeuvres related to protecting the perineum
• Active manipulation of the fetus at the moment of birth
• Restriction on food and fluid during labour unless medically indicated

4. Practice actions

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<tr>
<td><strong>Birth plan and labour management plan</strong></td>
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<tr>
<td>• Review the woman’s choices regarding her labour and birth and any advice given, and document accordingly.</td>
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<tr>
<td>• Midwife or LMC is to review and document a management plan for labour and birth on the CR3895 National Women’s Partogram and update the plan throughout labour.</td>
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<tr>
<td>• Ongoing informed choice and consent throughout labour is required (see Informed Consent policy).</td>
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<tr>
<td><strong>Admission</strong></td>
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<td>Document admission details in the clinical notes. Include:</td>
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<td>• Source and reason for admission.</td>
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<tr>
<td>• Relevant previous obstetric, gynaecology, medical, family or social history. Confirm that the woman is low risk.</td>
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<tr>
<td>• History of contractions, show, rupture of membranes, any other vaginal loss and fetal movements.</td>
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<tr>
<td>• Abdominal palpation findings.</td>
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<tr>
<td>• Date, time, signature, designation and printed name of clinician.</td>
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<tr>
<td>• Commence CR3732 Labour and Birth Summary and CR3731 NWH Newborn Record.</td>
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<td>Thereafter, continue to document progress and ongoing care.</td>
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<td><strong>Observations</strong></td>
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<tr>
<td>Record and document observations contemporaneously on CR3895 National Women’s Partogram once labour is established. This should be dated, legibly documented with names printed and signed by caregivers and include the woman’s name and NHI number, EDD, gravida and parity.</td>
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**Fetal**
Intermittent auscultation of the fetal heart rate is an appropriate method of intrapartum fetal monitoring in women experiencing
Actions

physiological labour and birth. Please see recommendation 4, 5 and 6 of the RANZCOG 2014 Clinical Guideline. These guidelines state:

- Auscultation in labour should be undertaken and documented every 15-30 minutes in the active phase of the first stage of labour and after each contraction or at least every five minutes in the active second stage of labour.
- Each auscultation episode should commence toward the end of a contraction and be continued for at least 30-60 seconds after the contraction has finished.
- Continuous CTG monitoring is recommended when risk factors for fetal compromise have been detected antenatally, are detected at the onset of labour, or develop during labour.
- The method of intermittent auscultation should be documented (refer to Fetal Surveillance policy).

Maternal

If outside normal parameters, refer as appropriate.

Temperature:
- On admission and then four-hourly
- Two-hourly if membranes ruptured
- Hourly if temperature greater than 37.4°C

Pulse:
- On admission and then hourly

Blood pressure:
- On admission and then four-hourly (between contractions)

Urine output:
- Document micturition on CR3895 National Women’s Partogram (see Bladder Care Postpartum and Urinary Retention Management guideline).

Liquor

- Artificial rupture of membranes is not routine practice and should only be considered after a diagnosis of delay in first stage or second stage of labour once labour is established.
- Document date and time of rupture of membranes, method of rupture and colour of liquor, noting amount and odour (only if offensive). Clearly document rationale for ARM.
- Continue to document evidence of amount, colour and consistency of liquor, and indication for artificial rupture of membranes if required.

Contractions

- Assess and record strength, length and frequency of contractions on a regular basis throughout the labour.
- Follow guide as described on partogram to record contractions.
### Actions

#### Progress in labour
- Descent of presenting part:
  - Abdominally palpate and document descent of presenting part before vaginal examinations (VE).
- Cervical dilatation:
  - Once membranes have ruptured, VE should be minimised to avoid infection.
  - Where possible the same practitioner should perform the VE at each assessment for consistency.
  - The practitioner who performs the VE is to document as many details as possible of the VE findings on the back page of the partogram in the area prescribed.
  - Plot cervical dilatation and descent of presenting part on the partogram. **Do not commence partogram until labour is established** (see Section 7: First stage).
  - Discuss reasons for considering vaginal examination four-hourly or as clinically indicated.

#### Analgesia/medications/oother management
- Document all medications including Entonox® administered on CR3895 National Women’s Partogram.
- Document any other complementary therapies and non-pharmacological measures and their effectiveness or side effects in the clinical notes (if any).
- Food should not be restricted and fluids should be encouraged in normal labour.

#### Environmental safety
- The labour and birthing environment should be optimal for supporting oxytocin release.
- Caregivers should remain mindful of the safety and preparedness of the birthing environment.
- All maternal and neonatal emergency equipment should be checked to be present and in good working order.
- The room should be adequately warmed in anticipation of birth and clinical supplies should remain adequately stocked.
5. Initial assessment

Pregnant woman presents with signs of labour at term

**Initial Assessment**

**Indication for assessment**
- Contractions
- Vaginal loss / SROM
- Other - i.e. pain

**History**
- Verbal account
- Fetal movements
- Social / Cultural
- Concerto
- HealthWare
  - Obstetric / Gynaecological
  - Medical
  - Surgical
  - Family
  - Risk sheet
  - Alerts – allergies, MMH
  - Research trials
- Discuss birth plan

**Observations**
- Maternal vital signs – BP, P, T, RR, SaO2
- Nutritional and hydration status
- General impression / demeanour

**Abdominal assessment**
- Palpation: fundal height (plot on CGC), lie, presentation, position and descent
- Uterine activity: frequency, duration, strength and resting tone
- FHR: auscultation with Doppler or Pinards and response to contractions refer to Fetal Surveillance Policy

**Vaginal loss**
- Nil, show, blood, liquor – colour and volume
- Time of SROM

**Vaginal examination / speculum**
- Only if indicated
- DO NOT VE if presenting with SROM and not in established labour

**Discomfort and pain**
- Assess response to contractions
- Reassure, promote and reinforce coping strategies
- Review birth plan, discuss options

**Documentation**
- Date, time and reason for presentation
- History and assessment
6. Latent phase

Latent Phase Antenatal Assessment

- Painful irregular contractions
- Some cervical changes including cervical effacement for nulliparous women
- Dilatation up to 5 cm

Latent Phase

If discharged / not admitted:
- Encourage to remain at home
- Reassure early labour is normal and can take time
- Discuss coping and comfort strategies for relief of discomfort:
  - Warm shower or bath
  - Massage, back rub
  - TENS
  - Encourage hydration & nutrition
  - If tired – rest / sleep
  - Oral analgesia
- Discuss mobilisation may establish contractions
- Provide information on:
  - Support available
  - When to phone the hospital for advice
  - Symptoms of concern

Documentation
- Antenatal assessment
  - Clinical notes
  - HealthWare
  - Communication, advice and care plan

Risk Factors Identified?

Discuss / Consult / Handover
Discuss with CCM / Obstetric Registrar according to professional guidelines

Prolonged Latent Phase

Consultation on management
- Three-way conversation between the woman, LMC and obstetric team to consider awaiting established labour, pain management if needed, admission to ward, or IOL

Documentation
- Assessment
- Clinical notes
- Communication, advice and care plan
7. First stage

First Stage
Established Labour
Antenatal Assessment

- Regular painful contractions
- Nulliparous woman: fully effaced
- Progressive cervical dilatation ≥ 5 cm

No

Latent Phase
Refer to: Intrapartum Care - Latent Phase

Yes

Established First Stage

Midwifery care
All women require midwifery support and woman-centred care which includes:
- Review birth plan / risk factors
- Environment
- Mobilisation and positioning
- Non-pharmacological comfort strategies – see Water for Labour and Birth Guideline

Ongoing assessment
Maternal wellbeing
- Pulse: hourly
- Temperature and BP: 4-hourly or more frequently if clinically indicated
- Vaginal loss: hourly
- Contractions: hourly for 10 minutes, record length, strength, frequency and maternal response
- Abdominal palpation: 4-hourly - progress and descent of presenting part and/or prior to VE
- VE: 4-hourly or more frequently if clinically indicated
- Bladder care: monitor and encourage regular urination
- Nutrition and hydration: encourage fluids and offer food as desired
- Response to labour: consider coping strategies

Fetal wellbeing
- FHR: intermittent auscultation - see Fetal Surveillance Policy

Documentation
- Commence partogram
- Clinical Notes: assessment, care, maternal and fetal wellbeing, communication, advice and ongoing care plan

Risk Factors Identified?

Yes

Discuss / Consult / Handover
Discuss with CCM / Obstetric Registrar according to professional guidelines

No

Second stage
Refer to: Intrapartum Care - Second Stage

- Continue as per Established First Stage
- Anticipate spontaneous vaginal birth
- Identify onset of second stage

Diagnosis of Prolonged, Established First Stage

- Cervical dilatation of < 2 cm in 4 hours for nullipara and primipara
- Slowing in the progress of labour for second and subsequent labours
- Progress should include descent and rotation of presenting part
8. Second stage

**Second Stage of Labour**

Full Dilatation of Cervix to Birth of Baby

### Active Second Stage

**Onset**
- Involuntary expulsive contractions
- In the absence of expulsive contractions – an active maternal effort to push

**Midwifery care**
- Continuous one-to-one midwifery care observing maternal and fetal wellbeing
- Encourage active and comfortable maternal positions - see *Water for Labour and Birth Guideline*
- Emotional support and reassurance

**Assessment**
- Maternal and fetal wellbeing
  - Continue maternal observations
  - Contractions: continuous assessment of length, strength and frequency
  - FHR: after every contraction as per *Fetal Surveillance Policy*
  - VE: if indicated to assess position and descent of presenting part. If OP refer at the start of second stage for consideration of manual rotation of fetal occiput
- Hydration: encourage oral fluids
- Bladder: monitor and encourage voiding

**Documentation**
- Date and time active second stage commenced
- Maternal vital signs
- Progress, descent and position of presenting part
- Second stage sticker
- Time of birth
- Communication, advice, care plan. **Call 2nd midwife to be present for birth**

### Passive Second Stage

**Onset**
- Absence of involuntary, expulsive contractions

**Assessment and care**
- FHR: 15 minutes, differentiate from maternal pulse
- Other assessment and care as per active second stage

**Documentation**
- Date and time passive second stage commenced
- Assessment
- Communication and care plan

**Diagnosis of Prolonged Active Second Stage**
- Nulliparous woman: after 2 hours or when total length of Second Stage exceeds 3 hours
- Multiparous women: after 1 hour

**Discuss / Consult**
- Discuss with CCM / Obstetric Registrar
- Commence CTG

**Third stage**
- Refer to: Intrapartum Care - **Third Stage**
9. Third stage

Third Stage of Labour

The time from birth of the baby to the birth of the placenta and membranes

Newborn assessment and care
Refer to: Intrapartum Care Postnatal

Third Stage

- **Continuous one-to-one midwifery care**
- Support of second midwife
- Support woman’s informed choice / birth plan however consider current risk factors
- Monitor blood loss and ensure timely actions are taken in the presence of PPH
- Uninterrupted skin-to-skin contact within 5 minutes of birth for at least 1 hour (unless contra-indicated)
- Take cord bloods when indicated
  - Rhesus Negative *See Anti-D Postnatal Guideline
  - Lactates / Cord Gases *See Fetal Surveillance Policy

Physiological

- Birth of placenta by maternal effort and gravity
- No routine use of uterotonics
- No fundal massage or controlled cord traction
- Clamp cord only after pulsation ends or placenta is delivered

Following birth of placenta

- Check if placenta and membranes are complete
- Assess PV loss / lochia
- Assess fundal height and uterine tone: massage only if bleeding

Documentation

- Date and time of placenta delivery
- Estimated / weighed blood loss
- Medication Chart: uterotonics prescribed and signed

Prolonged Third Stage

- Physiological third stage considered prolonged after 60 minutes
- Active third stage considered prolonged after 30 minutes
- Actions: breastfeed, empty bladder / consider IDC, IV cannulation, uterotonic as treatment

Active

- Second midwife draws up uterotonic and administers it following birth of anterior shoulder of the baby
- Delay cord clamping for 1 - 3 minutes following birth
- Wait for signs of separation
- Assess uterine tone but no fundal massage
- Controlled cord traction while guarding the uterus
- Uterine massage - if required after delivery of the placenta

Uterotonics:

1st line: oxytocin (Syntocinon®) 10 units IM
2nd line: oxytocin + ergometrine (Syntometrine®)
1 mL IM if no contraindications
* see Postpartum Haemorrhage (PPH) Prevention and Management Guideline

Discuss / Consult
Discuss with CCM / Obstetric Registrar
10. Immediate postnatal period

**Immediate Postnatal Period (1-2 Hours After Birth of Placenta)**

- Ensure mother and baby are closely observed by a midwife for a minimum of one hour, preferably two hours after birth
- Ideally two midwives should be in the room (one attending the mother and one observing the baby) until the primary midwife is able to observe the baby and provide immediate care
- Uninterrupted skin-to-skin contact within 5 minutes of birth for at least 1 hour (unless contra-indicated)
- Initiate breastfeeding/support the parent’s choice for feeding

**Newborn**

**Initial assessment and care by second midwife**
- Evaluate condition of baby
- Apgar scores at 1 and 5 minutes
- Resuscitation and paediatric review if any concerns

**Ongoing assessment and care**
- Ongoing assessment of airway integrity, colour, tone, respiration rate and temperature

**Following skin-to-skin and first feed**
- Newborn examination including customised birth weight centile
- ID labels x 2 - checked by parents
- Follow up cord blood results if taken
- Formulate on-going care plan in consultation with parents, including the administration of Vitamin K

**Documentation**
- CR3009 Newborn’s Clinical Notes
- CR3731 Newborn Record
- CR5636 Rooming-in Record
- CR9149 Pulse Oximetry Screening Record

**Maternal**

**Ongoing assessment and care by first midwife**
- Assess perineum and vagina; suture if indicated
- See Perineal Tears 3rd and 4th Degree Guideline
- Assess blood loss and on-going lochia
- Assess uterine tone and fundal height
- Maternal vital signs - BP, P, T, RR, SaO2
- Pain relief as indicated
- Bladder care
- If Rhesus negative - Kleihauer within first hour after birth
- When clinically stable, mobilise and assist with comfort cares, including shower if desired
- Formulate on-going care plan, including information for woman and family and handover of postnatal care

**Documentation**
- CR3009 Woman’s Clinical Notes
- Day Stay Medication Chart / 8 Day Medication Chart
  - Analgesia prescribed & administered
- CRS5825 MEWS commenced (If staying as an inpatient or abnormal observations)
- Complete:
  - CR3895 Partogram
  - CR3732 Labour & Birth Summary
  - CR2547 Body Parts / Tissue Release
  - CR4097 Perineal Injury Repair Record
  - Healthware

**Discharge**
- Arrange discharge home or to other primary postnatal facility
- See Discharge <12 hours Postpartum Guideline

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**Discuss / Consult**
- CCM/Obstetric/Neonatal Registrar

**Inpatient Postnatal Care**

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11. Supporting evidence


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If printed, this document is only valid for the day of printing.


### 12. Associated documents

- Anti-D Administration
- Bladder Care Postpartum and Management of Urinary Retention
- Cord Blood Haematology
- Count Policy for Surgical Procedures
- Discharge < 12 Hours Postpartum
- Fetal Surveillance Policy
- Group & Screen Requirements in Maternity
- Group B Streptococcus (GBS) - Prevention of Early-Onset Neonatal Infection
- Identification of Patients (including Newborns)
- Informed Consent
- Starship Child Health Clinical Guideline: Immunisation – Hepatitis B Vaccination
- Starship Child Health Clinical Guideline: Vitamin K deficiency bleeding and prophylaxis in the newborn
- Perineal Tears - Third and Fourth Degree (OASIS)
- Postpartum Haemorrhage (PPH) Prevention and Management
- Retained Placenta Management

### Clinical forms

- CR0452 Fluid Balance Record
- CR2547 Body Parts/Tissue Release
13. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this Auckland DHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.

14. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed before the scheduled date, they should contact the owner or Document Control without delay.

- CR3009 Clinical Notes Form
- CR3731 NWH Newborn Record
- CR3732 Labour and Birth Summary
- CR3895 National Women’s Partogram
- CR4039 Epidural/Spinal Insertion Record
- CR4097 Perineal Injury Repair Record
- CR5636 Rooming In Record
- CR5782 Adult Observations Chart