Newborn baby assessment (routine)
Cultural acknowledgement

We acknowledge the Traditional Custodians of the land on which we work and pay our respect to the Aboriginal and Torres Strait Islander Elders past, present and emerging.

Disclaimer

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The guideline is not a substitute for clinical judgement, knowledge and expertise, or medical advice. Variation from the guideline, taking into account individual circumstances, may be appropriate.

This guideline does not address all elements of standard practice and accepts that individual clinicians are responsible for:

- Providing care within the context of locally available resources, expertise, and scope of practice
- Supporting consumer rights and informed decision making, including the right to decline intervention or ongoing management
- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary
- Ensuring informed consent is obtained prior to delivering care
- Meeting all legislative requirements and professional standards
- Applying standard precautions, and additional precautions as necessary, when delivering care
- Documenting all care in accordance with mandatory and local requirements

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# Flow Chart: Routine newborn baby assessment

## Preparation
- **Family centred care**
  - Consider cultural needs
  - Discuss with parents: purpose, process, timing and limitations of assessments
  - Ask about parental concerns
  - Encourage participation
- **Timing**
  - Initial exam immediately after birth
  - Follow-up 5–7 days and 6 weeks
  - If unwell/premature–stage as clinically indicated
- **Review history**
  - Maternal medical/obstetric/social and family
  - Current pregnancy
  - Labour and birth
  - Sex, gestational age, Apgar scores and resuscitation
  - Since birth–medications, observations, feeding
- **Environment–consider:**
  - Warmth, lighting
  - Correct identification
  - Infection control precautions
  - Privacy
- **Equipment–prepare:**
  - Overhead warmer if required
  - Stethoscope
  - Ophthalmoscope
  - Tongue depressor & glove
  - Pencil torch
  - Tape measure, infant scales, growth charts
  - Pulse oximeter
  - Documentation
    - Infant Personal Health Record
    - Medical record
    - Neonatal clinical pathway

## Assessment

### General appearance
- Skin colour, integrity, perfusion
- State of alertness
- Activity, range of spontaneous movement
- Posture, muscle tone

### Growth status
- Chart head circumference, length, weight on centile charts

### Head, face, neck
- Head shape, size
- Scalp, fontanelles, sutures
- Eye size, position, structure
- Nose, position, structure
- Ear position, structure
- Mouth, palate, teeth, gums
- Tongue, frenulum
- Jaw size

### Shoulders, arms, hands
- Length, proportions, symmetry
- Structure, number of digits

### Chest
- Size, shape, symmetry, movement
- Breast tissue, nipples
- Heart sounds, rate, pulses
- Breath sounds, resp rate
- Pulse oximetry

### Abdomen
- Male–penis, foreskin, testes
- Female–clitoris, labia, hymen
- Anus position, patency
- Passage of urine and stool
- Umbilicus

### Genitourinary
- Ortolani and Barlow’s manoeuvres
- Leg length, proportions, symmetry and digits

### Hips, legs, feet
- Spinal column, skin
- Symmetry of scapulae, buttocks

### Back
- Behaviour, posture
- Muscle tone, spontaneous movements
- Cry
- Reflexes–Moro, suck, grasp

### Neurological
- Discuss findings with parents
- Document in health record(s)
- Refer as indicated

## Further investigation

### Urgent
- Growth and appearance
  - Dystrophic features
  - Excessive weight loss
  - Jaundice < 24 hours of age
  - Central cyanosis
  - Petechiae new/unrelated to birth
  - Pallor, haemangioma
- Head and neck
  - Enlarged/bulging/sunken fontanelle
  - Macro/microcephaly
  - Subgaleal haemorrhage
  - Caput, cephalhaematoma
  - Fused sutures
  - Facial palsy/asymmetry on crying
  - Hazy, dull cornea; congenital cataract
  - Absent red eye reflex
  - Pupils unequal/dilated/constricted
  - Purulent conjunctivitis/yellow sclera
- Nasal obstruction
  - Dacryocyst; cleft lip/palate
  - Unresponsive to noise
  - Absent ear canal or microtia
  - Ear drainage
  - Small receding chin/micrognathia
  - Neck masses, swelling, webbing
  - Swelling over or fractured clavicle
- Upper limbs
  - Limb hypotonia, contractures, palsy
  - Palmar crease pattern
- Chest
  - Respiratory distress
  - Apnoeic episodes
  - Abnormal HR, rhythm, regularity
  - Heart murmurs
  - Weak or absent pulses
  - Positive pulse oximetry
- Abdomen
  - Organomegaly
  - Gastrochisis/exomphalos
  - Bilateral undescended testes
  - Bilious vomiting
  - Inguinal hernia
  - Signs of umbilical infection
- Genitourinary
  - No urine/meconium in 24 hours
  - Ambiguous genitalia
  - Testicular torsion
  - Hypospadias, penile chordee
  - Micro/retro testes
  - Hypospadias, penile chordee
- Hips, legs and feet
  - Risk factors for hip dysplasia
  - Positive/abnormal Barlow’s and/or Ortolani manoeuvres
  - Contractures/hypotonia
  - Talipes
  - Developmental hip dysplasia
- Back
  - Curvature of spine
  - Non-intact spine
  - Tufts of hair/dimple along intact spine
- Neurological
  - Weak/irritable/absent cry
  - Absent/exaggerated reflexes
  - No response to consoling
  - Seizures
  - Altered state of consciousness

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**Urgent follow-up:** GP: general practitioner; HR: heart rate, NBST: newborn screening test, SUDI: sudden unexpected death in infancy, <: less than

Flowchart: F21.4-1-V6-R26

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Flow Chart: Management of newborn baby during pulse oximetry screening for CCHD

- **Baby ≥ 24 hours of age?**
  - No
  - **Pulse oximetry screen for CCHD**
    - **Abnormal (borderline)**
      - Review by MO or NNP
      - Repeat screen in one hour
    - **Normal (negative)**
      - Discharge as usual
    - **Repeat screen normal?**
      - Yes
        - **Respiratory distress:**
          - Tachypnoea > 60/min
          - Grunting
          - Chest recession
        - **Cardiac signs:**
          - Bradycardia < 60 bpm
          - Tachycardia > 160 bpm
          - Poor femoral pulses
          - Cardiac murmur
      - No
        - **Abnormal (positive)**
          - Requires urgent medical review
          - Admit to neonatal unit
          - Commence close clinical surveillance–SpO₂ and cardio-respiratory monitoring
          - Investigate for sepsis
            - Refer to QCG EOGBS guideline
          - Investigate for CCHD
          - Consider investigations for other respiratory/vascular problems
          - Contact RSQ as required
          - **Repeat screen normal?**
            - Yes
              - Admission to neonatal unit
                - Consider investigations for sepsis, other respiratory/vascular problems
                - If respiratory distress or cardiac signs
                  - SpO₂ and cardio-respiratory monitoring
                - Consider CXR, 4 limb BP, echocardiography
                - Delay discharge
                - If baby is well, repeat screen in 3–4 hours
                - Contact RSQ as required
            - No
              - Manage as abnormal (positive) screen

**CCHD:** critical congenital heart disease; **BP:** blood pressure; **bpm:** beats per minute; **CXR:** chest X-ray; **EOGBS:** early onset Group B Streptococcus; **GP:** general practitioner; **HR:** heart rate, **min:** minute; **MO:** medical officer; **NNP:** neonatal nurse practitioner; **QCG:** Queensland Clinical Guidelines, **RSQ:** Retrieval Services Queensland, **SpO₂:** oxygen saturation, **>:** greater than; **≥:** greater than or equal to; **<:** less than; **≤:** less than or equal to

Flowchart: F21.4-2-V1-R26
Flow Chart: Pulse oximetry screening of newborn baby for critical congenital heart disease

Between 24–36 hours of age measure oxygen saturation in foot or RH OR RH and either foot

**ABNORMAL**

- ≤ 90% foot or RH?
  - Yes
  - Consider differential diagnosis
  - Repeat screen in 1 hour
  - No

**BORDERLINE**

- 90–94% foot or RH OR > 3% difference between RH and foot?
  - Yes
  - Consider differential diagnosis
  - Repeat screen in 1 hour
  - No

**NORMAL**

- ≥ 95% foot or RH or ≥ 95% foot AND ≤ 3% difference between RH and foot?
  - Yes
  - No

**POSITIVE screen**

- Urgent medical review
  - Yes
  - No

**NEGATIVE screen**

- Continue normal care
  - Yes
  - No

RH: right hand, >: greater than; ≥: greater than or equal to; <: less than; ≤: less than or equal to
Flow Chart: Newborn bloodspot screening test

At birth:
- Complete screening card
  - Identification of baby
  - Identification of mother
  - Baby’s UR number
  - Birth weight
  - Gestation

Timing:
- Collect sample at 48–72 hours of age
- If discharged from hospital before 48 hours of age:
  - Discuss option for collection (e.g. by home visiting midwife, child health nurse)

Feeding—note on card:
- Type, date and time of first milk feed
- If not feeding (NBM)
- If baby fed within last half hour

Sampling technique:
- Collect from most medial or lateral aspect on plantar surface of heel
- Pain management
  - Breastfeed/EBM during or immediately prior
  - Skin to skin with mother
  - Face to face contact
  - Non-nutritive sucking
  - Administer sucrose 24% orally [refer to QCG: NeoMedQ Sucrose]

Completion:
- Add relevant clinical information
- Complete baby’s personal health record (red book)
- Follow local procedures for dispatching screening card to laboratory

Repeat screening indicated?

Yes

Repeat screening:
- Repeat screen at appropriate time
- Note reason for repeat on screening card
  - If 10% glucose note time and date ceased

No

Indication  Time of repeat
- Poor sample
  - Incomplete/poorly applied  As soon as possible
- Baby received 10% glucose infusion > 6 hours  48–72 hours after ceasing infusion
- Perinatal steroids (multiple doses)  7 days of age
- Baby < 1500 g BW
  - Monochorionic multiple birth (e.g. same sex twin)  14 days of age
- Blood transfusion in 1st 48–72 hours
  - Collect sample prior  48 hours after transfusion and 14 days later
- TPN  24 hours after starting/resuming milk feeds
- Baby < 1000 g BW  28 days of age (third sample/second repeat)

BW: birth weight; QCG: Queensland Clinical Guidelines; TPN: total parenteral nutrition; UR: unit record; <: less than; >: greater than; ≥: greater than or equal to
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCHD</td>
<td>Critical congenital heart disease</td>
</tr>
<tr>
<td>GP</td>
<td>General practitioner</td>
</tr>
<tr>
<td>NBST</td>
<td>Newborn bloodspot screening test</td>
</tr>
<tr>
<td>NEWT</td>
<td>Newborn early warning tool</td>
</tr>
<tr>
<td>SpO₂</td>
<td>Peripheral oxygen saturation</td>
</tr>
<tr>
<td>SUDI</td>
<td>Sudden and unexpected death in infancy</td>
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</table>

### Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family centred care</td>
<td>Is an approach to the planning, delivery and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients and families; and incorporates the core concepts of respect and dignity, information and sharing, participation and collaboration.¹,²</td>
</tr>
<tr>
<td>Newborn baby</td>
<td>A recently born infant in the first minutes to hours following birth.³</td>
</tr>
<tr>
<td>Neonatal unit</td>
<td>In this document ‘neonatal unit’ may be interpreted to mean neonatal observation or stabilisation area, unit or equivalent as per local terminology.</td>
</tr>
<tr>
<td>Newborn baby assessment</td>
<td>In this document ‘newborn baby assessment’ is a broad term referring to the assessment of the newborn occurring at various points in time within the first 6–8 weeks after birth. It includes the brief initial assessment, the full and detailed newborn assessment within 48 hours of birth and the follow-up assessments at 5–7 days and 6 weeks of age.</td>
</tr>
<tr>
<td>Urgent follow-up</td>
<td>Immediate and/or life-threatening health concern for the newborn requires urgent (same day) follow-up.</td>
</tr>
<tr>
<td>Positive screen</td>
<td>Means the screening test has detected an increased likelihood of having disease, anomaly or condition.</td>
</tr>
</tbody>
</table>
1 Introduction

Every newborn baby requires a brief physical examination within the first few minutes after birth, and then a full and detailed assessment within the next 48 hours and prior to discharge from hospital. A follow up assessment is required after hospital discharge at five to seven days (by a general practitioner (GP) or midwife), and then at 6 weeks of age. The physical examination is the most important screen for major occult congenital anomalies.

1.1 Clinical standards

Table 1. Clinical standards

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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</thead>
</table>
| Model of care| • Adhere to the principles of family centred care when assessing the newborn baby [refer to Queensland Clinical Guideline: Standard care\(^5\)]  
• Perform the examination with at least one parent present\(^4\)  
• Provide information to parents in a complete, unbiased and timely manner to support effective participation in their baby’s care and any decision making |
| Clinician    | • Develop local protocols regarding clinicians responsible for performing the newborn baby examination\(^4\)  
• Develop local protocols for clinicians regarding:  
  o Training and skills maintenance in newborn baby assessment\(^4,6,7\)  
  o Recognising and managing variances, seeking guidance as required, and referring appropriately\(^8\) |
| Documentation| • Complete the baby's Personal Health Record ('red book')  
  o Explain the booklet's purpose to the baby's parents |
2 Initial examination and assessment after birth

Complete the initial brief assessment immediately after birth on all babies following any resuscitation (if required). (Refer to Queensland Clinical Guideline: Neonatal resuscitation.6)

Table 2. Initial examination and assessment

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| Brief initial exam              | • Assess the baby for:
|                                 | o Successful transition to extra-uterine life
|                                 | o Any obvious dysmorphic features or gross anomalies that will require immediate attention or discussion with the family
|                                 | • Confirm baby’s sex
|                                 | • Be flexible with the timing of this initial examination and assessment
|                                 | • Do not restrict skin-to-skin contact and allow the healthy baby to spend time with their parents
| Hypoxic ischaemic encephalopathy | • If the baby had a perinatal event and/or acidosis assess baby for therapeutic hypothermia criteria and management as indicated [refer to Queensland Clinical Guideline: Hypoxic-ischaemic encephalopathy9] |
| Newborn observations            | • Commence newborn vigilance observations and document on appropriate newborn early warning (NEWT) tool (dependent on service level of facility as per Clinical Services Capability Framework)10,11
|                                 | • Assess, record and (if indicated) action baby’s vital signs:
|                                 | o Every 15 minutes for two hours following birth—colour, position (for airway patency), respiration rate and any respiratory distress
|                                 | o Within 1 hour of birth—heart rate, temperature and oxygen saturation
|                                 | o Every eight (after initial 2 hours following birth)—respiratory rate, respiratory distress, temperature, heart rate, colour
|                                 | • If baby has signs of respiratory distress or has any oxygen requirement, monitor and record oxygen saturations
|                                 | • Refer to NEWT12 and Neonatal clinical pathway13 |
| Hypoglycaemia                   | • If baby has risk factor(s) for hypoglycaemia commence blood glucose monitoring [refer to Queensland Clinical Guideline: Hypoglycaemia-newborn14] |
| Sub-galeal                      | • Risk of sub-galeal haemorrhage (SGH) is increased after an instrumental birth or as clinically indicated
|                                 | • If attempted or actual instrumental birth or as clinically indicated refer to NEWT for scalp examination including:
|                                 | o Inspection and palpation of the scalp and nape of the neck
|                                 | o Head circumference measurements
|                                 | • If ballotable mass or free fluid in the scalp or nape of neck, or ear displacement—escalate care as a medical emergency
|                                 | • If asymmetrical head, caput succedaneum, cephalhaematoma, new or increased bruising or abrasion—urgent follow up |
### 3 Full and detailed newborn baby assessment

#### 3.1 Principles of assessment

**Table 3. Principles of assessment**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Purpose**                    | - Identify the baby who is acutely unwell and requires urgent treatment  
- Review any concerns the family have about the baby and attempt to address them  
- Review any problems arising or suspected from antenatal screening, family history or labour (e.g. mental health issues, substance use, child protection issues, genetic conditions)  
- Review weight, length and head circumference measurements  
- Check the baby has passed urine and meconium since birth  
- Recognise common neonatal problems and give advice to parents about management  
- Diagnose congenital malformations and arrange appropriate management  
- Discuss matters such as:  
  - Baby care and feeding  
    - Refer to Queensland Clinical Guideline: Establishing breastfeeding\(^{17}\)  
  - Vitamin K  
  - Childhood immunisation schedule including where indicated Bacille Calmette-Guerin (BCG) vaccination  
    - Refer to the National Immunisation Program Schedule\(^{18}\)  
  - Reducing the risk of sudden unexpected death in infancy (SUDI)  
  - Any other matters relevant to the newborn baby\(^4\)  
- Explain problems such as jaundice that might not be observable in the baby but may become significant a few days or weeks later  
  - Refer to Queensland Clinical Guideline Neonatal jaundice\(^{19}\)  
- Convey information about local networks, services and access to members of a primary health care team [refer to Section 5 Discharge planning]  
- Inform families how they can request and negotiate additional help, advice, and support as relevant to the circumstances  
| **Timing**                     | - The Royal Australian College of Physicians (RACP) recommends an initial full and detailed assessment is performed within the first 48 hours after birth\(^4\)  
  - If baby is discharged home within the first 8 hours after birth, complete full assessment prior to discharge even though this is not the optimal time to detect all abnormalities  
  - Advise parents that certain conditions may only become evident in the first few days after birth following discharge from hospital  
    - Provide parents with information about local health support services (e.g. Child Health Services) prior to discharge  
    - Recommend a follow-up assessment\(^4\) by general practitioner (GP) or midwife at 5–7 days of age  
    - Recommend a further assessment at around 6 weeks of age\(^{4,20}\)  
| **Unwell and/or preterm baby** | - Stage the assessment as clinically indicated  
- Recognise the impact of prematurity on the assessment findings  
- Identify the requirement for additional, condition specific assessments (e.g. ophthalmology review for retinopathy of prematurity)  

3.2 Preparation for the full and detailed newborn assessment

### History

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Clinical assessment</th>
</tr>
</thead>
</table>
| Maternal history              | - Review medical, obstetric, social and family history, including:  
  o Maternal age, social background, mental health history, Edinburgh Postnatal Depression Score (EDPS), intimate partner violence, child safety alerts  
  o Chronic maternal disease and associated treatments (e.g. vitamin D deficiency, hypothyroidism) during pregnancy  
  o Substance use including prescription and non-prescription medications, alcohol and/or tobacco  
  - Refer to Queensland Clinical Guideline: Perinatal substance use: neonatal and Perinatal substance use: maternal  
  o Previous pregnancies including complications and outcomes (e.g. neonatal jaundice, ABO incompatibility, developmental dysplasia of the hips, genetic conditions, baby Group B Streptococcus positive [refer to Queensland Clinical Guideline: Early onset group B Streptococcal disease]) |
| Current pregnancy             | - Results of pregnancy screening tests (e.g. blood group and type, serology, ultrasound scans)  
  - Chorionicity if twin pregnancy  
  - Any other diagnostic procedures (e.g. amniocentesis)  
  - Maternal ill health with any non-specific illnesses  
  - Complications such a gestational diabetes mellitus or hypertension [refer to Queensland Clinical Guideline: Gestational diabetes mellitus and Hypertension and pregnancy] |
| Labour and birth              | - Progression of labour (e.g. onset, duration, interventions during labour, duration of rupture of membranes, maternal temperature, third stage)  
  - Evidence of abnormal fetal status in labour (e.g. cord blood gases, lactate, meconium liquor) [refer to Queensland Clinical Guideline: Intrapartum fetal surveillance]  
  - Maternal drugs in labour (e.g. antibiotics)  
  - Presentation and mode of birth  
  - Apgar scores and resuscitation at birth  
  - Medication since birth (e.g. vitamin K, hepatitis B immunoglobulin/vaccine, antibiotics) |
| Gestational age               | - If discrepancy with known maternal dates perform a formal gestational age assessment |
| Observations since birth      | - Initial observations and NEWT  
  - Axillary temperature  
  - Weight  
  - Urine/meconium  
  - Relevant tool to assess substance withdrawal (if relevant) [refer to Queensland Clinical Guideline: Perinatal substance use: neonatal] |
| Feeding since birth           | - Mode of feeding  
  - Suck behaviour  
  - Feeding since birth  
  - Refer to Queensland Clinical Guideline: Establishing breastfeeding |

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### 3.2.2 Assessment preparation

Table 5. Assessment preparation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Clinical assessment</th>
</tr>
</thead>
</table>
| **Explanation** | • Explain the purpose, procedure and limitations of the assessment  
|               |   • Ask the baby’s name and confirm sex                                             
|               |   • Ask about any concerns and provide opportunity for questions and answers        
|               |   • Discuss feeding choice and progress                                              
|               |     o Explain normal weight loss after birth (1–2% of body weight per day up         
|               |       to maximum 10% weight loss at day 5)                                           
|               |     o Provide further information as required                                       |
| **Environment** | • Ensure adequate warmth and lighting                                              
|               |   • Ensure privacy for discussion about sensitive family/health issues               |
| **Equipment**  | • Overhead warmer if required                                                        
|               |   • Stethoscope                                                                     
|               |   • Ophthalmoscope                                                                  
|               |   • Pencil torch                                                                    
|               |   • Tongue depressor and glove                                                      
|               |   • Tape measure                                                                    
|               |   • Infant scales and growth charts                                                 
|               |   • If indicated, bilirubinometer and jaundice nomograms [refer to Queensland        
|               |     Clinical Guideline: Neonatal jaundice]                                           
|               |   • Baby’s Personal Health Record (‘red book’)                                       |
3.3 Physical examination

Use a systematic approach to examine the baby where possible. A recommended systematic approach is ‘head to toe’ and ‘front to back’. Undress the baby down to the nappy as it is not possible to fully examine a dressed baby for all abnormalities. Assess the baby when they are quiet and settled, and do not interrupt breastfeeding.20

Table 6 includes aspects of the clinical assessment and possible indications for further investigation or follow up. Indications for urgent follow-up are identified but the list is not exhaustive. Use clinical judgement when determining the need and the urgency of follow-up for all abnormal or suspicious findings. [Refer to Table 7. Suggested follow-up actions].

Table 6. Newborn baby examination

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Clinical assessment</th>
<th>Indications for further investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General appearance20,24,27</td>
<td>• While the baby is quiet, alert, not hungry or crying observe:</td>
<td>• Dysmorphic features</td>
</tr>
<tr>
<td></td>
<td>o Skin colour/warmth/perfusion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Alert/responsive state</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Range of spontaneous movement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Posture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Muscle tone</td>
<td></td>
</tr>
<tr>
<td>Growth status and feeding20,24,28</td>
<td>• Document on the age and sex appropriate percentile charts:</td>
<td>• Less than 10th percentile or greater than 90th percentile</td>
</tr>
<tr>
<td></td>
<td>o Weight</td>
<td>• Excessive weight loss (more than 10 % of birth weight)</td>
</tr>
<tr>
<td></td>
<td>o Length</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Head circumference</td>
<td></td>
</tr>
<tr>
<td>Skin20,27,28</td>
<td>• Colour</td>
<td>☑ Any jaundice at less than 24 hours of age</td>
</tr>
<tr>
<td></td>
<td>• Trauma</td>
<td>☑ Central cyanosis</td>
</tr>
<tr>
<td></td>
<td>• Congenital or subcutaneous skin lesions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Oedema</td>
<td></td>
</tr>
<tr>
<td>Head20,24</td>
<td>• Shape and symmetry</td>
<td>☑ Enlarged, bulging or sunken fontanelle</td>
</tr>
<tr>
<td></td>
<td>• Scalp</td>
<td>☑ Microcephaly (less than 2nd percentile)/macrocephaly (greater than 98th percentile)</td>
</tr>
<tr>
<td></td>
<td>• Anterior and posterior fontanelle</td>
<td>☑ Subgaleal haemorrhage</td>
</tr>
<tr>
<td></td>
<td>• Sutures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Scalp lesions/swelling/bruising/lacerations</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7. Newborn baby examination continued

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Clinical assessment</th>
<th>Indications for further investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>✚ Urgent follow-up</td>
</tr>
<tr>
<td></td>
<td>Symmetry of structure, features and movement</td>
<td>Asymmetry on crying</td>
</tr>
<tr>
<td></td>
<td>Eyes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Size and structure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Position in relation to the nasal bridge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Red reflex</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eyes</td>
<td>Hazy, dull cornea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Absent red reflex</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unequal, dilated or constricted pupils</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Purulent conjunctivitis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow sclera</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Congenital cataracts</td>
</tr>
<tr>
<td></td>
<td>Nose</td>
<td>Nasal flaring</td>
</tr>
<tr>
<td></td>
<td>o Position and symmetry of the nares and septum</td>
<td>✚ Nasal obstruction especially if bilateral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dacryocyst</td>
</tr>
<tr>
<td></td>
<td>Mouth</td>
<td>Cleft lip and/or palate</td>
</tr>
<tr>
<td></td>
<td>o Size, symmetry and movement</td>
<td>Mouth drooping</td>
</tr>
<tr>
<td></td>
<td>o Shape and structure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gums and teeth (if present)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lips</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Palate (hard and soft)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tongue and frenulum</td>
</tr>
<tr>
<td></td>
<td>Ears</td>
<td>Unresponsive to noise</td>
</tr>
<tr>
<td></td>
<td>o Position</td>
<td>Absent external auditory canal or microtia</td>
</tr>
<tr>
<td></td>
<td>o Structure including patency of the external auditory meatus</td>
<td>Drainage from ear</td>
</tr>
<tr>
<td></td>
<td>o Well-formed cartilage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jaw size and shape</td>
<td>Small receding chin or micrognathia (e.g. Pierre Robin syndrome)</td>
</tr>
<tr>
<td></td>
<td>Structure and symmetry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range of movement</td>
<td>Masses/swelling</td>
</tr>
<tr>
<td></td>
<td>Structure and number of digits</td>
<td>Neck webbing</td>
</tr>
<tr>
<td>Shoulders, arms and hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Length</td>
<td>Swelling over clavicle/fractured clavicle</td>
</tr>
<tr>
<td></td>
<td>Proportions</td>
<td>Hypotonia</td>
</tr>
<tr>
<td></td>
<td>Symmetry</td>
<td>Palsy (e.g. Erb’s palsy, Klumpke’s paralysis)</td>
</tr>
<tr>
<td></td>
<td>Structure and number of digits</td>
<td>Contractures</td>
</tr>
<tr>
<td></td>
<td>Chest</td>
<td>Palmar crease pattern</td>
</tr>
<tr>
<td></td>
<td>o Chest size, shape and symmetry</td>
<td>Small, malformed or asymmetry</td>
</tr>
<tr>
<td></td>
<td>o Breast tissue</td>
<td>Widely spaced nipples (e.g. Turner’s syndrome)</td>
</tr>
<tr>
<td></td>
<td>o Number and position of nipples</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory</td>
<td>✚ Signs of respiratory distress</td>
</tr>
<tr>
<td></td>
<td>o Chest movement and effort with respiration</td>
<td>✚ Apnoeic episodes</td>
</tr>
<tr>
<td></td>
<td>o Respiratory rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Breath sounds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiac</td>
<td>Variations in rate, rhythm or regularity</td>
</tr>
<tr>
<td></td>
<td>o Pulses–brachial and femoral</td>
<td>Murmurs</td>
</tr>
<tr>
<td></td>
<td>o Skin colour/perfusion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Heart rate</td>
<td>Central cyanosis/mottling</td>
</tr>
<tr>
<td></td>
<td>o Heart rhythm</td>
<td>✚ Weak or absent pulses</td>
</tr>
<tr>
<td></td>
<td>o Heart sounds</td>
<td>✚ Positive pulse oximetry screen</td>
</tr>
<tr>
<td></td>
<td>o Pulse oximetry</td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>Clinical assessment</td>
<td>Indications for further investigation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Abdomen20,27,28</td>
<td>• Shape and symmetry</td>
<td>✗ Organomegaly</td>
</tr>
<tr>
<td></td>
<td>• Palpate for enlargement of liver, spleen, kidneys and bladder</td>
<td>✗ Gastroschisis/exomphalos</td>
</tr>
<tr>
<td></td>
<td>• Bowel sounds</td>
<td>✗ Bilious vomiting</td>
</tr>
<tr>
<td></td>
<td>• Umbilicus including number of arteries</td>
<td>• Inguinal hernia</td>
</tr>
<tr>
<td></td>
<td>• Tenderness</td>
<td>• Erythema or swelling at base of umbilicus onto anterior abdominal wall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Organomegaly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Organomegaly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Organomegaly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Organomegaly</td>
</tr>
<tr>
<td>Genitourinary20,27,28</td>
<td>• Urine passed including colour and amount</td>
<td>✗ No urine passed within 24 hours</td>
</tr>
<tr>
<td></td>
<td>• Male genitalia</td>
<td>✗ Ambiguous genitalia</td>
</tr>
<tr>
<td></td>
<td>o Penis including foreskin</td>
<td>✗ Bilateral undescended testes</td>
</tr>
<tr>
<td></td>
<td>o Testes (confirm present bilaterally and position of testes) including any discoloration</td>
<td>✗ Testicular torsion</td>
</tr>
<tr>
<td></td>
<td>o Scrotal size and colour</td>
<td>• Hypospadias, penile chordee</td>
</tr>
<tr>
<td></td>
<td>o Other masses such as hydrocele</td>
<td>• Penile torsion greater than 60%</td>
</tr>
<tr>
<td></td>
<td>• Female genitalia (discuss pseudomenstrual)</td>
<td>• Micropenis (stretched length less than 2.5 cm)</td>
</tr>
<tr>
<td></td>
<td>o Clitoris</td>
<td>• Unequal scrotal size or scrotal discoloration</td>
</tr>
<tr>
<td></td>
<td>o Labia</td>
<td>• Testes palpable in inguinal canal</td>
</tr>
<tr>
<td></td>
<td>o Hymen</td>
<td></td>
</tr>
<tr>
<td>Anus20,27,28</td>
<td>• Meconium passed</td>
<td>✗ No meconium passed within 24 hours</td>
</tr>
<tr>
<td></td>
<td>• Anal position</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Anal patency</td>
<td></td>
</tr>
<tr>
<td>Hips, legs and feet20,27,28</td>
<td>• Use Barlow and Ortolani manoeuvres to examine hips</td>
<td>• Risk factors for hip dysplasia: brech presentation, fixed talipes, fixed flexion deformity,</td>
</tr>
<tr>
<td></td>
<td>A firm surface is necessary</td>
<td>asymmetrical buttock creases, severe oligohydramnios, first degree relative with developmental hip</td>
</tr>
<tr>
<td></td>
<td>• Assess legs and feet for</td>
<td>dysplasia</td>
</tr>
<tr>
<td></td>
<td>o Length</td>
<td>• Positive Barlow and/or Ortolani test</td>
</tr>
<tr>
<td></td>
<td>o Proportions</td>
<td>• Hypotonia/contractures</td>
</tr>
<tr>
<td></td>
<td>o Symmetry</td>
<td>• Positional talipes</td>
</tr>
<tr>
<td></td>
<td>o Structure and number of digits</td>
<td></td>
</tr>
<tr>
<td>Back20,27,28</td>
<td>• Spinal column</td>
<td>• Curvature of spine</td>
</tr>
<tr>
<td></td>
<td>• Scapulae and buttocks for symmetry</td>
<td>• Non-intact spine</td>
</tr>
<tr>
<td></td>
<td>• Skin</td>
<td>• Tufts of hair or dimple along intact spine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sacral pit without visible intact base</td>
</tr>
<tr>
<td>Neurologic20,27,28</td>
<td>• Observe throughout:</td>
<td>• Weak, irritable, high pitched cry</td>
</tr>
<tr>
<td></td>
<td>o Behaviour</td>
<td>• No cry</td>
</tr>
<tr>
<td></td>
<td>o Posture</td>
<td>• Does not respond to consoling</td>
</tr>
<tr>
<td></td>
<td>o Muscle tone</td>
<td>• Absent/exaggerated reflexes</td>
</tr>
<tr>
<td></td>
<td>o Movements</td>
<td>✗ Seizures</td>
</tr>
<tr>
<td></td>
<td>o Cry</td>
<td>✗ Altered state of consciousness</td>
</tr>
<tr>
<td></td>
<td>o Examine reflexes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Moro</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Suck</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Grasp</td>
<td></td>
</tr>
</tbody>
</table>
3.4 Isolated abnormalities
The following anomalies are usually of no concern when isolated (3 or more such abnormalities are of concern)

- Folded-over ears
- Hyperextensibility of thumbs
- Syndactyly of second and third toes
- Single palmar crease on one hand
- Polydactyly, especially if familial
- Single umbilical artery
- Hydrocele
- Fifth finger clinodactyly
- Simple sacral dimple just above the natal cleft (less than 2.5 cm from anus and less than 5 mm wide)
- Single café-au-lait spot
- Slate grey naevi/congenital dermal melanocytosis (Mongolian spot)
- Single ash leaf macule
- Third fontanelle
- Capillary haemangioma apart from those described in table above
- Accessory nipples

4 Consultation and follow-up
Use clinical judgement to determine the appropriate urgency of follow-up in the context of abnormal or suspicious findings arising from a newborn baby assessment. If there is uncertainty about the urgency of follow-up seek advice from a more senior clinician.

Table 7. Suggested follow-up actions

<table>
<thead>
<tr>
<th>Category</th>
<th>Follow-up action</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Urgent</td>
<td></td>
</tr>
</tbody>
</table>
| Immediate and/or life-threatening health concern for the newborn baby | • Arrange same day (as soon as possible) medical review  
• If baby is already discharged from hospital arrange review by either:  
  o Hospital emergency department  
  o GP  
  o Paediatrician  
  o Neonatologist  
• Advise parents/family of clinical concerns and the importance of immediate review  
  o Provide verbal/written information as appropriate  
  o Consider parental support needs (e.g. social work involvement, transport requirements) |
| Follow-up |                |
| Existing and/or potential health concern for the newborn baby | • Determine the urgency of the follow-up required  
• Consider the need for:  
  o Consultation with senior practitioners (e.g. review of baby, telephone consultation about findings, telehealth consultation)  
  o Additional immediate investigation(s) (e.g. blood test)  
  o Referral for specialist review (e.g. cardiology)  
  o Re-assessment or recheck at 6 week assessment (or sooner as indicated)  
  o Distribution of written summary information (e.g. GP, referring hospital)  
• Advise parents/family of clinical concerns and the importance of review and follow-up arrangements  
  o Provide verbal/written information as appropriate  
  o Consider parental support needs (e.g. social work involvement, transport requirements) |
5 Discharge planning
Evaluate each mother-baby dyad individually and involve the family when determining optimal time of discharge. Criteria for newborn baby discharge include physiological stability, family preparedness to provide care for the baby at home, availability of social support, and access to the health care system and community resources.29

5.1 Screening newborn baby

Table 8. Screening newborn baby

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Context**             | • Explain to baby’s parents the importance, and how to access screening of the newborn baby  
                          • If possible complete all screening before discharge  
                          • Organise repeat screening and/or follow up as required |
| **Hearing**30           | • Healthy hearing screening is performed in the birthing hospital prior to discharge  
                          • May be provided as outpatient up to 3 months of age30  
                          o Refer to local protocols |
| **Jaundice**            | • Consider checking TcB (transcutaneous bilirubin) prior to discharge  
                          • Follow local protocols  
                          • Refer to Queensland Clinical Guideline: Neonatal jaundice19 |
| **CCHD**                | • Refer to Table 9. Pulse oximetry screening |
| **Newborn bloodspot screening test (NBST)31,32** | • Screens for galactosaemia, phenylketonuria, primary hypothyroidism, congenital adrenal hyperplasia, cystic fibrosis and a range of rare disorders of amino acid, organic acid and fatty acid metabolism  
                          • Collect sample by heel prick to medial or lateral plantar aspect of heel  
                          o If collected from infusion line (e.g. umbilical catheter) repeat screening is usually required33  
                          • First test collected at 48–72 hours of age and then if:  
                          o Baby has received 10% glucose intravenous infusion repeat 48 hours after infusion is ceased  
                          o Perinatal steroids (multiple doses), repeat at 7 days  
                          o Monochorionic multiple birth (e.g. same sex twins), repeat in 2 weeks, and maintain an index of suspicion for congenital hypothyroidism31  
                          o Birthweight 1000–1500 gram repeat at 14 days of age  
                          o Birth weight less than 1000 gram repeat at 14 and at 28 days of age  
                          o Blood transfusion is required collect sample prior to commencing, and repeat 48 hours and 14 days later  
                          o Total parental nutrition (TPN) administered, repeat 24 hours after resuming/commencing milk feeds  
                          • If baby is discharged before 48 hours of age discuss collection options with parents  
                          • Complete all documentation on screening card including relevant clinical information, feeding status of baby and reason for repeat screening (if required)  
                          o Repeat collection is also required for unsatisfactory sample  
                          • Advise parents of results notification process in Queensland  
                          • Refer to Queensland Health Pathology information31 |
5.2 Pulse oximetry screening

The Queensland Maternal and Perinatal Quality Council recommends all newborn babies are offered pulse oximetry screening for critical congenital heart disease (CCHD). Optimal detection of CCHD occurs when pulse oximetry screening is used in conjunction with an antenatal ultrasound and a physical examination of the baby.

Table 9. Pulse oximetry screening

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Context** | • Congenital heart disease (CHD) occurs in nearly 1% of live births, approximately one quarter of these will be CCHD\(^ {36} \)  
• If CCHD is undetected newborn babies are at risk for death in the first few days or weeks of life\(^ {36} \)  
• Pulse oximetry:  
  o Non-invasive screening technology to assist in detecting hypoxemia, a clinical sign of critical congenital heart disease (CCHD)\(^ {20,29} \)  
  o Can detect some CCHD that would otherwise be missed on routine examination or antenatal ultrasound  
  o Can also identify non-cardiac problems such as sepsis and respiratory problems, and these are common causes of a positive screen  
  o Cochrane Review\(^ {37} \) found pulse oximetry:  
    ▪ Overall sensitivity 76.3% (95% CI 69.5–82.0)  
    ▪ Specificity 99.9% (95% CI 99.7–99.9)  
    ▪ No significant differences in sensitivity or specificity for foot only versus both foot and right hand measurement |
| **Target population** | • All healthy term and late preterm newborn babies\(^ {35} \) |
| **Equipment** | • Motion tolerant pulse oximeter  
• Neonatal oxygen saturation sensor |
| **Timing** | • Screen between 24 and 36 hours of age as\(^ {35} \):  
  o Prior to 24 hours of age is likely to result in increased false positive result\(^ {36} \) or  
  o After 48 hours delays early intervention if required  
• If baby is less than 24 hours of age at time of discharge, screen immediately prior  
  o Consider screening by home visiting midwife\(^ {36} \) |
| **Protocol** | • Ensure baby has been fed and is settled  
• Site the sensor and then connect to motion-tolerant monitor(s)\(^ {35} \):  
• Site either:  
  o On either foot\(^ {36,37} \) (postductal) or  
  o Right hand (pre-ductal) and either foot (postductal)  
• Keep sensor(s) in situ until a steady trace is obtained\(^ {37} \) then remove (usually less than one minute)  
• Document–highest oxygen saturation result during the screen and if used difference between sites |
### 5.2.1 Pulse oximetry results

Table 10. Pulse oximetry results

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Saturation greater than or equal to 95% (normal)** | • **Negative pulse oximetry screen—maximum oxygen saturation:**  
  o Greater than or equal to 95% on either foot or right hand, and a difference between right hand and either foot less than or equal to 3%  
  o Baby suitable for discharge (in accordance with other discharge criteria) |
| **Saturation 90–94%**           | • **Borderline pulse oximetry screen—maximum oxygen saturation:**  
  o 90–94% on either foot or right hand a difference between right hand and either foot greater than 3%  
  o Medical review indicated  
  o Consider investigation of other causes including respiratory/vascular problems (e.g. sepsis, respiratory distress syndrome, lung malformations, persistent pulmonary hypertension of the newborn)–monitor as indicated  
  o Repeat screen in one hour  
  o Consider using different oximeter  
  o If oxygen saturations remain borderline repeat the screen in one hour  
  o Consider right hand and either foot simultaneously  
  o If repeat screen abnormal, specialist medical review indicated:  
    o Delay discharge and admit to neonatal unit  
    o Consider chest X-ray and four limb blood pressure  
    o Consider referral for echocardiography  
  o Contact RSQ for advice from a neonatologist or paediatric cardiologist |
| **Saturation less than 90% (abnormal)** | • **Positive pulse oximetry screen:** maximum oxygen saturation during recording is less than 90% on either foot or right hand  
  • Admit to neonatal unit–requires urgent specialist medical review  
  • Consider chest X-ray and four limb blood pressure  
  • Commence close clinical surveillance (e.g. continuous monitoring including oximetry)  
  • Investigate for neonatal sepsis  
    o Refer to Queensland Clinical Guideline: *Early onset Group B Streptococcal disease*  
  • Consider investigations for CCHD including an echocardiogram  
    o Investigate investigation of other causes including respiratory/vascular problems (e.g. respiratory distress syndrome, lung malformations, persistent pulmonary hypertension of the newborn)  
  • Contact RSQ for advice from a neonatologist or paediatric cardiologist |
### 5.3 Discharge preparation

#### Table 11. Discharge preparation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discharge criteria</strong></td>
<td>• Review the baby’s status prior to discharge including(^\text{13}):&lt;br&gt;  o Feeding–suck feeding adequately&lt;br&gt;  o Newborn baby observations–temperature maintenance, respiratory rate, BGL (if measured), weight&lt;br&gt;  o Urine and stool passage&lt;br&gt;  o Completion of newborn baby assessment&lt;br&gt;  o Vitamin K status–if required give script and education for further oral vitamin K&lt;br&gt;  o Hepatitis B vaccination (and if indicated, hepatitis B immunoglobulin) administered–advise parents about next dose due</td>
</tr>
<tr>
<td><strong>Discharge at less than 24 hours of age</strong></td>
<td>• If discharged at less than 24 hours of age, advise parents to seek urgent medical assistance if baby:&lt;br&gt;  o Has not passed meconium within 24 hours of birth&lt;br&gt;  o Appears jaundiced within first 24 hours after birth&lt;br&gt;  o Has elevated temperature&lt;br&gt;  o Vomiting&lt;br&gt;  o Difficulty feeding&lt;br&gt;  o Lethargic&lt;br&gt;  o Has decreased urine output or stools&lt;br&gt;  o Respiratory signs&lt;br&gt;  o Rash&lt;br&gt;  • Provide relevant Queensland Clinical Guidelines consumer information sheets (e.g. breastfeeding, jaundice)</td>
</tr>
<tr>
<td><strong>Referral and follow-up</strong></td>
<td>• Advise parents about the importance of follow-up assessments at:&lt;br&gt;  o Five to seven days of age&lt;br&gt;  o Six weeks of age&lt;br&gt;  • Arrange referral for a newborn baby and/or family with identified problems&lt;br&gt;  • Document arrangements and inform family&lt;br&gt;  • If required provide scripts or medication (e.g. vitamin D) for use after discharge&lt;br&gt;  • Provide discharge information to the GP</td>
</tr>
<tr>
<td><strong>Documentation</strong></td>
<td>• Plot anthropometric parameters on growth charts&lt;br&gt;  • Complete the baby’s Personal Health Record booklet&lt;br&gt;  o Ensure relevant sections complete before discharge&lt;br&gt;  o Explain parental use and completion after discharge&lt;br&gt;  • Document completion of the newborn assessment and associated discussions, findings and follow-up requirements in the medical record</td>
</tr>
<tr>
<td><strong>Support agencies</strong></td>
<td>• Provide information on the role of and how to access relevant support agencies (including but not limited to):&lt;br&gt;  o Child health service&lt;br&gt;  o GP&lt;br&gt;  o Child/community Health/health worker&lt;br&gt;  o Midwife (e.g. home visiting, drop-in clinics, group practice, eligible or private)&lt;br&gt;  o Lactation consultant&lt;br&gt;  o Australian Breastfeeding Association&lt;br&gt;  o 13HEALTH (13 43 25 84) telephone help line&lt;br&gt;  • Psychological support agencies (e.g. perinatal mental health services; PANDA; groups for fathers)</td>
</tr>
</tbody>
</table>
5.4 Health promotion
Discuss relevant parenting and health education topics with parents/carers prior to discharge, and provide relevant Queensland Clinical Guidelines parent information sheets.

Table 12. Health promotion

| Newborn baby care | • Hygiene  
| | o Bathing  
| | o Eye and mouth care  
| | o Umbilical cord care  
| | • Nappy changing including skin care  
| | • Feeding  
| | o Feeding cues and behaviour  
| | o Promote and support breastfeeding  
| | o Refer to Queensland Clinical Guideline: Establishing breastfeeding17  
| | • Growth and weight gain  
| | • Sleep patterns  
| | • Normal bowel and urine patterns  
| | • Detection and management of jaundice [refer to Queensland Clinical Guideline: Jaundice–newborn19  
| | • Sun protection42  
| | • Prevention of hypothermia and hyperthermia  
| Warning signs of illness43 | • Discuss and advise when to seek medical help, e.g.:  
| | o Raised temperature  
| | o Poor feeding  
| | o Vomiting  
| | o Irritability, lethargy  
| | o Decreased urine or stools  
| | o Jaundice  
| | o Respiratory signs  
| | o Rash  
| SUDI44 | • Provide written information about safe infant care to reduce the risk of sudden unexpected death in pregnancy (SUDI)  
| | • Discuss safe positioning of baby during breastfeeding  
| | • Discuss safe sleeping:  
| | o Positioning and settling  
| | o Swaddling  
| | o Sharing sleep surfaces  
| | o Appropriate clothing  
| | • Risks from smoking–provide advice about smoking cessation  
| Injury prevention | • Car capsule to transport baby  
| | • Pram safety  
| | • Reducing home hazards  
| | • Hip healthy swaddling and use of slings45  
| Immunisation schedule | • Provide information about childhood immunisation program  
| | • Refer parents to baby’s Personal Health Record (‘red book’)
References

Acknowledgements

Queensland Clinical Guidelines gratefully acknowledge the contribution of Queensland clinicians and other stakeholders who participated throughout the guideline development process particularly:

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Funding
This clinical guideline was funded by Healthcare Improvement Unit, Queensland Health