1. **Purpose**

This clinical guideline outlines the requirement for management and treatment of infants at risk of Neonatal Abstinence Syndrome at the Women’s.

This guideline is related to the ‘Management of Women with Alcohol and Drug Issues’ guideline (in development).

2. **Definitions**

- **Fetal Alcohol Syndrome (FAS)** is a term used to indicate the severe effects of alcohol use in pregnancy, characterised by brain damage, facial deformities and growth deficits.

- **Infant Home Based Withdrawal (IHBW)** is a model of care where babies continue and complete pharmacological treatment for Neonatal Abstinence Syndrome (NAS) at home, subject to satisfactory risk assessments and close domiciliary supervision from a team of health professionals.

- **Neonatal Abstinence Syndrome (NAS)** is a syndrome of drug withdrawal observed in babies of women physically dependent [in the 4-6 weeks prior to birth] on drugs manifested by non-specific symptoms and signs in the baby, including neurological excitability, gastrointestinal dysfunction, autonomic signs, poor feeding, sleep-wake abnormalities, vomiting, dehydration, poor weight gain, neuromuscular abnormalities and occasionally seizures.

- **WADS** Women’s Alcohol & Drug Service, The Royal Women’s Hospital.

- **Withdrawal** is the development of a substance-specific syndrome due to the cessation of (or reduction in) substance use that has been prolonged.

3. **Responsibilities**

Nursing/ midwifery, neonatal medical staff and the Women and Alcohol and Drug Service (WADS) team.

**Principles of Care:**

- Babies of women dependent on alcohol or drugs are at an increased risk of harm and poor developmental outcomes due to complex interplay of psychosocial and environmental adversity. Assessment of risk of harm or neglect to the baby should occur throughout the pregnancy and postnatal period.

- Health outcomes for mothers and babies can be improved with provision of comprehensive models of care and follow-up. All women dependent on alcohol or drugs should be offered comprehensive models of care, which includes continuity of carers (care manager) and follow-up within a multidisciplinary healthcare team including specialist drug and alcohol service providers, counsellors, dieticians, and social workers.

- If comprehensive models of care, with appropriate expertise are not available, statewide secondary consultation services should be sought from the Women’s Alcohol and Drug Service (WADS) on 03 8345 3931, or out of hours via Royal Women’s Hospital switchboard on 03 8345 2000.

- There is a high incidence of mental health co-morbidity associated with alcohol and drug dependency, which can lead to poor maternal-infant bonding and adversely impact on infant psychosocial development, in addition to serious mental health consequences for the woman. All women and babies should have ongoing assessment for mental health problems by members of the care team who must be able to recognise mental health problems and refer for specialist mental health care when required.

4. **Guideline**

Refer to Appendix 1 for summary flow chart for Assessment and Care of babies at risk of NAS.

4.1 **Resuscitation**

In the event of respiratory depression in the baby of an opioid-dependent mother, normal resuscitation methods should be used, including thorough assessment and mechanical ventilation as required.

If there is a history of regular maternal opioid use during pregnancy, use of antagonist agents such as naloxone during resuscitation of the baby is contraindicated, because severe rapid onset seizures associated with withdrawal may be precipitated.
4.2 Differential diagnosis and investigations

Part of routine care for every baby is to observe the baby’s feeding and behaviour. If a baby shows behaviour consistent with withdrawal (i.e. unsettled, irritable, high pitched cry, tremors/jitteriness, poor feeding and/or diarrhoea) further assessment should be undertaken, including maternal substance use, and referral should be made to a neonatal RMO/paediatrician.

Differential diagnosis should include consideration of neonatal withdrawal syndrome, which may occur in up to 30% of babies born to women who use antidepressants, particularly SSRIs. Onset of symptoms in babies varies depending on the specific pharmacological properties of the medicine but is usually seen within the first few days of life. If suspected or anticipated:

- Refer baby to neonatal RMO/paediatrician
- Use modified Finnegan assessment tool (MR/1820) to monitor baby
- Early review before 4 weeks of age should be considered
- Consider referring the mother to a psychiatrist for advice about psychotropic medication use in the postnatal period, particularly where mother breastfeeding.

Feeding and gastrointestinal disturbances are common in babies withdrawing from maternal substance use. Therefore if a baby at risk of NAS is losing weight with breastfeeding alone, consideration should be given to the use of supplemental expressed breast milk or formula until adequate milk supply is established.

Clinical signs similar to those of NAS may be caused by concurrent illness, such as infection and hypoglycaemia. This should be considered when assessing a baby at risk of NAS.

Investigations should be performed as required for diagnosis and not solely on account of a history of maternal substance use.

Routine urine or meconium drug screening for illicit drugs is not recommended in mothers or babies, unless considered of diagnostic importance to determine which drugs the mother has been using (e.g. if the infant has signs of NAS and the drugs used by the mother are unknown).

Babies of women dependent on alcohol should be assessed after birth by a paediatrician for signs of Fetal Alcohol Syndrome (FAS). Signs of FAS may not be apparent at birth, therefore parents should be advised that further follow-up will be required.

4.3 Settings of care

In order to promote mother-baby bonding, babies at risk of NAS should be cared for with the mother, unless contraindicated by the medical condition or social circumstances of mother or baby.

If babies are separated from their mother, efforts should be made to maximise parental involvement in care including assessment and care of NAS. Documentation of parental involvement in care may be required by child protection services.

SIDS prevention safe sleeping practices must be practiced in hospital.

4.4 Breastfeeding

The benefits of breastfeeding are sufficiently important to support the mother’s choice to breastfeed unless there is substantial evidence or reasonable consensus that the drug taken by the woman will be harmful to the infant or there is risk of disease transmission. Contraindications to breastfeeding include:

- Intoxication with alcohol or other drugs
- HIV positive mother
- Hepatitis C positive mother who has cracked and/or bleeding nipples.

Breastfeeding may be contraindicated for intermittent periods, including after drug or alcohol use. All women who breastfeed should be advised on how and when to express; and store or discard breast milk; and to develop a safety plan for feeding the baby.

Breastfeeding women who use stimulants (amphetamines, ecstasy, or cocaine) should be informed of risks, and advised not to breastfeed for 24 hours after use.
Breastfeeding women who smoke cannabis or tobacco should be advised to breastfeed prior to smoking and smoke outside and away from the baby, to minimise secondary exposure to the baby. Women should be encouraged to reduce cannabis use; heavy use may pose a risk of substantial amount of cannabis excreted into the breast milk.

Breastfeeding women should be informed that alcohol passes into breast milk, and that there is no known safe level of alcohol consumption. If a breastfeeding mother chooses to drink alcohol, she should be advised to breastfeed before drinking alcohol (or express and store breast milk), then wait a minimum of 2 hours or longer per standard drink before breastfeeding again (time is taken from the beginning of drinking).

4.5 Artificial feeding

Some women may choose to artificially feed their infants. This may be the primary source of nutrition for the infant or provided in conjunction with breastfeeding. Women who choose to artificially feed their infants will require the same information including:

- preparation and storage of formula
- heating of milk in an appropriate manner
- cleaning and sterilisation of feeding equipment.

Women with ongoing or intermittent substance use need to have a 'safety' or backup plan for the times when they are under the influence of substances. This safety plan should be discussed with women prior to their discharge from the acute setting. Safety plans should include:

- mother's ability/plans to have baby cared for and fed by another appropriate person if she is substance affected
- formula preparation, etc (as above).

4.6 Assessment of withdrawal

Babies at risk of NAS should be referred for neonatal medical care after birth. Babies born to women assessed as dependent (or intoxicated at delivery) on opioids (including women who have ceased use within 4 weeks of birth), sedatives or stimulants, should be assessed for NAS with the modified Finnegan neonatal abstinence scoring system and documented in the patient record using MR/1820:

- commencing within 2 hours of birth
- repeated every 4 hours (30-60 minutes after feeds)
- for a minimum of 4 days.

Babies may be eligible for discharge after 96 hours observation if:

- daily peak Finnegan scores are less than 6 for the prior 48 hours
- no unresolved medical or social issues requiring hospitalisation are present (see Discharge section)

Babies of women dependent on cannabis may have delayed onset of withdrawal, and should be referred for early postnatal review before one month of age with a suitably qualified clinician, GP or paediatrician, but do not require assessment with the modified Finnegan tool after birth.

Babies of women dependent on alcohol, sedatives or stimulants may develop symptoms in the first 7 days, thus requiring assessment in hospital. Although not validated for use in this group of babies, the symptoms observed are similar to those of opiate dependent mothers and the modified Finnegan scoring tool should be used in the absence of another validated tool. Maternal dependence on these substances may also cause delayed onset of infant withdrawal and babies should be referred for early assessment before one month of age with a suitably qualified clinician, GP or paediatrician.

Infant is assessed for signs of withdrawal half- to one hour after each feed. The infant will be more settled at this time and a more accurate assessment can be obtained. Scoring interval is inclusive of the time since the last score was taken. The mother is involved in the assessment process, as she will be aware of infant’s symptoms of withdrawal. Infants who exhibit signs of withdrawal will generate scores from criteria in each of the
three sections of the scoring chart (central nervous system, gastrointestinal, autonomic). Table 1 indicates how to assess elements of the modified Finnegan abstinence severity scale tool.

**Table 1: Guide to scoring modified Finnegan abstinence severity scale**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Scoring Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High pitched cry</td>
<td>Score 2 if high-pitched at its peak, 3 if high-pitched throughout</td>
</tr>
<tr>
<td>Tremors</td>
<td>This is a scale of increasing severity and a baby should only receive one score from the four levels of severity. Undisturbed refers to the baby being asleep or at rest in the cot.</td>
</tr>
<tr>
<td>Increased muscle tone</td>
<td>Score if the baby has generalised muscle tone greater than the upper limit of normal.</td>
</tr>
<tr>
<td>Excoriation</td>
<td>Score only when excoriations first appear, increase or appear in a new area.</td>
</tr>
<tr>
<td>Yawning and sneezing</td>
<td>Score if occurs more than 3 to 4 times in 30 minutes.</td>
</tr>
<tr>
<td>Nasal flaring/respiratory rate</td>
<td>Score only if present without other evidence of lung or airways disease.</td>
</tr>
<tr>
<td>Excessive sucking</td>
<td>Score if more than that of an average hungry baby.</td>
</tr>
<tr>
<td>Poor feeding</td>
<td>Score if baby is very slow to feed or takes inadequate amounts.</td>
</tr>
<tr>
<td>Regurgitation</td>
<td>Score only if occurring more frequently than would be expected in a newborn baby.</td>
</tr>
</tbody>
</table>

Symptoms of NAS in **preterm babies (34 – 37 weeks gestation)** are similar to those of term babies. The modified Finnegan tool should be used for assessment of NAS, with modifications in the sleeping and feeding sections to allow for variations in behaviour due to prematurity as there is no alternative validated tool.

- Many premature babies require tube feeding. Babies should not be scored for poor feeding if tube feeding is expected at the gestation.
- A baby on 3 hourly feeds can sleep at most 2 1/2 hours. Scoring should be:
  - 1 if a baby sleeps less than 2 hours
  - 2 if sleeps less than 1 hour
  - 3 if does not sleep between feeds.

In older infants sleeping patterns should be considered when interpreting the NAS score (infants greater than 6 weeks of age spend more time awake during the day). It may be appropriate to discontinue NAS scoring and base decisions to wean treatment on general behaviour.

### 4.7 Supportive care

Non-pharmacological care is the first line of treatment for all babies exposed to maternal substance use in pregnancy. This includes supportive care interventions such as:

- a quiet setting
- breastfeeding
- use of a pacifier (if parents give consent)
- small frequent feeds
- cuddling
- swaddling
- close skin contact
- carrying in a sling.

Pain relief for procedures should be provided based on need as for any baby.
4.8 **Pharmacological treatment**

Once the modified Finnegan score averages 8 or more for 3 consecutive scores, or averages 11 or more for 2 consecutive scores, transfer baby to NISC for:

- further assessment and scoring by a neonatal RN experienced in using the modified Finnegan’s scoring tool
- pharmacological treatment as per protocol.

Pharmacological treatment dose changes should be calculated using birth weight not current weight.

4.9 **Morphine Treatment**

Morphine Hydrochloride (1mg/mL) should be administered orally for NAS caused by opioid withdrawal.

Commencing treatment commits the infant to several weeks in the neonatal unit (or a prolonged period of tapering of treatment in the IHBW program, if appropriate). The scores on which the treatment is based should be checked and confirmed in NISC.

**Table 2: Recommended Morphine Treatment Regime**

<table>
<thead>
<tr>
<th>Score</th>
<th>Morphine Dose</th>
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<tbody>
<tr>
<td>3 consecutive scores average 8 or more</td>
<td>125 micrograms/kg/dose 6-hourly or 85 micrograms/kg/dose 4-hourly*</td>
</tr>
<tr>
<td>2 consecutive scores average 11 or more (consider higher dosage)</td>
<td>125-175 micrograms/kg/dose 6-hourly or 85-120 micrograms/kg/dose 4-hourly*</td>
</tr>
</tbody>
</table>

*If NAS symptoms are not assessed as controlled with 6-hourly medication, change dose frequency to 4 hourly in the first instance before increasing the dosing amount.

Higher doses of morphine have been described up to a maximum of 1200micrograms/kg/day (200micrograms/kg/dose 4 hourly). When polysubstance exposure has occurred adding a second therapeutic agent is preferable to increasing the morphine dose above the usual prescribing range.

4.10 **Monitoring babies receiving morphine treatment**

Babies receiving morphine should be closely monitored including use of an apnoea monitor whilst commencing and stabilising on treatment as morphine is a respiratory depressant. Overdosing may result in respiratory depression, abdominal distension, constipation and (rarely) urinary retention.

4.11 **Weaning morphine therapy**

Once NAS symptoms have been assessed as controlled (three consecutive scores less than 8) the following weaning process should be implemented, subject to continuing satisfactory paediatric assessment of clinical condition at each stage of weaning process. The dose should reduce by 10% of the initial dosage prescribed (based on birth weight, not current weight) throughout the weaning process (i.e. the morphine decreases by a constant amount throughout weaning).

Weaning morphine treatment – on 6-hourly dosing:

- Reduce by 10% of the initial dose (based on birth weight) every 72 hours (i.e. 12.5-17.5 micrograms/kg/dose)
- When daily dosage is 30micrograms/kg/dose, morphine may be discontinued
- Continue assessment of NAS for a further 72 hours.

Weaning morphine treatment – on 4-hourly dosing:

- Reduce by 10% of the initial dose (based on birth weight) every 72 hours (i.e. 8.5-12 micrograms/kg/dose)
- When on 35 micrograms/kg/dose, change dose frequency from 4-hourly to 6-hourly (i.e. 35 micrograms/kg/dose 6-hourly)
Discontinue treatment after 72 hours
Continue assessment of NAS for a further 72 hours

Infants who complete weaning of morphine treatment through the IHBW program are prescribed 6-hourly dosing. An infant may be transferred from 4-hourly dosing to 6-hourly dosing at any stage of the weaning process by changing the dosing frequency from 4- to 6-hourly without altering the total daily dose amount (in consequence the amount of morphine per dose will increase).

Correct prescribing of oral morphine for NAS

See Neonatal Pharmacopoeia for further information about Morphine use and administration.

4.12 Vomiting
To reduce the risk of the baby vomiting the morphine dose:

- give medication before a feed
- ensure the baby is not being overfed.

Table 3: Vomiting

<table>
<thead>
<tr>
<th>If baby vomits</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 10 minutes of morphine dose</td>
<td>Redose</td>
</tr>
<tr>
<td>10-30 minutes after dose</td>
<td>Give half dose</td>
</tr>
<tr>
<td>&gt;30 minutes after dose</td>
<td>Wait until next scheduled dose</td>
</tr>
</tbody>
</table>

4.13 Phenobarbitone Treatment
Phenobarbitone may be indicated as an additional therapy where the symptoms of NAS are not adequately suppressed by morphine treatment alone, particularly where there has been concurrent use of opioid and non-opioid drugs in pregnancy.

Phenobarbitone should be used as the first line treatment if babies with signs of NAS reach threshold for treatment, and:

- maternal drugs used are unknown
- maternal drugs used are non-opioid drugs
- the mother was intoxicated with alcohol or non-opioid drugs at the time of birth.

If used as a first line treatment, a loading dose is likely to achieve more rapid control of symptoms.
Table 4: Recommended phenobarbitone treatment regime

<table>
<thead>
<tr>
<th>Score</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>All scores</td>
<td><strong>Loading dose:</strong> 10-15mg/kg orally or parenterally if not tolerating oral intake</td>
</tr>
<tr>
<td>Then (maintenance doses):</td>
<td></td>
</tr>
<tr>
<td>Average 8 or more for 3 consecutive scores</td>
<td>3mg/kg (birthweight)/dose  12-hourly</td>
</tr>
<tr>
<td>Average 11 or more for 2 consecutive scores (consider higher dosage)</td>
<td>3-4 mg/kg (birthweight)/dose 12-hourly</td>
</tr>
</tbody>
</table>

Assays of phenobarbitone levels should be performed if:

- indicated by clinical condition.

**Weaning phenobarbitone treatment:**

Once NAS symptoms have been assessed as controlled (scores less than 8) for 48 hours, the phenobarbitone dose should be reduced by 2mg per dose every 4th day or longer depending on neonatal medical assessment of clinical condition until less than 1mg/kg/dose.

**4.14 Other treatments**

Some infants with NAS symptoms are incompletely responsive to treatment with morphine and/or phenobarbitone. Consideration should be given to alternative causes of symptoms other than withdrawal. Symptomatic management of the particular uncontrolled symptoms should be undertaken only in consultation with the WADS paediatrician.

Other pharmacological treatments that may be useful include:

- Clonidine 0.5 -1 microgram/kg orally every 6 hours based on weight at commencement of treatment (may be increased to 1microgram/kg every 4 hours). Adverse effects include hypotension, rebound hypertension if clonidine is not tapered off over more than a week, AV-block and bradycardia. Wean dosage by 25% of the initial dose every 5 days.

- Chloral hydrate 8 mg/kg/dose orally 8-hourly based on weight at commencement of treatment (one paper reports use of 30-50mg/kg/dose orally with dose frequency increased up to 3 times per day in conjunction with clonidine).

- Trimeprazine 1-2 mg/kg orally nocte (not on hospital formulary, discuss with NISC pharmacist for supply).

**4.15 Infant Home Based Withdrawal**

Before a baby is discharged home on morphine or phenobarbitone, the care management team must ensure:

- social circumstances and suitability for IHBW have been reassessed (see appendix 2) as satisfactory after birth by experienced social worker/counsellor, in consultation with the care team who have had involvement with the woman throughout pregnancy, including the woman’s psychiatrist where applicable
- adequacy of parenting abilities, including the ability to administer treatment
- baby is stable on 6-hourly morphine or 12-hourly phenobarbitone at least 48 hours prior to transfer
- a care management meeting has been held and the roles and responsibilities of all carers are clearly identified and understood (see appendix 4)
- a clear discharge plan is in place including home visiting and paediatric follow-up in WADS outpatient clinic.
4.16 Discharge

Babies of women dependent on alcohol or drugs are at an increased risk of harm or neglect. Babies should not be discharged if:

- unresolved medical issues requiring hospitalisation are present
- weight loss is excessive (e.g. >10% of birth weight)
- a court order prevents discharge home
- further assessment for withdrawal is required
- parentcraft ability of primary carer is inadequate or behaviour is erratic
- problematic drug use is likely to be continued within the home
- home support is inadequate and assistance is not accepted
- material goods or housing are inadequate
- required community support workers is unavailable (e.g. weekends and public holidays).

Babies should not be discharged and child protection authorities should be notified if:

- neglect or abuse of the baby or siblings is suspected
- home violence is suspected.

The home sleeping environment for the infant should be assessed for safety as per SIDS safe sleeping guidelines by all professionals visiting the home, preferably beginning before the baby goes home.

Babies of women dependent on alcohol or drugs should continue to have long term comprehensive care after discharge. A care management meeting may be held to ensure referrals and supports are in place and respective roles and responsibilities are clearly understood. The care manager should follow-up women after discharge to ensure they are engaged with community services.

Child protection services may be involved at any stage before or after the birth. If involved, they assume responsibility for organising appropriate community support.

4.17 Follow-up for babies at risk of vertical transmission of Blood Born Virus (BBV) (Hepatitis B, Hepatitis C and Human Immunodeficiency Virus)

If a baby is at risk of blood borne virus (HIV, HBV, HCV) transmission, refer to the ‘Human Immunodeficiency Virus (HIV) - Maternal and Neonatal Care’, ‘Management of Positive Women – Intrapartum and Infants’ (in development) and ‘Neonates born to women with Hepatitis B and C infection: Management and follow-up’ (in development).

The WADS paediatric clinic provides follow-up for infants born to women who have had a positive HCV antibody test in pregnancy.

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be monitored, evaluated and reported through incidents reported to VHIMS.

6. References


7. Legislation/Regulations related to this guideline or procedure
Not applicable.

8. Appendices
Appendix 1: Assessment and care for babies at risk of Neonatal Abstinence Syndrome (NAS) (flowchart)
Appendix 2: Assessment tools for Infant Home Based Withdrawal
Appendix 3: The Royal Women’s Hospital: Neonatal Abstinence Syndrome (NAS) and Infant Home Based Withdrawal (IHBW)
Appendix 4: The Royal Women’s Hospital, Infant Home Based Withdrawal (IHBW). Roles and responsibilities of team members
Appendix 5 – Example of morphine discharge prescription for home based withdrawal.
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NOTE: Care should be taken when printing any clinical guideline from this site. Updates to these guidelines will take place as necessary. It is therefore advised that regular visits to this site will be needed to access the most current version of these guidelines.
Appendix 1

Assessment and Care of Babies at Risk of NAS

Infant at risk of NAS (or displaying signs of NAS)

Yes

- Environmental measures (1)
- Feeding management (2)
- Neonatal RMO/ Paediatric referral
- WADS/ Social work support
- Commence scoring with modified Finnegan Scoring Tool (3)

Threshold NAS scores (4)

No

- Assessment at 96 hours
- Daily peak scores < 6 for prior 48 hours

Yes

- Review clinical condition
- Continue NAS scoring for further 72 hours
- Supportive care

Daily peak scores ≥ 6

Eligible for discharge
- Cease NAS scoring
- Check community supports in place
- Arrange early follow-up

No

Routine care

Notes:
1. Decrease stimuli, provide quiet environment, encourage holding and skin-to-skin contact, avoid overheating if swaddled
2. Feed on demand, small frequent feeds, caloric needs may be increased
3. Commence within 2 hrs of birth, continue 3-4 hourly with carers
4. Threshold reached when 3 consecutive scores average ≥ 8 or 2 consecutive scores average ≥ 11

Eligible for discharge

Transfer to NISC for further assessment
Pharmacologic treatment as per protocol

Assessment at 96 hours

Daily peak scores > 6

Eligible for discharge
### ANTENATAL ASSESSMENT

For completion by social worker at 36/40 weeks gestation  
EDC: _________

Name of provider: _________________________________________________

Signature: _______________________________________ Date: ___________

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<thead>
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<th>INDICATOR</th>
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<th>CONCERN</th>
<th>PLAN</th>
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<td>Mother stable and/or Infant’s Primary carer</td>
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<td>Ongoing illicit drug use or alcohol abuse (mother)</td>
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<tr>
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Comments: ___________________________________________________________________
_____________________________________________________________________________
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Original sheet to be retained in mother’s medical record
Forward duplicate sheet to the Case Manager, SCN
### Appendix 2

The Royal Women’s Hospital: Assessment tools for Infant Home Based Withdrawal (IHBW)

#### Assessment for Infant Home Based Withdrawal (IHBW)

**NISC ASSESSMENT**

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</tbody>
</table>

**Retain in baby’s medical record**
Appendix 3

The Royal Women’s Hospital: Neonatal Abstinence Syndrome (NAS) and Infant Home Based Withdrawal (IHBW)

**WADS referral**
Antenatal assessment at 36 weeks for IHBW reapplied after birth
(see assessment form appendix 2)

**Not eligible**
NAS managed in special care nursery

**Eligible**

**氖t**

**Eligible**

**Care manager organises team meeting** that includes:
- Family
- Medical Registrar/Consultant
- Pharmacist
- HITH nurse
- Antenatal care providers/social worker
- Community services as required

**Baby stabilised** on 6 hours medication at least 48 hours prior to IHBW transfer

**Transfer to HITH** until completion of IHBW

**Neonatal RMO:** Next week’s prescription including spill kit

**Born before 36 weeks or non-WADS referral**
Assessed by social worker for IHBW eligibility
(see assessment form appendix 2)

**Pharmacist**
Medication education

**Care manager:**
Organise weekly Outpatients appointments
## Appendix 4

### The Royal Women’s Hospital IHBW:

#### Roles and Responsibilities of Team Members

| BABY | gaining weight  
|      | stable on 6 hourly medication  
| PARENTS | demonstrate safe parenting skills  
|      | able to safely administer and store medication  
|      | meet criteria for IHBW eligibility  
|      | consent to IHBW and neonatal HITH program  
| ANTENATAL CARE PROVIDER(S) | reviews eligibility for IHBW program  
| eg SOCIAL WORKER | (Appendix 2)  
| WARD CONSULTANT | assesses eligibility for transfer to HITH  
| CARE MANAGER | coordinates team meeting  
|      | liaises with Maternal Child Health Nurse  
|      | organizes follow up appointments  
|      | contacts GP/family doctor and assertively follows up general referrals  
| PHARMACIST | parent education - medication administration  
|      | - safe storage  
|      | - weekly collection of prescriptions  
|      | and collection of spill kit  
| REGISTRAR | writes prescription for first week’s medication and spill kit based on baby’s birth weight (Appendix 5)  
|      | writes first week’s continuum of care including medication reductions every 72 hours  
| HITH NURSE | assesses safety of home  
|      | parent education regarding IHBW  
|      | obtains consent for IHBW  
|      | discusses  
|      | • plans for home visiting  
|      | • settling techniques at home  
|      | • safe sleeping (SIDS guidelines)  
|      | provides 24 hour contact numbers  
|      | views and documents infant’s sleeping arrangements at home  
|      | attends weekly meetings with families as able  
| WADS Paediatrician | reviews baby at weekly consultations  
|      | writes prescription for following week’s medication and spill kit  
|      | writes continuum of care for following week  

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Appendix 5

Example of Morphine Discharge Prescription for Home Based Withdrawal

<table>
<thead>
<tr>
<th>Hospital prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>67144410</td>
</tr>
<tr>
<td>The Royal Women's Hospital</td>
</tr>
<tr>
<td>20 Flemington Road</td>
</tr>
<tr>
<td>Parkville VIC 3052</td>
</tr>
<tr>
<td>TEL: 03 8345 2000</td>
</tr>
<tr>
<td>Provider no. 0031040A</td>
</tr>
<tr>
<td>Patient's Medicare number</td>
</tr>
<tr>
<td>Pharmacetical benefits entitlement or DVA number</td>
</tr>
</tbody>
</table>

**Ward/clinic**

**Discharge date:** / /  
**Time:** am/pm  

**UR number:** 123456  
**Ward:** NISC

**Name:** SAMPLE BABY  
**Address:** SAMPLE ADDRESS  
**DoB:** 12/05/2014

**Print patient’s name:** SAMPLE BABY

**Drug name and form**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Strength</th>
<th>Dose, route and frequency</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine liquid</td>
<td>IMNAD</td>
<td>100mg PO QD for 3 days</td>
<td>2 x 4mL</td>
</tr>
<tr>
<td>Morphine liquid</td>
<td>IMNAD</td>
<td>160mg PO QD for 3 days</td>
<td>1 x 2mL</td>
</tr>
<tr>
<td>Morphine liquid</td>
<td>IMNAD</td>
<td>120mg PO QD for 1 day</td>
<td>1 x 2mL</td>
</tr>
</tbody>
</table>

**Drug hypersensitivities**

DO NOT LEAVE BOX BLANK  
If patient has an allergy, enter NDA or NA  
NDA (neonate)

**Prescriber’s name:** A Doc  
**Prescriber number:** 654321  
**Prescriber type:**  
**Payer number:** 989189  
**Clinical unit:** NISC  
**Date:** 30/1/14

**Signature:** A Doc  
**Date:** 30/1/14  
**Do not turn over for privacy note**  
I certify that I have received the medication and the information relating to any entitlement to free or concessional pharmaceutical benefits is not false or misleading.

**Date of supply:**  
**Patient or agent’s signature:**  
**Agent’s address:** 4002 (55/11)