CLINICAL PRACTICE GUIDELINE PREGNANCY





INSTITUTE OF OBSTETRICIANS & GYNAECOLOGISTS ROYAL COLLEGE OF PHYSICIANS OF IRELAND

Feidhmeannacht na Seirbhíse Sláinte Health Service Executive

## **CLINICAL PRACTICE GUIDELINE**

## METHADONE PRESCRIBING AND ADMINISTRATION IN PREGNANCY

Institute of Obstetricians and Gynaecologists, Royal College of Physicians of Ireland And Directorate of Strategy and Clinical Care Health Service Executive

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## Key Recommendations

- 1. Methadone maintenance treatment is the treatment of choice for opioiddependent pregnant women. In adequate doses, methadone provides stability for the woman during pregnancy, avoiding repeated cycles of intoxication and withdrawal that may adversely affect the fetus.
- 2. Withdrawal from opioids can cause fetal death and preterm delivery. It is important that women who report illicit opiate use are assessed and treated in a timely manner.
- 3. Clear communication between Maternity Hospitals and local Addiction Services is required, particularly in relation to methadone doses and admission/discharge of methadone-maintained women.
- 4. Initiation of methadone may be required in a Maternity Hospital to avoid obstetric complications of opioid withdrawal. Careful initiation is required, as the highest risk of overdose mortality is in the first two weeks on methadone treatment.
- 5. A validated scoring tool should be used to assess signs of opioid withdrawal in opioid-dependent pregnant women.
- 6. Opioid-dependent pregnant women are at risk of under-treatment of peripartum pain.
- 7. Breastfeeding should be encouraged in women who are stable on methadone maintenance treatment unless there are other medical contraindications.
- 8. The maternal methadone dose should be individually adjusted to control maternal craving or withdrawal symptoms.

## 1. Purpose and Scope

The purpose of this guideline is to promote the safe and effective prescribing and administration of methadone in antenatal and postnatal opioid-dependent women. These guidelines are intended for healthcare professionals, particularly those in training, who are working in HSE-funded obstetric and gynaecological services. They are designed to guide clinical judgement but not replace it. In individual cases a healthcare professional may, after careful consideration, decide not to follow a guideline if it is deemed to be in the best interests of the woman.

## 2. Background and Introduction

This document provides guidance on the assessment of methadone-maintained women and women currently using illicit opioids. It addresses admission and discharge procedures in Maternity Hospitals, the prescribing and administration of methadone, the management of vomiting in women on methadone, peripartum pain management and breastfeeding in opioid-dependent women treated with methadone.

Methadone is the first-line treatment for the management of opioid-dependent pregnant women, as recommended by UK, US and Australian clinical guidelines (Batki et al, 2005; New South Wales Dept of Health, 2006; Dept of Health UK, 2007). Compared to on-going heroin use, methadone maintenance treatment in the context of multidisciplinary care including antenatal care, has been associated with improved perinatal outcomes including higher birth weights, fewer obstetric complications, less preterm birth and reduced neonatal morbidity(Jones et al, 2012). Methadone maintenance treatment provides stability for the woman during pregnancy, avoiding repeated cycles of intoxication and withdrawal that may adversely affect the fetus (Kaltenbach et al, 1998).

Withdrawal from opioids can cause fetal death and preterm delivery (Kaltenbach et al, 1998). It is important that women who report illicit opiate use are assessed and treated in a timely manner.

## 3. Methodology

Medline, EMBASE and the Cochrane Database of Systematic Reviews were searched using terms including pregnancy, opioid related disorders, opiate, abuse/addiction/dependence, methadone, neonatal abstinence syndrome and neonatal withdrawal. Relevant meta-analyses, systematic reviews, interventional and observational studies were reviewed. International clinical guidelines were reviewed from Australia, Canada, UK, USA and the World Health Organisation (SEE REFS).

The principal guideline developer was Dr. Brian Cleary, Senior Pharmacist, Coombe Women and Infants University Hospital. This guideline was developed from a previous guideline developed for use in the three Dublin Maternity Hospitals in 2011. Initial drafts of this document were developed by Justin Gleeson, Deirdre Carmody, Victoire Hurley, Dr. Michael O'Connell and Dr Brian Cleary in May 2010. The draft document was discussed at group meetings of representatives of the three Dublin Maternity Hospitals and the HSE Addiction Services on 23<sup>rd</sup> June and 29<sup>th</sup> November 2010 (including Deirdre Carmody, Dr. Brian Cleary, Dr. Maeve Eogan, Dr. Anne Frankish, Justin Gleeson, Dr. Shane Higgins, Victoire Hurley, Dr. Eamon Keenan, Dr. Michael O'Connell, Dr. John O'Connor and Dr. Brion Sweeney). Comments from the guideline development group were incorporated into a final draft which was circulated to the Drug and Therapeutics Committees of the relevant organisations in February 2011. The guidelines were also presented at a national meeting of healthcare professionals from all the maternity hospitals in Farmleigh House in October 2012.

The guideline was peer-reviewed by Ms Victoire Hurley (Midwifery), Ms Deirdre Carmody (Midwifery), Dr Emma Kilgarriff (GP).

Finally, the guideline was reviewed and endorsed by the Programme's Clinical Advisory Group and National Working Party.

## 4. Clinical Guideline

#### Background

Methadone is an opioid agonist used in maintenance treatment of opioid dependence which suppresses opioid craving when given in effective doses. It is a controlled drug with a high dependency potential and a low lethal dose. Methadone should normally be prescribed as a 1mg/mL solution. Methadone should not be given to any women showing signs of intoxication, especially when due to alcohol or other depressant drugs e.g. benzodiazepines.

Most methadone-maintained patients admitted to hospital are known to the Addiction Services. Women are either treated in a methadone maintenance clinic or in primary care, where trained GPs prescribed methadone which is then dispensed by a nominated community pharmacy. Ideally, all women with opioid dependence should attend a specialised or high risk antenatal clinic. In maternity hospitals without a specialised clinic that deals with opioid-dependent women, a single clinic should be nominated to provide continuity of care.

#### Symptoms and Signs of Overdose

The symptoms and signs of overdose with methadone parallel those for other opioids, namely profound respiratory depression, pin-point pupils, hypotension, circulatory failure and pulmonary oedema, coma and death. Mydriasis (dilation of the pupil) may replace miosis (constriction of the pupil) as asphyxia intervenes.

## For information on the management of suspected overdose see Appendix 1

## 4.1 Clinical Scenario 1: Pregnant women admitted and known to be on prescribed methadone from medical record or verbal history

- **4.1.1** Contact the methadone clinic, or, if the woman is attending a prescribing GP, contact the pharmacy from where the woman's methadone is dispensed and inform them of the woman's admission to hospital (contact numbers of the Addiction Services are available in Appendix 4 or in the Inpatient Methadone Record Sheet in the woman's chart).
- **4.1.2** Confirm: woman's name, date of birth, prescribing methadone clinic or G.P, dose of methadone and when next the methadone is due to be dispensed. Refer to Guidance to Nurses and Midwives on Medication Management section 2- Transcription of Prescription/Telephone Orders (An Bord Altranais, 2007).
- **4.1.3** Contact a member of the relevant medical team regarding the admission at the earliest opportunity to prescribe the woman's methadone.
- **4.1.4** Methadone should be supplied in accordance with the Misuse of Drugs Act. Methadone should be administered in the ward office to ensure woman confidentiality. Two midwives or registered general nurses should supply and sign for methadone in the controlled drug register.
- **4.1.5** On discharge from the hospital the discharging team or midwife should inform the methadone clinic/GP/pharmacy of the amount of methadone provided while the woman was admitted. See section 4.7 Discharge of methadone- maintained women for further detail.

# 4.2 Clinical Scenario 2: Pregnant women admitted with a 'take-away' methadone supply.

- **4.2.1** Women are either on daily supervised methadone or are dispensed unsupervised 'take-away' doses.
- **4.2.2** Women should be advised not to bring in their 'take-away' methadone supply when they are being admitted to the hospital.
- **4.2.3** Under no circumstances should any methadone be stored by the woman at the bedside or in the woman's locker for reasons of health and safety.
- **4.2.4** Any supply of methadone brought in to the hospital by the woman which cannot be sent home should not be used and should be sent to the Pharmacy Department for destruction.
- **4.2.5** If a woman does bring in her 'take-away' methadone supply, the exact amount of methadone sent for destruction in the Hospital Pharmacy should be recorded in the Inpatient Methadone Record Sheet in her chart (see Appendix 2).
- **4.2.6** Contact the methadone clinic, or, if the woman is attending a prescribing GP, contact the pharmacy from where the woman's methadone is dispensed and inform them of the woman's admission to hospital (contact numbers of the Addiction Services are available in Appendix 4 or in the Inpatient Methadone Record Sheet in the woman's chart).
- **4.2.7** Confirm: woman's name, date of birth, prescribing methadone clinic or G.P., dose of methadone and when next the methadone is due to be dispensed. Refer to Guidance to Nurses and Midwives on Medication Management section 2- Transcription of Prescription/Telephone Orders.
- **4.2.8** Contact a member of the relevant medical team regarding the admission at the earliest opportunity to prescribe the woman's methadone.
- **4.2.9** Women might not take all the methadone prescribed to them, for various reasons, in one single dose and may be splitting their dose into two or three portions during the 24 hour period.
- **4.2.10** On discharge from the hospital the discharging team or midwife should inform the methadone clinic/GP/pharmacy of the amount of methadone sent to the Hospital Pharmacy for destruction and the amount dispensed while the woman was admitted. (contact numbers of the Addiction Services are available in Appendix 4 or in the Inpatient Methadone Record Sheet in the woman's chart)

## 4.3 Clinical Scenario 3: Pregnant women admitted to hospital self-reporting heroin use but not registered with the addiction services or a prescribing GP

- **4.3.1** Withdrawal from opioids can cause fetal death and preterm delivery. It is important that women who report illicit opiate use are assessed and treated in a timely manner.
- **4.3.2** Where possible seek guidance on the initiation of methadone from local Addiction Services (contact numbers of the Addiction Services are available in Appendix 4).
- **4.3.3** A member of the relevant medical team must be contacted regarding admission to organise inpatient care and ensure access to local Addiction Services on discharge.
- **4.3.4** The prescriber must ascertain that a patient is opioid-dependent before prescribing methadone. If there is no evidence of opioid-dependence in the patient's hospital notes then caution is advised. The initial two weeks of treatment with methadone are associated with an increased risk of overdose mortality (Cousins et al, 2011). It is vitally important that the appropriate assessment, titration of doses and monitoring are performed during this period.
- **4.3.5** Obtain the woman's consent for urine toxicology to confirm opioid use.
- **4.3.6** Obtain a supervised urine sample.
- **4.3.7** The sample should be tested using a point-of-care toxicology testing dipstick.
- **4.3.8** For confirmation the urine sample should also be sent for drug toxicology testing before methadone is administered if possible. Do not delay initiation of methadone while awaiting results.
- **4.3.9** Urine toxicology does not confirm dependence or opioid tolerance and should be used alongside clinical judgement.
- **4.3.10** Carry out a physical examination, looking for injection site or track marks or abscesses.
- **4.3.11** Ascertain the extent of the self-reported drug use, method of administration, drug used, for how long, and the quantity used daily (in grams or monetary terms).
- **4.3.12** Observe the woman and assess for signs or symptoms of withdrawal with Clinical Opiate Withdrawal Scale- see Appendix 3).
- **4.3.13** If methadone is warranted based on clinical judgement or if there is evidence of withdrawal prescribe methadone 20mg stat with subsequent observation for signs of intoxication

- **4.3.14** Assess with Clinical Opiate Withdrawal Scale before any further doses are administered- see Appendix 3.
- **4.3.15** Prescribe an additional 10mg of methadone every 4 hours as needed for withdrawal symptoms (generally up to a total maximum dose of 40mg in the first 24 hours) (BNF, 2010; Seligman et al, 2008; Berghella et al, 2003).
- **4.3.16** Seek advice from local Addiction Services before administering any further methadone if the patient is still displaying signs of withdrawal after the third dose (40mg total).
- **4.3.17** If at any point the woman becomes sedated, increase the frequency of observation and ensure no further methadone is administered until sedation is reversed.
- **4.3.18** Women should be encouraged to remain on the ward for 60-120 minutes after the dose for observation (peak levels are reached after 2-3 hours).
- **4.3.19** Women should be cautioned about the use of other drugs while on methadone.
- **4.3.20** The day 2 methadone dose should be the total methadone dose administered in the first 24 hours. This should be prescribed as a once daily dose.
- **4.3.21** Reassess the patient for further signs of withdrawal after the day 2 dose. Further doses of 10mg may be administered at 4-6 hour intervals up to a total maximum dose on day 2 of 60mg.
- **4.3.22** Steady state plasma levels are reached after about 7-10 days.
- **4.3.23** All women starting on methadone must be informed of the risks of toxicity and overdose and the need for methadone maintenance as an outpatient if started on treatment in hospital.

## 4.4 Clinical Scenario 4: Pregnant women admitted looking for a prescribed dose of methadone out of hours and known to be on prescribed methadone from medical record or verbal history

- **4.4.1** Withdrawal from opioids can cause fetal death and preterm delivery (Kaltenbach, 1998). It is important that women who report illicit opiate use are assessed and treated in a timely manner.
- **4.4.2** In this unexpected situation the woman is admitted to hospital 'out of hours' requesting a dose of methadone as she has missed her dose in the methadone clinic or pharmacy. As it is out of hours the dosage or dispensing details for that day cannot be confirmed with the dispensing clinic or pharmacy.
- **4.4.3** Methadone should not be administered on an outpatient basis. The woman should be admitted for assessment.
- **4.4.4** Before prescribing any methadone, the prescriber should assess the woman for opioid withdrawal using the Clinical Opiate Withdrawal Scale (Appendix 3).
- **4.4.5** As methadone has a half-life of approximately 24 hours, caution needs to be exercised and up to a maximum of half the woman's current dose should be prescribed as the patient's clinic/pharmacy will likely be open before 36hrs since last dose.
- **4.4.6** The woman will need observation for signs of withdrawal or signs of opiate toxicity (see section 5.3).
- **4.4.7** Further management as per Clinical Scenario 1(see section 4.1).

### 4.5 Intoxicated pregnant women

- **4.5.1** In most reviews of methadone-related deaths concurrent use of sedatives such as benzodiazepines and alcohol was found to play a contributory role.
- **4.5.2** Intoxicated women must not be dispensed methadone until they have been medically assessed and found to be unimpaired.

## 4.6 Vomiting in pregnant women on methadonemaintenance treatment

- **4.6.1** To minimise risk of vomiting methadone during pregnancy:
  - Discourage ingesting methadone on an empty stomach.
  - Encourage women to sip their dose slowly.
  - Consider splitting the dose or giving an anti-emetic before dosing if the dose of methadone appears to consistently cause vomiting.
- **4.6.2** If a woman vomits constantly and not necessarily in relation to her dose of methadone, she should be assessed for other causes of vomiting e.g. hyperemesis gravidarum or urinary tract infection.
- **4.6.3** In cases of persistent vomiting it may be useful to consider another brand of methadone, which the woman may find more tolerable.
- **4.6.4** If a methadone dose is vomited by a woman:
  - Within 10 minutes of dosing: consider giving a repeat dose
  - Within 10-30 minutes of dosing: consider giving half a repeat dose
  - More than 30 minutes after dosing: consider giving half a repeat dose only if withdrawal occurs (see Clinical Opiate Withdrawal Scale- Appendix 3)
  - Consider if the entire dose is likely to have been vomited.
- **4.6.5** Vomiting of a methadone dose may lead to maternal and fetal withdrawal. It is preferable that staff have observed the vomiting, but since it is unlikely that all stomach contents are expelled during a vomit, it is still difficult to be sure how much of the dose has been absorbed. Where there is doubt, every effort should be made for the woman to be reassessed by an experienced doctor 4 to 6 hours after vomiting the methadone administered, when the effects of methadone should be at their peak, to determine whether an additional small dose is required.

## 4.7 Discharge of methadone- maintained women

**4.7.1** Contact the methadone clinic or, if the woman is attending a prescribing GP for methadone, the pharmacy where the woman is dispensed her methadone (documented on the Inpatient Methadone Record Sheet in her chart) on the day of discharge and inform them of:

i) the amount of methadone sent to the Hospital Pharmacy for destruction (if any)

ii) the amount of methadone dispensed while the patient was admittediii) any opioids administered while the woman was admitted

(see the Inpatient Methadone Record Sheet in her chart- Appendix 2).

- **4.7.2** Under no circumstances should women be discharged with supplies of methadone issued from hospital stock.
- **4.7.3** Do not give women a discharge prescription for methadone or benzodiazepines.
- **4.7.4** If a woman wishes to be discharged unexpectedly during a weekend then it should be explained that there is limited access to dispensing methadone clinics, prescribing community GP's and some pharmacies. The majority of community agencies dispensing methadone close on bank holidays and dispense sufficient quantities of methadone the day before the bank holiday

## 4.8 Peripartum pain management

#### Background

Opioid-dependent patients are at risk of under-treatment of acute pain (Mehta and Langford, 2009). This may be due to opioid tolerance, misperceptions about drug seeking behaviour and expectation of analgesic effects of maintenance methadone (Hoflich et al, 2012).

- **4.8.1** Opioid-dependent pregnant women should be offered the same options for pain relief as any other woman in labour or the postpartum period (ACOG, 2012). Maintenance doses of methadone will not provide adequate pain relief to opioid-dependent women.
- **4.8.2** Some patients may be concerned about the risk of relapse of illicit opioid use after use of opioid analgesics. Patients should be reassured that there is no evidence that analgesic use of opioids leads to relapse of illicit drug use (Mehta and Langford, 2009).
- **4.8.3** In general, opioid-dependent women will require higher doses of opioids to achieve an equivalent analgesic effect compared with other patients.
- **4.8.4** There should be an awareness of possible additive effects- the postpartum patient who receives opioid therapy in addition to methadone should be closely monitored for symptoms of over-sedation with subsequent dose adjustment if required
- **4.8.5** If a patient is prescribed opioids besides methadone while in hospital, this should be recorded on the Inpatient Methadone Record Sheet in her chart. The Addiction Clinic or GP should be informed of this opioid use as it may affect the interpretation of subsequent urine toxicology testing.

## 4.9 Breastfeeding

#### Background

The issue of breastfeeding in women with a history of drug misuse can be clinically challenging (Jansson, 2009). International clinical guidelines from the USA, Canada, Australia and New Zealand encourage methadone-maintained women to breastfeed in the absence of contraindications. A 2001 review of the American Academy of Paediatrics guidance on medications and lactation classified methadone as "usually compatible with breastfeeding". This is a change from a previous version of the guideline which recommended that it was only compatible with breastfeeding at maternal doses below 20 mg per day (Wilson, 1990).

- **4.9.1** Breastfeeding should be encouraged in women who are stable on methadone maintenance treatment unless there are other medical contraindications (Lactmed. Methadone, 2012).
- **4.9.2** Clinical judgement should be used in determining whether breastfeeding is appropriate for an individual woman and her baby. Contraindications to breastfeeding include:
  - HIV infection
  - Ongoing illicit drug use
- **4.9.3** Minimal levels of methadone are found in breast milk regardless of dose.
- **4.9.4** Breastfeeding may attenuate the severity of NAS and lead to earlier hospital discharge (Phillip et al, 2003; Dryden et al, 2008; Pritham et al, 2012).
- **4.9.5** Abrupt weaning of breastfed infants of women on methadone maintenance can result in infant withdrawal symptoms.
- **4.9.6** Diazepam and other commonly used benzodiazepines are excreted into the breast milk and have active metabolites. Accumulation may occur with repeated doses, leading to sedation, particularly in a newborn or preterm infant.
- **4.9.7** Seek advice on the safety of other concomitantly prescribed medicines in breastfeeding.

## 4.10 Methadone dosing in pregnancy

#### Background

There have been conflicting findings on the relationship between the methadone dose and development of NAS since the earliest reports of gestational methadone use (Blinick, 1968; Reddy et al, 1971). A recent meta-analysis reported that there was no consistent statistically significant difference in the incidence of NAS with differing doses of methadone (Cleary et al, 2010). Women frequently request detoxification or dose reductions during pregnancy, in the hope of reducing the risk of NAS (Dept of Health, UK 2007). There is no compelling evidence to support the lowering of maternal methadone doses during pregnancy in the hope of avoiding NAS (Batki et al, 2005).

The issue of appropriate methadone dosing during pregnancy is further complicated by pregnancy-associated pharmacokinetic changes. Plasma methadone concentrations have been shown to be lower during pregnancy than in the postpartum period (Pond et al, 1985). These differences may be due to physiological changes such as increased total body water, a larger tissue reservoir, enhanced hepatic, placental and fetal clearance of methadone during pregnancy or a reduction in the absorption of methadone after oral administration (Szeto et al, 1982; Swift et al, 1989; Jarvis et al, 1999; Wolff et al, 2005; Hieronymous et al, 2006). Consequent reductions in plasma methadone levels over the course of pregnancy may put women at risk of relapse of illicit drug use.

- **4.10.1** The maternal methadone dose should be individually adjusted to control maternal craving or withdrawal symptoms.
- **4.10.2** Adequacy of the maternal methadone dose should be reassessed at regular intervals during pregnancy. An inadequate methadone dose may result in subtle signs and symptoms of opioid withdrawal and lead to fetal stress and increased likelihood of maternal illicit drug use.
- **4.10.3** Pharmacokinetic changes in pregnancy may lead to the need for higher methadone doses to achieve consistent plasma methadone levels, particularly in the third trimester.
- **4.10.4** Withdrawal from methadone is not recommended during pregnancy due to high relapse rates and the risks associated with resumption of maternal illicit drug use.

## **5. Hospital Equipment and Facilities**

Point of care urine toxicology testing strips are required in all maternity units to allow objective assessment of maternal methadone or illicit opioid use.

## 6. Implementation Strategy

- Distribution of guideline to all members of the Institute and to all maternity hospitals.
- Implementation through HSE Obstetrics and Gynaecology programme local implementation boards.
- Distribution to other interested parties and professional bodies.

## **7. Key Performance Indicators**

To be developed.

## 8. Qualifying Statement

This guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. Clinical material offered in this guideline does not replace or remove clinical judgement or the professional care and duty necessary for each pregnant woman. Clinical care carried out in accordance with this guideline should be provided within the context of locally available resources and expertise.

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

- Discussing care with women in an environment that is appropriate and which enables respectful confidential discussion.
- Advising women of their choices and ensure informed consent is obtained.
- Meeting all legislative requirements and maintaining standards of professional conduct.
- Applying standard precautions and additional precautions, as necessary, when delivering care
- Documenting all care in accordance with local and mandatory requirements.

## 9. Appendices

#### **Appendix 1- Treatment of Suspected Opiate Overdose**

- Anaesthetic staff should be consulted at the earliest opportunity.
- Assess the patient for respiratory depression- if the respiratory rate is less than 12 breaths per minute consider the need for naloxone.
- CAUTION! Naloxone will precipitate acute opiate withdrawal which may lead to preterm labour.
- Naloxone is the treatment of choice for the reversal of coma and the restoration of spontaneous respiration.
- In opioid-dependent patients the administration of the recommended dose of an opioid antagonist may precipitate an acute withdrawal syndrome. The severity will depend on the degree of physical dependence and the dose of naloxone administered.
- If the patient is unresponsive, a bolus dose of naloxone should be administered. Naloxone is available as a 0.4mg/mL injection. It is administered by intravenous injection of 0.4–2mg; if no responserepeat at intervals of 2–3 minutes to a maximum of 10mg (then review diagnosis). (BNF 60)
- If the patient is responsive, but has severe respiratory depression (respiratory rate < 8 breaths/minute) naloxone should be administered with extreme care and by titration with smaller than usual doses of naloxone (give 100-200 micrograms; if response inadequate, give subsequent doses of 100 micrograms every 2 minutes. (BNF 60)
- Further doses of naloxone may be required if respiratory function deteriorates. Naloxone has a short duration of action (repeated doses or infusion may be necessary to reverse effects of opioids with longer duration of action) (BNF 60).
- Consider benzodiazepine toxicity, seek advice expert advice from the Poisons Information Centre of Ireland (01 8379964 or 8092566) before the use of flumazenil (BNF 60).

#### **Appendix 2 - Inpatient Methadone Record Sheet**

Dispensing Clinic/Pharmacy:	
Phone:	
Fax:	
Patient Sticker here	
Prescriber:	
Phone:	
Fax:	

# <u>On each admission</u>: methadone dose confirmed/pharmacy notified of admission:

Date	Methadone Dose	Confirmed with	Signature

<u>On discharge</u>: Pharmacy/Prescriber informed of methadone dispensed and any opioids administered as an inpatient:

Date	Confirmed with	Signature

"Take away" methadone returned to pharmacy for destruction:

Date	Amount	Midwife/Nurse Signature	Pharmacist Signature	Date

#### Appendix 3 - Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name:			
Date and Time/:			
Reason for this assessment:			
Resting       Pulse       Rate:        beats/minute      beats/minute         Measured after patient is sitting or lying for one minute       0 pulse rate 80 or below         0 pulse rate 80 or below       1 pulse rate 81-100         2 pulse rate 101-120       4 pulse rate greater than 120         Sweating: over past ½ hour not accounted for by room temperature or patient activity.       0 no report of chills or flushing         1 subjective report of chills or flushing       1	GI Upset: over last ½ hour 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting Tremor observation of outstretched hands 0 No tremor 1 tremor can be felt, but not observed 2 slight tremor observable		
2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face <b>Restlessness</b> Observation during assessment 0 able to sit still	4 gross tremor observable 4 gross tremor or muscle twitching <b>Yawning</b> Observation during assessment 0 no yawning		
<ol> <li>reports difficulty sitting still, but is able to do so</li> <li>frequent shifting or extraneous movements of legs/arms</li> <li>Unable to sit still for more than a few seconds</li> </ol>	<ol> <li>yawning once or twice during assessment</li> <li>yawning three or more times during assessment</li> <li>yawning several times/minute</li> </ol>		
<ul> <li>Pupil size</li> <li>0 pupils pinned or normal size for room light</li> <li>1 pupils possibly larger than normal for room light</li> <li>2 pupils moderately dilated</li> <li>5 pupils so dilated that only the rim of the iris is visible</li> </ul>	<ul> <li>Anxiety or Irritability</li> <li>0 none</li> <li>1 patient reports increasing irritability or anxiousness</li> <li>2 patient obviously irritable anxious</li> <li>4 patient so irritable or anxious that participation in the assessment is difficult</li> </ul>		
<ul> <li>Bone or Joint aches If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</li> <li>0 not present</li> <li>1 mild diffuse discomfort</li> <li>2 patient reports severe diffuse aching of joints/ muscles</li> <li>4 patient is rubbing joints or muscles and is unable to sit still because of discomfort</li> </ul>	<b>Gooseflesh skin</b> 0 skin is smooth 3 piloerrection of skin can be felt or hairs standing up on arms 5 prominent piloerrection		
Runny nose or tearing Not accounted for by cold symptoms or allergies 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing	Total Score The total score is the sum of all 11 items		
4 nose constantly running or tears streaming down cheeks	SignatureofpersoncompletingAssessment:		

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

#### **Appendix 4- Addiction Services Contact Details**

To be completed locally by each maternity unit

## **10.** References

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