MATERNITY GUIDELINES

Augmentation of Labour

1. Indications for the Augmentation of Labour

Delay in 1st stage of labour

- Inefficient uterine activity
- Cervical dilatation of less than 2 cm in 4 hours

2. Management of Augmentation of Labour in First Stage of Labour

2.1 Assessment of women before augmentation

2.1.1 Nulliparous women

The Obstetrician must review the woman where there has been cervical dilatation of less than 2cm in four hours. Fetal wellbeing must be assessed and details of the abdominal palpation and vaginal examination should be known. A management plan should be clearly documented in the maternal records.
Midwifery staff are able to commence the first syringe of Oxytocin under a PGD provided the patient is cephalic, at term gestation and a singleton and the patient gives verbal consent to treatment without the immediate intervention of a doctor.

2.1.2 Multiparous women

Cervical dilatation of less than 2 cm in 4 hours or a slowing in the progress of labour for second or subsequent labours should alert midwifery and medical staff to the possibility of obstructed labour. An abdominal palpation and vaginal examination must be performed by the coordinator or a senior obstetrician prior to the commencement of Oxytocin. In the presence of significant caput and moulding and/or an oedematous poorly applied cervix, augmentation with Oxytocin is contraindicated

In all circumstances a full history, taking into account risk factors and contraindications, must be undertaken and documented in the patient record prior to the commencement of Oxytocin.

2.1.3. Fetal assessment

The CTG must have been commenced for a period of ideally up to 30 min prior to starting Oxytocin. If the CTG is classified as other than normal, the fetal well-being must be established by an obstetrician. The decision to commence Oxytocin must be made by an obstetrician with a clear, documented reason and management plan. In the presence of a pathological CTG the fetal wellbeing must be confirmed by obtaining a normal FBS.

2.2 Augmentation of labour is achieved by:

- Artificial rupture of the membranes
- Use of Oxytocin

2.3 Once decision for augmentation has been made, ensure:

- An individualised management plan must be documented at commencement of Oxytocin that includes reason for use and the prescribing clinician.
- Adequate analgesia
- Assessment of frequency and length of uterine activity and recorded every 30 minutes

- Examination 4 hours after commencing Oxytocin in established labour. If there is less than 2 cm progress after 4 hours of Oxytocin, further obstetric review is required to consider caesarean section. If there is 2 cm or more progress, vaginal examinations should be advised every 4 hours.
- Examination should include: abdominal examination to assess descent of presenting part, followed by cervical assessment to determine cervical dilatation and application, position and station of presenting part. The frequency of which would also be determined by the stage of labour. Vaginal examinations which would not affect the management of the patient should be avoided.
- Continuous electronic fetal monitoring when Oxytocin is administered

2.4 Contraindications for Augmentation of Labour

- Hypertonic uterine activity (contraction more than 5 in 10 and/or no relaxation between contractions)
- Suspected obstructed labour
- If the CTG is classified as suspicious or pathological, refer to guideline 10. Acute events need to be excluded, underlying causes considered and conservative measures implemented. Note that reduction or cessation of contractions is considered a resuscitative measure.
- Breech presentation

2.5 Indications that require caution when considering augmentation of labour

The following indications should be assessed by **registrar or above** before any treatment is undertaken:

- Previous caesarean section
- Compound fetal presentation
- Prematurity

2.6 Side Effects of the Administration of Oxytocin

- Uterine hyperstimulation
- Fluid retention - observe fluid balance
- Neonatal jaundice

2.7 Treatment

- 3 units of Oxytocin in 50 ml of normal saline. (Pre-prepared syringes are available).
- **Oxytocin must not be infused through the same intravenous line as blood or plasma.**
- The Oxytocin is administered via a syringe driver using the following infusion rate:

Increase every 30 minutes until contractions are satisfactory, i.e. 3-4:10.

Time after starting (min.)	Oxytocin Dose mU/min	Volume Infused (mls/hour)
0	1	1
30	2	2
60	4	4
90	8	8
120	12	12
150	16	16
180	20	20
210	**24**	**24**
240	**28**	**28**
270	**32**	**32**

Note

The quantities highlighted in bold print can only be used following review and at the registrar's or consultant's discretion.

The infusion rate should be reduced in the event of the following:

- Uterus becomes hyperstimulated (contracting more than 4 in 10), with or without fetal heart rate changes, and/or does not relax between contractions.
- If there are any concerns about fetal wellbeing, be aware of the possible underlying causes including hyperstimulation. In this situation the Oxytocin should be reduced or stopped.

3. Delay in Second Stage of Labour

3.1 Nulliparous women

Delay is suspected if there is inadequate progress after 1 hour of active second stage. If after 1 hour of active second stage progress is inadequate and delay is suspected, the woman should be discussed with the obstetric registrar and a **clearly documented management plan made**.

- Offer vaginal examination hourly in the active stage, or in response to maternal wishes and advise amniotomy if membranes intact.
- Where there is delay in the second stage of labour, or if the woman is excessively distressed, support and sensitive encouragement and consideration of the woman's need for analgesia/anaesthesia are particularly important.
- Consider oxytocin, with the offer of regional anaesthesia, if contractions are inadequate at the onset of the second stage following discussion with a post CCT fellow or Consultant Obstetrician.
- Ensure adequate bladder care.
- Women with confirmed delay in the second stage of labour should not have oxytocin commenced unless assessed and a decision made by a post CCT fellow or Consultant Obstetrician.

- Following initial obstetric assessment for women with delay in the second stage of labour, ongoing obstetric review should be maintained every 15–30 minutes

3.2 Multiparous women

Delay is defined by not delivered after 1 hour of active second stage.
The use of Oxytocin in these circumstances must only be made following a senior obstetric review (post CCT or Consultant) and a clearly documented management plan made.
Once delay is diagnosed, obstetrician reviews patient and considers suitability for assisted vaginal delivery with appropriate analgesia. If decision for further pushing has been made, ongoing obstetric review should be maintained every 15-30 minutes.

The Oxytocin rate for augmentation commenced in the second stage of labour needs to be discussed with the Obstetric Consultant or post CCT fellow and may be increased every 30 minutes unless there is a clearly stated regime made by the Consultant Obstetrician or post CCT fellow and as indicated by fetal condition.

Birth is expected to take place within 3 hours of start of active second stage for nulliparous women and within 2 hours for parous women.

4. Record Keeping and documentation

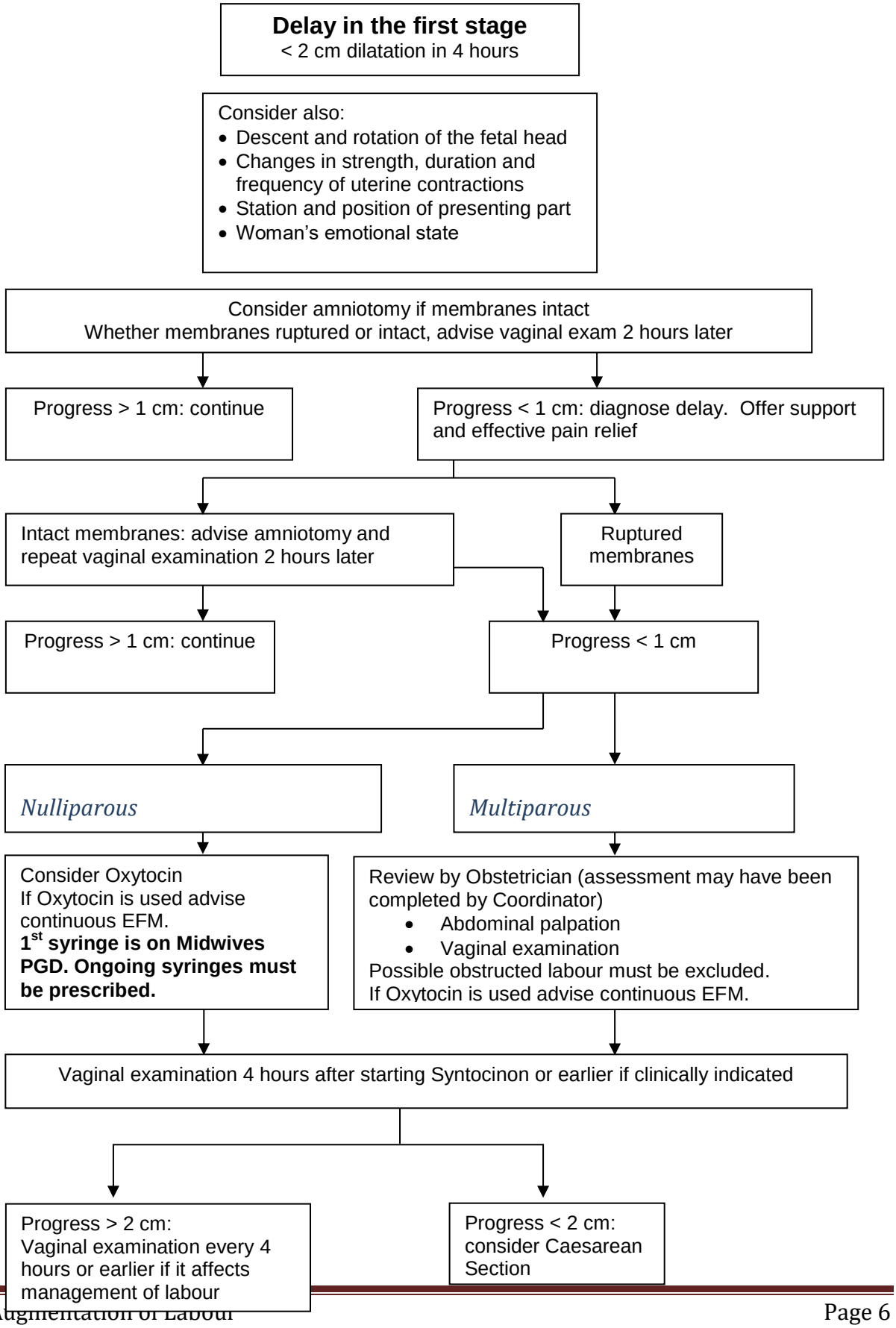
It is expected that every episode of care be recorded clearly, in chronological order and as contemporaneously as possible by all healthcare professionals as per Hospital Trust Policy. This is in keeping with standards set by professional colleges, i.e. NMC and RCOG.

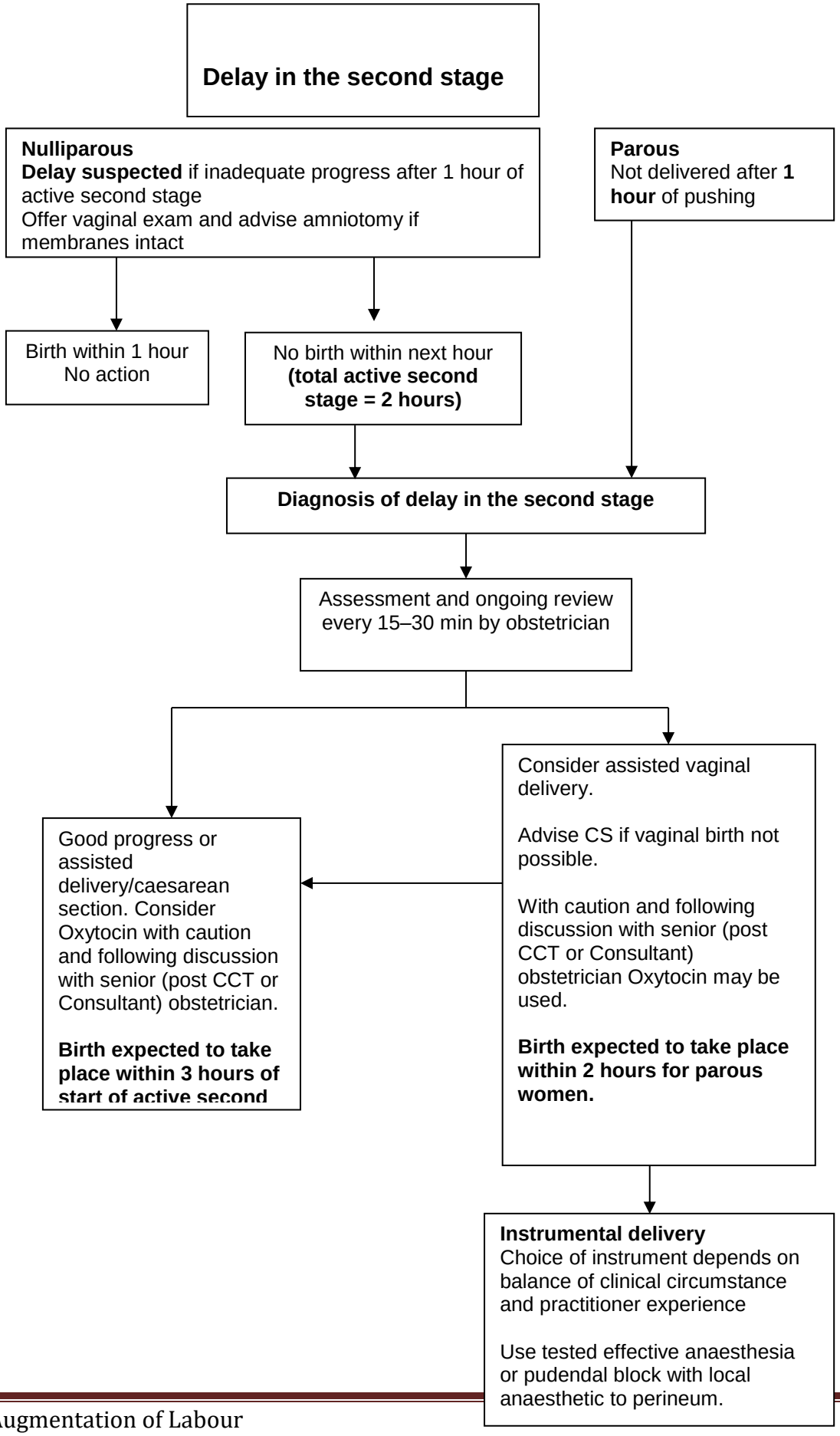
Documentation must include:

- Assessment prior to commencement of Syntocinon
- Dose and timing of increase / decrease of Syntocinon or when it is stopped. Please document reason for any changes
- Assessment of mother and fetus
- Individualised management plan

All entries must have the **date and time** together with **signature and printed name.**

Flow charts for Augmentation of labour in 1st and 2nd stage of labour




Delay in the second stage
Nulliparous
Delay suspected if inadequate progress after 1 hour of active second stage
Offer vaginal exam and advise amniotomy if membranes intact
Parous
Not delivered after 1 hour of pushing
Birth within 1 hour
No action
No birth within next hour
(total active second stage = 2 hours)
Diagnosis of delay in the second stage
Assessment and ongoing review every 15–30 min by obstetrician
Good progress or assisted delivery/caesarean section. Consider Oxytocin with caution and following discussion with senior (post CCT or Consultant) obstetrician.
Birth expected to take place within 3 hours of start of active second
Consider assisted vaginal delivery.
Advise CS if vaginal birth not possible.
With caution and following discussion with senior (post CCT or Consultant) obstetrician Oxytocin may be used.
Birth expected to take place within 2 hours for parous women.
Instrumental delivery
Choice of instrument depends on balance of clinical circumstance and practitioner experience
Use tested effective anaesthesia or pudendal block with local anaesthetic to perineum.

Monitoring and Audit

Auditable standards:
Assessment prior to commencement of Oxytocin
Monitoring of mother and fetus according to NICE guidelines
Documentation of individualized care plan at start of Oxytocin
Documentation when Oxytocin should be stopped

Please refer to audit tool, location: 'Maternity on cl2-file11', Guidelines

Reports to:
Maternity Assurance Group – responsible for action plan and implementation of recommendations from audit

Frequency of audit:
Annual

Responsible person:
CDS Manager

Cross references

TRW/MMA/POL/271/7 Injectable Drug Administration Policy
TRW/MMA/POL/265/5 Medicines Management Policy
Patient Group Direction No. 210/2011 V4. Oxytocin infusion during labour.
Maternity guideline - Maternity Hand Held Notes, Hospital Records and Record Keeping
Maternity guideline – Guideline development within the Maternity Services

References

NICE, 2007. Intrapartum care: Care of healthy women and their babies during childbirth. RCOG, London. NICE, London

Author	Helen Harling, Rachel Roberts, Guideline Committee.	
Work Address	Maternity Unit, Derriford Hospital, Plymouth, Devon, PL6 8DH	
Version	7	
Changes	Must have at least 30 min of CTG prior to commencement of Oxytocin Abdominal palpation and Vaginal Examination must be documented prior to the commencement of Oxytocin.	
Date Ratified	June 2021	**Valid Until** June 2026