Weight Management in the Newborn

Classification :	Guideline
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Departments/Group this Document applies to:	Maternity Paediatrics

Approval Group: Guideline Review Group, Women's Health CIG, Paediatric PIG, Children's Health CIG	**Date of Approval:**	09/11/2020
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Guideline to be followed by (target staff): Midwives, Nursery Nurses, Maternity Support Workers and Maternity Care Assistants – Maternity, Paediatricians and ANNPs – Paediatrics

To be read in conjunction with the following documents:

- Milton Keynes University Hospital NHS Foundation Trust. *Newborn feeding policy*. DOC155. Version 1.1, 2017.
- Milton Keynes University Hospital NHS Foundation Trust. *Hypoglycaemia of the newborn (postnatal ward identification and management).* PAED/GL/169. Version 4.1, 2017.
- Milton Keynes University Hospital NHS Foundation Trust. *Jaundice management of the neonate*. MIDW/GL/155. Version 4, 2018.
- Unicef UK (2015) *Off to the best start: important information about feeding your baby*. [Online]. Available from: https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/breastfeeding-resources/off-to-the-best-start/ [Accessed 17 June 2020]

Are there any eCARE implications? No

CQC Fundamental standards:

Regulation 9 – person centred care
Regulation 10 – dignity and respect
Regulation 11 – Need for consent
Regulation 12 – Safe care and treatment
Regulation 13 – Safeguarding service users from abuse and improper treatment
Regulation 14 – Meeting nutritional and hydration needs
Regulation 15 – Premises and equipment
Regulation 16 – Receiving and acting on complaints
Regulation 17 – Good governance
Regulation 18 – Staffing
Regulation 19 – Fit and proper

Disclaimer

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.
The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

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Guideline Statement

The aim of this guideline is to:

- Support maternity staff in their ability to care for a baby and manage weight loss, giving them the knowledge and evidence base to be confident in their practice.
- Enable staff to detect weight loss early and plan proactive management with the mother and paediatric staff (where appropriate).
- Support Paediatricians/ANNPs in their care planning for babies who have had excessive weight loss.
- Reduce the number of readmissions to hospital.
- Keep mother and baby (breastfeeding dyad) at home, where possible, with additional support measures in place.

Executive Summary

Neonatal weight loss in the first few days of life is part of normal physiology, due to excretion of extracellular fluid. This can however, cause anxiety to parents and carers. In some cases, it can lead to readmission into hospital and sometimes breastfeeding cessation. This guideline specifies the parameters for weight loss, how to identify concerns and management plans for weight losses.

Contributing factors:

- Ineffective milk transfer
- Maternal/neonatal separation
- Events during labour for mother and/or baby (e.g. shoulder dystocia)

Definitions

5-7 % loss of birthweight is an average weight loss in the first few days.
It generally peaks at day 3 - 4, then a steady weight gain should be seen by about day 8 (Boskabadi, et al., 2010; Macdonald, et al., 2003) and birthweight will be regained by day 14.

≥8% – 10% loss of birthweight will be the trigger for cause for concern (Marasco, et al., 2000).

>10% – 12% loss of birthweight is abnormal and warrants referral to a paediatrician/ANNP, for a care plan at home to be managed by the community midwifery team.

>12% loss of birthweight is deemed an excessive weight loss. It requires referral to a paediatrician/ANNP and readmission to the postnatal ward due to the risk of hypernatremia (Boskabadi, et al., 2010; Macdonald, et al., 2003).

Abbreviations

ANNP - Advance Neonatal Nurse Practitioner
MSW - Maternity Support Worker
MCA - Maternity Care Assistants
NNU - Neonatal Unit
FBC - Full Blood Count
SBR - Serum Billirbin Result
CRP - C- Reactive Protein

U&E's - Urea & Electrolytes

1.0 Roles and Responsibilities:

Midwives, Maternity Support Workers (MSWs), Nursery Nurses and Maternity Care Assistants (MCA's) are able to undertake Breastfeeding Assessments.
Babies can be weighed at home or in hospital. If the baby has a weight loss which is escalated to a paediatrician/ANNP, they have the responsibility to ensure their plans protect the breastfeeding dyad (mother and baby) by including measures to support and increase breastmilk production.

2.0 Implementation and dissemination of document

Staff will be orientated to this guideline as part of their induction and the yearly update Baby Friendly Initiative training sessions. The guideline will be accessible on the hospital intranet.

3.0 Processes and procedures

Weight loss is common in the early days of life and usually peaks at days 3-4 (NICE NG75)
Feeding should be discussed and assessed at each contact, whether breast or formula feeding. If breast feeding, a breast feeding assessment should be carried out, as per Newborn Feeding Policy (appendix 1). This should be documented on e-Care or in the handheld notes.

3.1 Prevention of weight loss

3.1.1 Birth

- All women should have skin to skin with their baby, regardless of their proposed method of feeding.
- Initiation of breastfeeding should be encouraged as soon as possible after birth, ideally within 1 hour.
- If the woman is suitable for an early discharge home, a feeding assessment must be completed prior to discharge. This should be documented in e-Care, under Newborn/Feeding section.
- All breastfeeding mothers require a Breastfeeding assessment prior to discharge (ideally between days 0-2).

3.1.2 Day following discharge from hospital

- A Breastfeeding Assessment should be undertaken by Midwife. Any concerns should be addressed, plan made and documented in the notes.

3.1.3 Day 3

- **All babies require a weight on this day.**
- Undertake a Breastfeeding Assessment
- Implement a Management Plan as necessary for any infant feeding issues (see Appendices 1-3).
- Consider referral to Infant Feeding Lead Midwife for specialist support, if required.
- If formula feeding observe a feed, ensuring baby is feeding effectively.

3.1.4 Day 5

- **Weigh baby on this day if appropriate.**
- Undertake a Breastfeeding Assessment
- Implement a Management Plan as necessary for any infant feeding issues (see Appendices 1-3).
- Consider referral to Infant Feeding Lead Midwife for specialist support, if required.
- If formula feeding observe a feed, ensuring baby is feeding effectively.

3.1.5 Day 10-14

- **Weigh the baby**
- If the baby has regained its birthweight and both mother and baby are well, then they are able to be discharged.
- Continue with Management Plans where appropriate, if not able to be discharged.

4.0 Statement of evidence/references

Statement of evidence:

Evidence regarding the optimum frequency of neonatal weighing is scarce and varies dramatically across the country. NICE do not specify clearly when and why a baby needs weighing in the first two weeks. Evidence also varies in terms of establishing the level at which concerns should be raised and where breastfeeding support interventions are required, from 7, 8 or 10%, hence an average of the three has been used in this guideline. This guideline is backed by the following evidence that supports early intervention to prevent excessive weight loss and in turn reduce the risk of hospital readmission.

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5.0 Governance

5.1 Document review history

Version number	Review date	Reviewed by	Changes made
1	N/A		New document

5.2 Consultation History

Stakeholders Name/Board	Area of Expertise	Date Sent	Date Received	Comments	Endorsed Yes/No
Julie Cooper	Head of Midwifery	17/08/2020		Various	Yes
Denise Campbell	Quality Lead, Paediatrics	17/08/2020		Use a different word, not prevention	Yes
Laurie Gatehouse	ANNP	17/08/2020		Amend flowchart for Management plan 3	Yes

5.3 Audit and monitoring

Audit/Monitoring Criteria	Tool	Audit Lead	Frequency of Audit	Responsible Committee/Board
Neonatal Readmissions	Datix	Infant Feeding Lead Midwife	Monthly	Mat/Neo Board
Breastfeeding Assessment completion	BFI Tool	Infant Feeding Lead Midwife	Quarterly	BFI Audit

5.4 Equality Impact Assessment

As part of its development, this Guideline and its impact on equality has been reviewed. The purpose of the assessment is to minimise and if possible remove any disproportionate impact on the grounds of race, gender, disability, age, sexual orientation, religion or belief, pregnancy and maternity, gender reassignment or marriage and civil partnership. No detriment was identified. Equality Impact assessments will show any future actions required to overcome any identified barriers or discriminatory practice.

Equality Impact Assessment			
Division		Department	
Person completing the EqIA		Contact No.	
Others involved:		Date of assessment:	
Existing policy/service		New policy/service	

Will patients, carers, the public or staff be affected by the policy/service?	Yes
If staff, how many/which groups will be affected?	*For example: community midwives, phlebotomists, all staff*

Protected characteristic	Any impact?	Comments
Age	YES NO	Positive impact as the policy aims to recognise diversity, promote inclusion and fair treatment for patients and staff
Disability	YES NO	
Gender reassignment	YES NO	
Marriage and civil partnership	YES NO	
Pregnancy and maternity	YES NO	
Race	YES NO	
Religion or belief	YES NO	
Sex	YES NO	
Sexual orientation	YES NO	

What consultation method(s) have you carried out?
For example: focus groups, face-to-face meetings, PRG, etc
How are the changes/amendments to the policies/services communicated?
For example: email, meetings, intranet post, etc
What future actions need to be taken to overcome any barriers or discrimination?

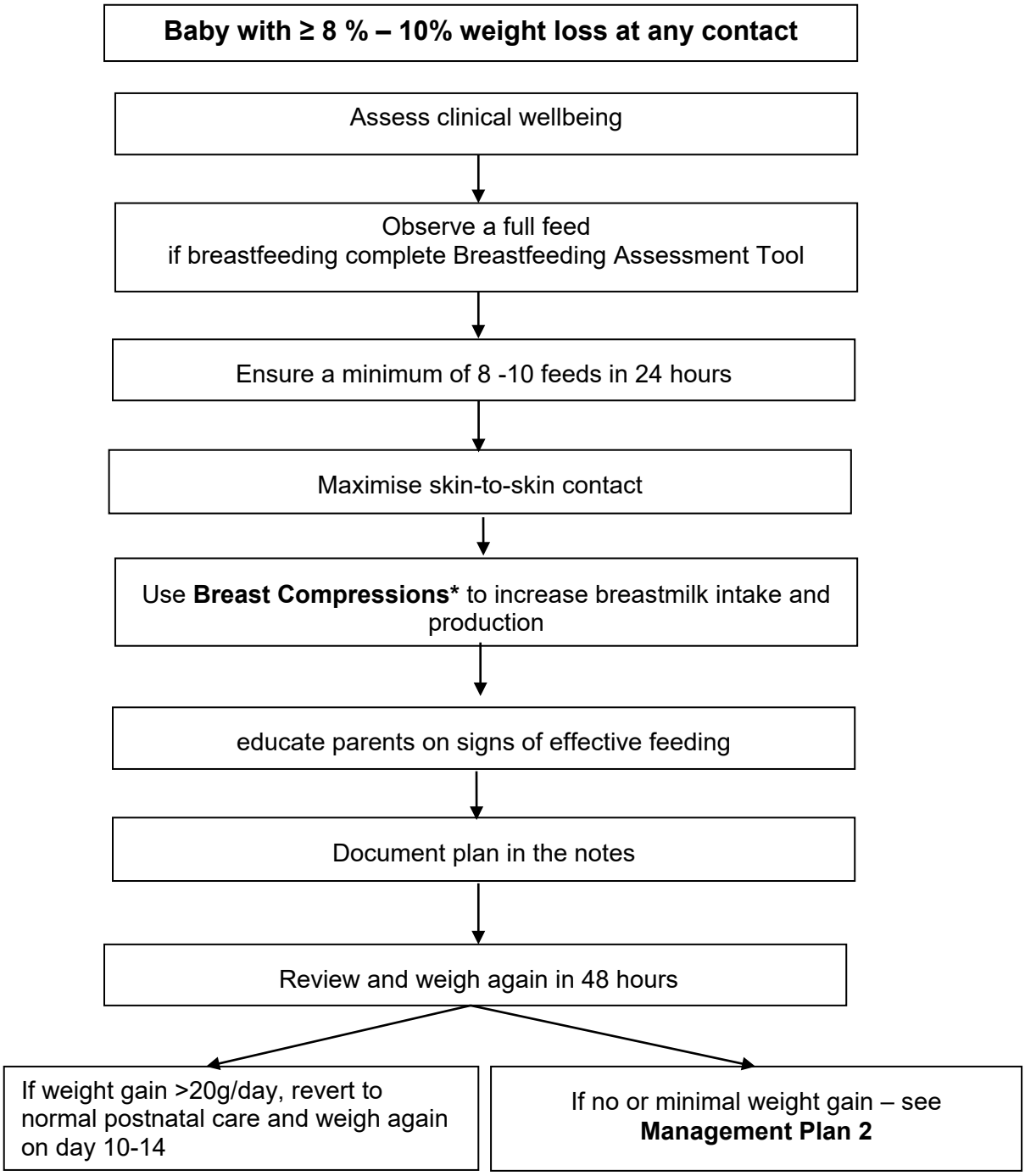
What?	Who will lead this?	Date of completion	Resources needed
Review date of EqIA			

Appendix 1: Management Plan 1 Guideline

≥8% - 10% loss of birthweight at any contact

1. Assess clinical wellbeing and document care plan. If any significant concerns are identified, follow appropriate guideline.
2. **Observe a full feed**. Use **Breastfeeding Assessment Tool** to assess effectiveness of breastfeeding.
3. Ensure a minimum of **8-10 feeds in 24 hours.**
4. **Maximise skin-to-skin** contact.
5. Whilst baby is suckling at the breast, use **Breast Compressions** to increase breastmilk intake and production.
6. Ensure parents are educated on how to recognise effective feeding.
7. **Weigh again in 48 hours** to ensure appropriate weight gain and carry out another Breastfeeding Assessment.
8. Ensure further support is offered where required
9. Discuss weight gain with paediatric team but if no/minimal weight gain – see **Management Plan 2** (Appendix 2).

MANAGEMENT PLAN 1



Appendix 2: Management Plan 2 Guideline

> 10% - 12% loss of birthweight at any contact

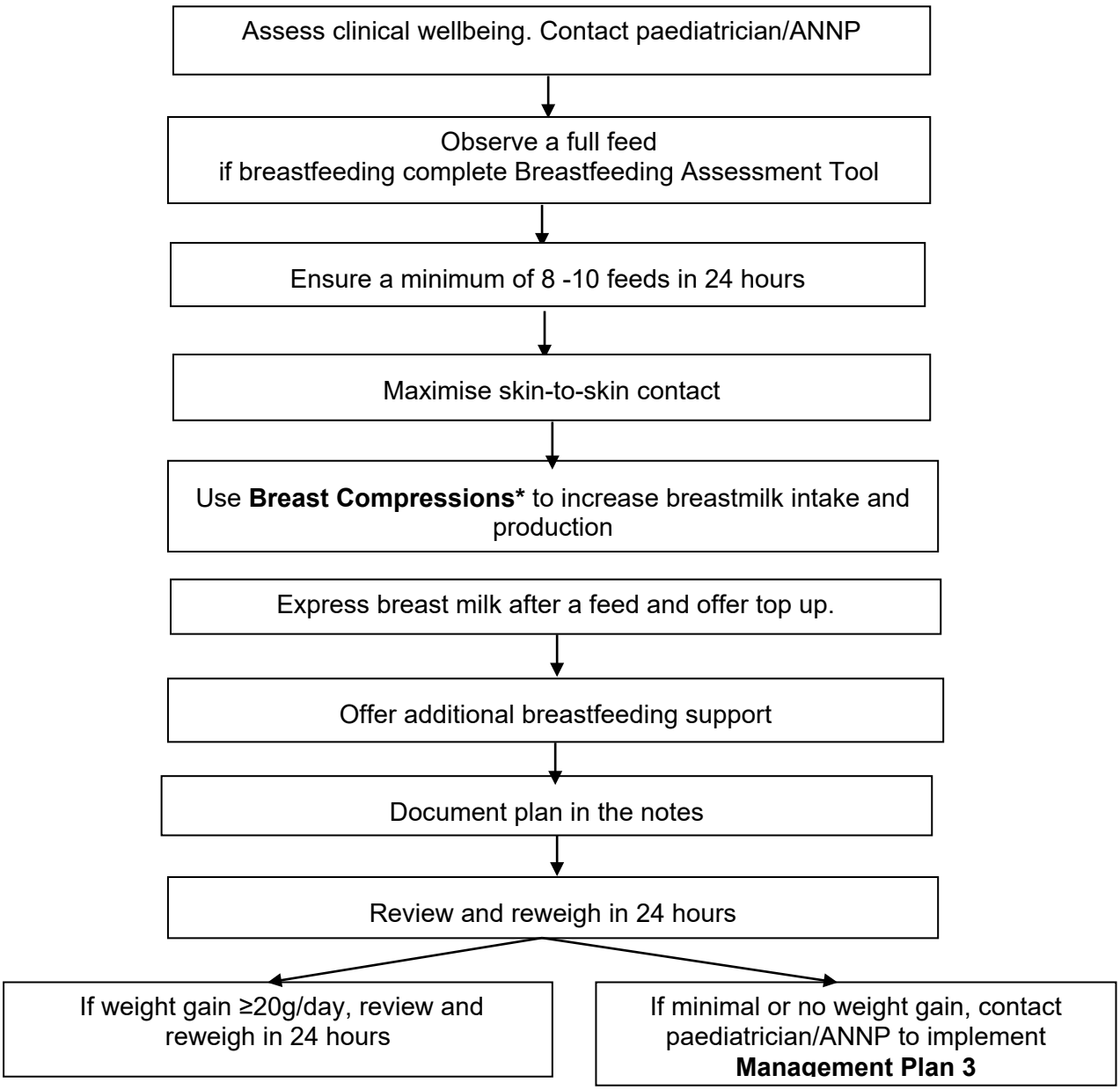
(*or no/minimal improvement following Management Plan 1)*

1. Assess clinical wellbeing and document care plan. If any significant concerns are identified, follow appropriate guideline.
2. Inform the paediatrician/ANNP on call of the weight loss with a view to following **Management Plan 2**.
3. **Observe a full feed**. Use **Breastfeeding Assessment Tool** to assess effectiveness of breastfeeding.
4. Ensure a minimum of **8-10 feeds in 24 hours.**
5. **Maximise skin-to-skin** contact.
6. Whilst baby is suckling at the breast, use **Breast Compressions** to increase breastmilk intake and production.
7. Express breast milk after each feed and offer this as a top up, preferably using a cup (if competent and in hospital) or a bottle. Don't force this amount - allow the baby to take what it can.
8. If little or no milk is expressed, it could be clinically indicated to give a top up of artificial milk, with a plan from Paediatric team. This also requires full maternal consent. A supplementation audit form **must** be completed.
9. Ensure parents are educated on how to recognize signs of effective feeding.
10. **Weigh again in 24 hours**
11. Carry out another Breastfeeding Assessment and ensure further support is offered where required
12. Document Infant Feeding Management Plan 2 in notes with next visit date and time.
13. If weight gain of ≥20g/day weigh again in 24 hours.
14. If minimal or no weight gain contact the paediatrician/ANNP to establish if **Management Plan 3** should now be followed.

MANAGEMENT PLAN 2

> 10% to 12% loss of birthweight at any contact

or no/minimal improvement following Management Plan 1



Appendix 3: Management Plan 3 Guideline

>12% loss of birthweight at any contact

or no/minimal improvement following Management Plans 1 and 2

- Refer immediately to paediatric staff – **this is mandatory**
- Consider admission to Neonatal Unit (NNU) if baby is severely hypernatremia or clinically unwell.
- At readmission, take blood tests for FBC, CRP, U&E's and SBR. Perform sepsis screen and commence antibiotic treatment if CRP is raised.
- Submit DATIX form regarding weight loss and re-admission.
- Inform Infant feeding Lead Midwife for specialist support.
- If artificially feeding Paediatrician will determine quantities required for 3 hourly feeds.
- If a little or no milk is expressed, it could be clinically indicated to give a top up of artificial milk with a plan from Paediatric team. This also requires full maternal consent. A supplementation audit form **must** be completed. As the breastmilk supply increases, decrease the volume of formula milk.
- **Observe a full feed**. Use **Breastfeeding Assessment Tool** to assess effectiveness of breastfeeding.
- Ensure a minimum of **8-10 feeds in 24 hours.**
- **Maximise skin-to-skin** contact.
- Whilst baby is suckling at the breast, use **Breast Compressions** to increase breastmilk intake and production.
- Use an electric pump to increase milk supply (encourage 'double pumping') and offer this as a top up.
- Ensure parents are educated on how to recognise effective feeding.
- **Weigh again in 24 hours**
- Carry out another Breastfeeding Assessment and ensure further support is offered where required
- Document Infant Feeding Management Plan 3 in notes.
- Reweigh in 24 hours, then daily weights until clear trend towards birth weight is demonstrated.

The baby can be discharged from midwifery care if consistent weight gain is shown, but the plan must be handed over to the Health Visitor by documenting in the red child health record.

MANAGEMENT PLAN 3

Baby who has lost >12% of birthweight at any contact

or no/minimal improvement following Management Plan 1 & 2

Refer immediately to paediatric staff – **this is mandatory**

↓

FBC, CRP (+/- sepsis screen), U & E's and SBR

Consider admission to NNU if baby severely hypernatraemic or clinically unwell

↓

Submit datix regarding readmission

↓

If little or no milk is expressed, it may be clinically indicated for to give a formula top up of artificial milk, as per paediatrician plan.

↓

Ensure a minimum of **8-10 feeds in 24 hours.**

↓

Observe a full breastfeed – complete Breastfeeding Assessment tool

↓

Use **Breast Compressions*** whilst feeding

Use electric pump to stimulate milk supply - 'double pumping'

↓

maximise skin-to-skin contact

Offer additional breastfeeding support

↓

As EBM volumes increase/milk transfer confirmed on Breastfeeding Assessment, reduce the amount of formula milk top ups

↓

Reweigh in 24 hours, then **daily** weights until clear trend towards birthweight

↓

The baby can be discharged from midwifery care if consistent weight gain is shown