All Wales Midwifery-Led Care Guidelines

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The latest approved version of this document is online.
If the review date has passed please contact the Author for advice.

Powys Teaching Health Board is the operational name of Powys Teaching Local Health Board
Bwrdd Iechyd Addysgu Powys yw enw gweithredol Bwrdd Iechyd Lleol Addysgu Powys

Version Control

Version	Summary of Changes/Amendments	Issue Date
1	1st issue	Jan 2007
2	Reviewed and updated with NICE (2008) Intrapartum Care Guidance And NICE antenatal care guidance (2008)	Jan 2009
3	Reviewed SBAR transfer documents replaced	Dec 2013
4	Reviewed in line with NICE guidance and Updated RCOG guidance for managing emergencies.	Dec 2015
5	Updated by All Wales October 2017 – adopted by Powys Teaching Health Board July 2018	July 2018
6	Updated through All Wales working group 2022 – substantial changes to the document. Adopted by Powys Teaching Health Board Dec 2022	Dec 2022

ENGAGEMENT & CONSULTATION

Key Individuals/Groups Involved in Developing this Document

Role / Designation
Consultant Midwives Cymru including PTHB Consultant Midwife

Circulated to the following for Consultation

Date	Role / Designation
21/10/2022	Powys Maternity Leadership and Management Team
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Groups approved at	
8/11/2022	Maternity Policies and Procedures Group
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Evidence Base
Please list any National Guidelines, Legislation or Health and Care Standards relating to this subject area? NICE Guidance CG190. Intrapartum Care for Healthy women and babies (2014) NICE Guidance NG121. Intrapartum Care for women with existing medical conditions or obstetric complications and their babies (2019) Full reference list within the main document
Detail: This guideline is adopted in full for use in Powys Teaching Health Board with the exception of one recommendation detailed in the caveat below. **Powys Caveats:** The recommendation in section 10 relating to interprofessional working cannot be achieved in Powys in relation to an identified link for obstetrics and neonatology. This is because Powys maternity services do not have a lead link obstetrician or neonatologist linked to the freestanding midwifery units. Advice can be sought from named obstetricians and neonatologist in the obstetric unit specific to an individual case if it is required on a case-by-case basis. If women choose to give birth in an obstetric unit or alongside midwifery-led unit this will need referral to the Health Board/NHS Trust of choice. Referral should be completed in a timely manner. This guideline should be used in conjunction with: • MAT068 – Pan-Powys Maternity Transfer and Communication to Ambulance Services Standard Operating Procedure (SOP) • MAT079- Informed Choice, Personalised Care and The Care Of Women Making Choice Outside Of Recommended Guidelines

- MAT 080 **-** All Wales Early Onset Sepsis Risk Assessment for Infants Over 34 Weeks Gestation – noted as Appendix 5 in this guideline.

All Wales Maternity & Neonatal Guidelines

All Wales Midwifery-Led Care Guideline 6th Edition

Documents to read alongside/ support this guideline	-NICE Guidance CG190. Intrapartum Care for Healthy women and babies (2014) -NICE Guidance NG121. Intrapartum Care for women with existing medical conditions or obstetric complications and their babies (2019)

Version Control					
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6	August 2022	Consultant Midwives Cymru Bryany Tweedale- Consultant Midwife (CTM) Elizabeth Rees- Consultant Midwife (HDUHB) Emma Mills -Consultant Midwife (ABUHB) Judith Cutter -Consultant Midwife (C & VUHB) Laura Latina- Consultant Midwife (BCUHB) Sarah James –Consultant Midwife (C & VUHB) Shelly Higgins- Consultant Midwife (PTHB) Victoria Owens-Consultant Midwife (SBUHB)	19/08/2022	19/08/2025	October 2022
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5th Edition		E M Davies, Consultant Midwife (Abertawe Bro Morgannwg University Health Board) Marie Lewis, Practice Development Midwife (Powys Teaching Health Board)		October 2020	October 2017

Disclaimer: These guidelines have been ratified at the Maternity/Neonatal Guideline Meeting; however clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt, contact a senior colleague or expert. Caution is advised when using guidelines after the review date.

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Contents

Glossary

AFM – Altered Fetal Movement

AMU – Alongside Midwifery Unit

AWCPNL – All Wales Clinical Pathway for Normal Labour

BCG - Bacillus Calmette-Guerin

BMI – Body Mass Index

BP – Blood Pressure

BRAN Benefits/Risks/Alternatives/Nothing

CEfM – Continuous Electronic Fetal Monitoring

CoC – Continuity of Carer

CPD – Continued Professional Development

DOM - Duty Operational Manager (within WAST)

EFW – Estimated Fetal Weight

EMRTS – Emergency Medical Retrieval Team

EOS – Early Onset Sepsis

FBC – Full Blood Count

FHR – Fetal Heart Rate

FMU – Freestanding Midwifery Unit

GAP – Growth Assessment Protocol

GBS – Group B Streptococcus

GDM – Gestational Diabetes Mellitus

GP – General Practitioner
GROW – Gestation Related Optimal Weight

HART – Hazardous Area Response Team

Hb – Haemoglobin

HCP Health Care Professional

HIE – Hypoxic Ischaemic Encephalopathy

HIV – Human Immunodeficiency Virus

HR – Hear Rate

IAP – Intrapartum Antibiotic Prophylaxis

IIA – Intelligent Intermittent Auscultation

IPC – Infection Prevention and Control

IUGR – Intrauterine Growth Restriction

LLETZ – Large Loop Excision of the Transformation Zone

MBL – Measured Blood Loss

Mls – Millilitres

MDT – Multidisciplinary Team

MLC – Midwifery-Led Care

MLCC – Midwifery-Led Continuity of Care

NEPTS – Non-Emergency Patient Transport Service

NEWTTS – Newborn Early Warning Trigger and Track

NICE – National Institute for Health and Care Excellence

NIPE – Newborn and Infant Physical Examination

NNU – Neonatal Unit

OLC – Obstetric-Led Care

OP – Occiput Posterior

OT – Occiput Transverse

OU – Obstetric Unit

PN - Postnatal

PPH – Post Partum Haemorrhage

PROMPT – PRactical Obstetric Multidisciplinary Training

PTSD – Post Traumatic Stress Disorder

PV – Per vagina

RCM- Royal College of Midwives

RCOG – Royal College of Obstetricians and Gynaecologists

RDS – Respiratory Distress Syndrome

SBAR – Situation, Background, Assessment, Recommendation

SFH – Standardised Fundal Height

SGA – Small for Gestational Age

SORT – Specialist Response Operations Team

UCS – Urgent Care Service

USS – Ultrasound Scan

VTE – Venous Thrombo-Embolism

WAST – Welsh Ambulance Service NHS Trust

WHO – World Health Organisation

WMNN – Wales Maternity and Neonatal Network

Opening statement

The process of physiological childbirth holds many physical and psychosocial advantages for women and their babies. Rising rates of intervention during birth, globally, are being correlated with increasing clinical adverse outcomes, including maternal mortality in developed countries[1].

The World Health Organisation (WHO) has announced a state of emergency in global childbirth, calling for targeted strategies to reduce potentially avoidable medical intervention at, or around, the time of birth[2].

This guideline is developed in response to this call and built on the empirical evidence base around the bio-psycho-social benefits of physiological birth. It aims to support the wider health strategy in Wales[3,4] and to maximise the impact of midwifery-led care on birth and wider population health.

This document will support the delivery of the highest quality of midwifery-led care, informed by the available evidence. It will highlight gaps in the empirical knowledge base and make recommendations for future research. The document seeks to support clinicians in the provision of all aspects of care providing clarity in expected care standards.

The guideline aims to facilitate antenatal identification of **all** women who would benefit from midwifery-led intrapartum care and birth in midwifery-led settings[5,6]. To achieve this the evidence base has been explored and, where possible, 'special considerations' will be made for some of the more contentious issues in obstetrics and midwifery. The aim of these special considerations is to utilise the evidence base to reduce variation in care quality and provision in Wales.

> *' *The words woman and women have been used throughout this document as this is the way that the majority of those who are pregnant and having a baby will identify. For the purpose of this document, this term includes girls. It also includes people whose gender identity does not correspond with their birth sex or who may have a non-binary identity'*[7 pg 55].

However, in practice, it is assumed that clinicians will adopt an inclusive approach to their practice and use the term 'pregnant person' should their client be gender variant or transgender.

1. Introduction

The current All Wales Midwifery-led care guidelines have been revised to reflect Maternity Care in Wales- A five year vision for the Future [8] published by Welsh Government in 2019. The aim is to provide a robust clinical governance framework to support midwives in their clinical practice, optimising the five key principles of the document:

- family centred care
- safe and effective care
- continuity of carer
- skilled multi-professional teams
- sustainable quality services

The document *Maternity Care in Wales: A five-year vision for the future*[8] incorporates key findings from the national documents Your Birth, We Care[5] (a survey of women's views in relation to antenatal care and place of birth) and *Midwives' Voices* Wales (where midwives in Wales responded to the identified themes).

- models of care
- antenatal information giving
- continuity of carer
- enabling choice

The guidelines are not intended to replace the knowledge, skills and clinical judgement of autonomous professionals, but to reflect national guidance from the Royal College of Midwives (RCM), Royal College of Obstetricians and Gynaecologists (RCOG) and the National Institute for Health and Care Excellence (NICE) whilst facilitating maternal choice and optimising physiological birth.

International research has highlighted that women globally want and value a normal physiological birth[9]. In *Your Birth We Care*[5], women in Wales said that they wanted unbiased information given around their place of birth options, continuity of carer, and to have their choices supported. Maternity Services in Wales focus on safe and effective care where a positive birth experience is not seen as an additional extra, but rather an integral, high valued aspect of maternity care.

2. Who is the guideline for?

The revised All Wales Guidelines for Midwifery-led Care (MLC) are to support midwives and obstetricians to ensure that the key principles of the maternity care in Wales: a five-year vision for the future[8] are embedded in clinical practice.

3. Facilitating choice

The UK has strong legislation and legal frameworks in place to support women's autonomy over their own bodies, and the right to decline treatment[,10,11,12]. The role of the midwife is to build a trusting relationship[13] with the woman, to provide non-biased information based on the best available evidence, to facilitate informed choice[14], and to document these discussions and the care provided[15].

Recommendations

- All discussions should be conducted without bias and coercion and every effort should be made to understand the woman's wishes, whilst supporting their choices. Information should be provided in line with guidance[14].

- Risk ratios should be provided to aid discussions and should use absolute risk where available[14].

- It is recommended that women are encouraged to use a recognised framework, for example BRAN, to help navigate the choices during maternity care.

- Any decision-making aid should meet recommended standards[14] (NICE Standard Framework

- Midwives and obstetricians should be aware of the principles of informed choice and the professional responsibility to be up to date with this information[15]. Recommended NICE on-line learning module.

- All discussions should use clear language, avoid acronyms, and interpreters should be used where necessary.

- Locally agreed or national information leaflets (e.g. RCOG, NICE, EIDO) should be used where appropriate, and a copy given to the woman to further support decision making.

4. Antenatal Care

4.1 Models and pathways of antenatal care

Definition of the Midwife-led Continuity of Care (MLCC) model:

> '*A MLCC model provides women with care from the same midwife or small team of midwives during pregnancy, birth, and the postnatal period, with appropriate involvement of the multidisciplinary team when needed. This involves coordination and provision of care led by midwives which enables the development of a therapeutic partnership between the midwife and woman over time. MLCC is woman-centred and based on the premise that pregnancy and childbirth are normal life course events.*
>
> *A MLCC model comprises, but is not limited to, the following elements:*
> - *The model is supported and implemented within health care systems*
> - *The model is made available to all women, independent of individual and clinical circumstances.*
> - *A primary/named MLCC midwife is allocated to every woman from the start of the pregnancy*
> - *The MLCC midwife follows a woman across settings including institutions and community through all phases of pregnancy, birth and the postnatal period. Coordinating collaboration with other health professionals when necessary*
> - *The midwife provides holistic care addressing the woman's social, emotional, physical, psychological, spiritual and cultural needs and expectations*
> - *The midwife is an advocate for the woman and her choices*
> - *Students are trained within a MLCC model and exposed to continuity of care during their midwifery education programme*.'[13 pg1]

MLCC models are known to; reduce the chance of adverse outcome during pregnancy, reduce intervention at the time of birth, and improve birth experiences for women[16]. The literature identifies MLCC as integral to the health promotional strategy in Wales, and a key intervention which will positively contribute towards reducing adverse perinatal outcome including pre term birth and stillbirth[13,14].

Continuity of Carer (CoC) is a key principle of the strategic vision for maternity services in Wales[8]. All Health Boards in Wales are committed to achieving models of antenatal and postnatal MLCC by 2024.

Recommendations

- Every woman should have a named midwife allocated at booking[17], plus an allocated buddy midwife[8].

- Women **without** additional care needs[18] should be recommended and supported to follow a MLCC pathway.

- Women should see no more than two midwives for routine antenatal care[8].

- Where possible continuity into intrapartum care should be facilitated[16].

- Student Midwives should be supported to be exposed to MLCC models throughout their training in line with the Future Midwife Standards[7].

4.2 Criteria for Midwifery-led Antenatal Care

Recommendations

- Suitability for midwifery-led antenatal care should be considered in accordance with NICE Antenatal Care[17], Intrapartum care for healthy women and their babies[6], Intrapartum Care for women with medical conditions or obstetric complications and their babies[19] and the All-Wales Antenatal Care Criteria (Appendix 1).

- The lead carer should be assessed and documented by the midwife during the booking visit[17].

- If the initial assessment indicates a need for clarity of information from another health care provider, or from previous birth records, this should be sought at the first opportunity. The midwife should follow up any request if necessary, to ensure lead carer is suitable for individual need.

- Ongoing assessment of lead carer, and care plan, should continue at each antenatal contact[17,20]. This assessment should be documented in the relevant area of the All-Wales Maternity Record, any recommended change to the planned place of birth documented accordingly and discussed with the woman.

- Systems of referral should be clear and concise from MLC to Obstetric Led Care (OLC) as well as OLC to MLC to meet individual clinical need[20].

- Any recommended change of lead professional should be discussed and agreed with the woman, documented in the All-Wales Maternity Record and communicated with the named midwife.

- There may be instances where specialist midwifery clinics are used to support antenatal care pathways- these should have a comprehensive protocol and governance process

agreed by the multi-professional team. The protocol should include: ○ a clearly defined inclusion criterion,

- ○ schedule of care and process for referral for prompt obstetric opinion if required.
- ○ internal monitoring and ongoing assessment ○ clear reporting mechanisms.

4.3 Routine Antenatal Care, Timings and Principles

Recommendations

- Midwives should be the first point of contact for all pregnant women[17]. First contact should be encouraged as early as possible.
- All routine antenatal and postnatal care should be provided by the named midwife or their 'buddy'[8,16].
- The named midwife will be the care coordinator and care provider[8,13].
- Antenatal care should be offered in venues that meet the needs of women. These venues should be community based and enable flexibility in timing and length of antenatal appointments[17].
- Routine antenatal care should, at the very least, be provided in line with NICE schedule of antenatal care[17] and should be tailored to clinical, psychosocial and spiritual need.
- The expected schedule of care should be discussed with the woman at the first appointment[15].
- Care should avoid any duplication [4,5,17].
- Antenatal pathways should support identification of women who would benefit from a midwifery-led birth [6,21].
- There may be some care episodes where virtual consultations are a suitable alternative to face-to-face care, and this should be assessed on an individual basis [17].
- In instances where women transfer their pregnancy care to another care provider during pregnancy/birth or the postnatal period, there must be liaison with the original maternity service to ensure adequate information sharing and care provision, related to both clinical and safeguarding factors.

- In times of a pandemic, professional guidance should be utilised to support the safest schedule of care.

5. Birth planning.

Women suitable for midwifery-led care at the onset of labour will be exposed to an increased rate of intervention during birth by commencing labour on an Obstetric Unit (OU)[6,21,22,23,24]. The reasons for this are multifactorial, but numerous studies have shown an increased rate of intervention, including assisted vaginal birth and caesarean birth, with no improvement in outcomes for the baby [6,21]. (NICE: Planned Place of Birth)

This information should be a guiding governance principle in maternity care provision[25]. Service structure should seek to promote only necessary birth related intervention, and optimise maternal and neonatal, short and long term, health and wellbeing through the healthiest birth environments based on clinical need.

At first contact and throughout pregnancy, women should be given the opportunity to discuss birth mode[25.] Discussions around the advantages and disadvantages of all birth modes should be held '*with women taking into account their circumstances, concerns, priorities, and plans for future pregnancies'.* Some information to support mode of birth discussions can be found here. Information around the likelihood of birth related intervention should be discussed in line with the birthplace study. This should include information around routine process and procedures, recommendations, and care options where intervention is medically advised. Information should be available in various formats and must be accessible.

Recommendations

- Midwifery-led areas should be actively promoted and marketed in Wales[5]

- The All-Wales Place of Birth Assessment Document (Appendix 2) should be used to guide birth planning.

- A full assessment of previous and current medical and obstetric history should be made by the midwife when considering birth place recommendations[6].

- All health professionals should be able to provide unbiased information around birth settings[6,14] (Recommended resources to support birth discussions)

- A discussion by 36 weeks between the woman and her named midwife should take place (preferably at home[7]) to include options for place of birth and intrapartum care[6,8,] with an opportunity to discuss any issues and ask questions[13].

- The advantages and disadvantages of each birth setting should be outlined[6,] and an individual professional recommendation around the safest place of birth should be made and documented in the All-Wales maternity record.

- The Birth Place Decision leaflet can be used to aid discussions and inform decision making. Localised versions may be available.

- Where women are following a midwifery-led pathway of care and choosing to birth on an obstetric unit without clinical indication, an additional discussion should take place to ensure women are supported to make a fully informed choice. This should be documented in the maternity records.

- If a pregnant woman has received input from an obstetrician during the pregnancy, and it is unclear where the recommended place of birth is, the named midwife should hold a discussion with the named obstetrician to consider an appropriate plan of care. Receiving obstetric input during pregnancy does not necessarily mean that a woman would not be recommended to have her baby in a midwifery-led setting, but does mean individual assessment is usually required[6].

- Women in category B of the All-Wales Place of Birth Assessment Document (Appendix 2) will require documented individual assessment around place of birth. This should include consideration of any additional care need requirement. There should be a locally agreed pathway/process for counselling women in this group.

- Women choosing to birth in a midwifery setting in category A of the All-Wales Birth Assessment Document (Appendix 2) will be birthing outside of guidance and will require a detailed individualised care plan to support this choice.

- Midwives should have access to locally agreed pathways for women birthing outside of guidance. Individual care plans should be shared with the birth areas, care providers and contain details to support midwives in care delivery.

- Models of midwifery-led intrapartum care should not be changed due to identified additional clinical needs of the woman or fetus/baby. Women will be informed of these care needs and opt into/out of the care model that is available in the chosen place of birth. There is no evidence to support additional monitoring in midwifery-led settings outside of the All-Wales Clinical Pathway for Normal Labour (AWCPNL) [22].

- Women should be advised that where they wish to accept recommended additional care or monitoring (outside of the AWCPNL), including Continuous Electronic fetal Monitoring (CEfM), then they will need to plan to birth on an obstetric unit[6].

5.1 Place of Birth

It is nationally accepted that at least 45% of women should be suitable to birth in a midwifery-led setting at the onset of labour[7,27]. Maternity services and care provision should be designed to support this as a strategy[6,8,25,27].

Recommendations (most recommendations from this section are directly quoted from NICE CG190)[6] (pg. 6-10)

- *'Advise low risk multiparous women that planning to give birth at home or in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit.'*

- *'Advise low risk nulliparous women that planning to give birth in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit. Explain that if they plan birth at home there is a small increase in the risk of an adverse outcome for the baby.'*

- *'explain to low risk multiparous women that:*

    - *planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with higher rates of spontaneous vaginal birth than planning birth in an obstetric unit*

    - *planning birth in an obstetric unit is associated with a higher rate of interventions, such as instrumental vaginal birth, caesarean section and episiotomy, compared with planning birth in other settings*

    - *there are no differences in outcomes for the baby associated with planning birth in any setting.*

- *explain to low risk nulliparous women that:*

    - *planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with higher rates of spontaneous vaginal birth than planning birth in an obstetric unit*

- *planning birth in an obstetric unit is associated with a higher rate of interventions, such as instrumental vaginal birth, caesarean section and episiotomy, compared with planning birth in other settings*

- *there are no differences in outcomes for the baby associated with planning birth in an alongside midwifery unit, a freestanding midwifery unit or an obstetric unit.*

- *planning birth at home is associated with an overall small increase (about 4 more per 1000 births) in the risk of a baby having a serious medical problem compared with planning birth in other settings.'*

- Birth place options should be discussed in the context of the known evidence base. Midwifery-led settings should be assumed for women without additional care needs, unless the woman 'opts out' of this care recommendation.

- Health Boards should aim to have all four birth settings available to women.

Where FMU's are not available there should be clear referral pathways to other Health Boards to support this birth choice and the known reduction in intervention seen in these settings[5,6].

5.2 Special considerations in birth planning and professional recommendation in place of birth.

5.2.1 Standardised Fundal Height (SFH) or Estimated Fetal Weight (EFW) over 90th centile (SBAR- 1)

Recommendations

- Gestation Related Optimal Weight (GROW)[28] Charts should be printed using the 3rd, 10th, 50th ,90th and 97th centile.

- Follow Growth Assessment Protocol (GAP) guidance[28]- Where first Standardised Fundal Height (SFH) measurement is above the 90th centile and there are no concerns around polyhydramnios, growth surveillance should continue via fundal height measurement. Where growth is maintained at the expected trajectory USS is NOT required[28]. Reassure the woman that SFH is not attempting to estimate weight, only to provide an initial baseline and then measure continued growth trajectory.

- Where SFH shows accelerative growth trajectory at any time, a referral for an USS should be made[28]. Accelerative growth suspected via SFH is defined as growth from one routine measurement to the next which exceeds the trajectory of the 90th centile.

- Where EFW on ultra sound scan (USS) is above the 90th centile but below 97th do not offer any further USS, unless otherwise indicated, the woman can remain on a midwifery-led pathway without adjustment. The perinatal institute defines 'excessive EFW' via GAP as that over the >97th centile on USS (Perinatal Institute: Definition of excessive EFW via GAP)[28].

- Offer suitable women the opportunity to participate in relevant research studies as per agreed protocols[28].

5.2.2 Estimated Fetal Weight over 97th centile (SBAR-1)

Recommendations

- Refer to Obstetric Led Care where EFW via USS is ≥97th centile, for a discussion around individualised care planning.

- Provide women with national and local information around scan accuracy in estimating fetal weight[28].

- Advise women that it is widely recognised that USS and abdominal palpation remain poor predictors of macrosomia and/or of shoulder dystocia as a result of macrosomia[28].

- Advise women with an EFW ≥97th centile that macrosomia (Birth Weight of >4 –4.5kg) increases the chance of some birth complications, including shoulder dystocia and intrapartum related intervention such as caesarean birth[29.] Overall birth planning should occur with the woman and consider all birth options in line with best available evidence[14].

- Estimated fetal weight equal to or more than 97th centile recorded on individualised growth charts may provide a better indicator of where fetal weight is considered out of proportion to the woman[28] outside of traditional birth weight indicators, as 50% of shoulder dystocia happens in 'normal' birth weight infants.

- Individual care planning will support some women to plan birth in a midwifery-led setting in the absence of any other complexity. Suspected macrosomia does not automatically exclude women from midwifery-led birth settings, but it does prompt individual assessment[6] and consideration of the various models of care[1]. This assessment and discussion should be weighed against the benefits of midwifery-led settings for women who have no existing additional care needs.

- All other complexities should be considered and caution taken where these exist, including raised BMI >35. In the instance of any other additional care need birth is recommended on the OU.

- Individual assessment and supporting discussions should be fully documented in the relevant section of the All-Wales Maternity Records.

- Individual care plans should be in place to support women who are choosing to birth in a midwifery-led setting with EFW ≥97th centile.

- More research is required to explore the most suitable intended place of birth for women where EFW ≥97th centile is the only identified antenatal concern.

5.2.3 Care for women with obesity (SBAR-2)

BMI 30-34.9 (Class 1)

Recommendation

- In the absence of co-morbidities, women in obesity class I who have a negative gestational diabetes screen, un-complicated abdominal palpation and ease in fetal auscultation with hand held doppler device or Pinnards stethoscope, should be supported to plan to birth in a midwifery-led setting [6,21,31].

BMI 35-39.9 (Class II)

Recommendations

- Women in obesity Class II follow an obstetric led (or specialist Midwifery) antenatal pathway, however evidence suggests that class I and II maternal obesity is not a reason, in itself, for advising birth within an OU, but indicates that further consideration of birth setting may be required[31].

- Multiparous women with a previous vaginal birth are suitable for a midwifery-led setting for birth and have the same chance of transfer and obstetric complication as a nulliparous woman with a BMI <30. Birth counselling in this population should occur in line with nulliparous women suitable for midwifery-led care[31,32]

- In nulliparous women the possibility of additional intrapartum complication linked to maternal obesity should be discussed[31,32,33] (UKMidSS Infographic), along with models of care, so that an informed choice about planned place of birth can be made. Parity is the most important factor in class II obesity. Nulliparous are recommended to plan to birth on the obstetric unit.

- Where possible, and in line with local health and safety risk assessments, women in obesity class I and II should be supported to use water immersion for analgesia during the 1st stage of labour.

- Where it is difficult to perform abdominal palpation and auscultation of fetal heart rate (FHR) via hand held doppler device or Pinnard stethoscope, or there are any further co-morbidities, birth should be recommended on the OU.

- Ensure correct equipment is in place to care for women in a midwiferyled setting. For example, birthing beds that hold over 125kg in weight, pool evacuation nets, wide wheelchairs and large blood pressure (BP) cuffs.

- Birthing pool evacuation procedures should provide guidance to midwives for this group of women.

- An active 3rd stage is a reasonable recommendation for all classes due to the small increased likelihood of postpartum haemorrhage (PPH). Consider administering a uterotonic via deltoid if women are in the pool for birth or have disproportionate weight in their lower body.

5.2.4 Parity 4 or more (SBAR 3)

Recommendations

- Women who are up to and including para 4 remain midwifery-led and should be offered a midwifery-led setting for birth, if there are no other co morbidities.

- Women who are para 5 require obstetric antenatal care and an individual discussion and assessment for place of birth.

- Women who are para 6 or more birth should be advised to birth on an obstetric unit and should have an individualised birth plan if choosing to birth in a midwifery-led setting.

- An active 3rd stage is recommended in all settings.

5.2.5 Women administrating daily antenatal anticoagulant therapy or prophylaxis (SBAR 4)

Recommendations

- Women should be informed of the possible increased chance of PPH of both >500mls and >1000mls with antenatal anticoagulants. This may exist even where this medication is in prophylactic doses and has not been received in the last 12-24 hours.

- Increased chance of PPH is seen in women administering prophylactic antenatal anticoagulation, but mean blood loss and blood transfusion are not thought to increase.

- A decision as to whether or not to accept antenatal thromboprophylaxis should be made with the woman and be balanced against the chance of venous thrombo-embolism (VTE). This discussion should be initiated by the community midwife and continued via an obstetric appointment by 28 weeks. Consideration of place of birth, and the known benefits of midwifery-led settings for suitable women, should be a part of the antenatal conversation.

- If antenatal thromboprophylaxis is declined, assessment and discussion around postnatal prophylaxis should be undertaken. Where accepted, this should be arranged in the antenatal period. The woman would remain under midwifery-led care.

- Where antenatal thromboprophylaxis is accepted by the woman, care should be transferred to a named obstetrician.

- It is unclear if women on antenatal thromboprophylaxis should be advised to birth on an obstetric unit. More research is required to support birth planning in this group, but it seems reasonable to consider this as a precaution in the absence of quality evidence and the suggested increased chance of postpartum haemorrhage.

- An active 3rd stage is recommended in any setting.

- Future research should aim to conclude if there are additional obstetric or neonatal birth complications in women using prophylactic anticoagulation who are birthing in midwifery-led settings.

- Where there is an antenatal VTE score of 2, and postnatal thromboprophylaxis is accepted, midwives should follow local process antenatally to ensure this will be available in all birth settings.

5.3 Antenatal information for women, and their birth partners, around possible transfer during labour, birth and the early postnatal period.

Recommendation

- In order to support informed decision-making, pregnant women should be informed that:
  - There is a possibility of the need to transfer during labour or in the immediate postnatal period from a midwife-led setting to an OU.
  - For nulliparous women, the likelihood of needing to transfer in from home is 45%, with 36–40% transfer rates for midwifery-led units[21]. ○ For multiparous women, the transfer rate from home or a midwifery unit is around 10%[20]
  - For both nulliparous and multiparous women, FMU's offer the lowest rates of transfer[21].
  - Data including the likelihood of transfer happening should be discussed from the Birthplace Decisions Leaflet.
  - Localised statistics should also be available to women. ○ The reasons for transfer, possible mode of transport, distances and travel times for transfers should be provided[6].

- Discussion should include information that details transfer in emergency situations is always to the nearest obstetric unit, or designated receiving hospital in the Health Board providing care, regardless of where antenatal care has been received.

6. Care in the latent Phase of Labour

Definition of the latent and established first stages of labour:

> '*Latent first stage of labour – a period of time, not necessarily continuous, when: there are painful contractions and there is some cervical change, including cervical effacement and dilatation up to 4 cm*.' [6 (pg. 19)]

Recommendations

- Information around the latent phase of labour should be provided during the antenatal period. This should include coping mechanisms for this stage of labour and the known benefits of remaining at home during this period.

- *'All women must undergo a full clinical assessment when presenting in early or established labour. This must include a review of any risk factors and consideration of whether any complicating factors have arisen which might change recommendations about place of birth. These must be shared with women to enable an informed decision re place of birth to be made'*[34]

- On-going assessment of suitable place of birth should be made during every pre labour assessment in the latent phase of labour.

  The principles of Part 1 of the AWCPNL should be used at every telephone contact with women who are reporting signs of labour.

- Standard local processes for documentation of telephone assessment should be followed.

- Women should be offered home assessment where suitable[6,8].

- All initial labour assessments (part 2 assessments AWCPNL) should be undertaken for at least 1 hour and should occur in a midwifery setting if not provided at home[6].

- All face-to-face initial labour assessments should be undertaken in line with part 2 of the AWCPNL.

- Care in the latent phase should be provided in line with AWCPNL.

    - *'Advise the woman and her birth companion(s) that breathing exercises, immersion in water and massage may reduce pain during the latent stage of labour[6].*

    - *Midwives should recognise that a woman may experience painful contractions without cervical change, and although she is described as not being in labour, she may well think of herself as being 'in labour' by her own definition.*

    - *Offer her individualised support, and analgesia if needed 6.*

Following holistic assessment, *encourage women in the latent phase of labour to remain at, or return home, unless doing so leads to a significant risk that she could give birth without a midwife present, that she may become distressed, or it is her preference to remain in the assessment environment*[6'].

6.1 Special considerations for each face-to-face initial labour assessment (part

2 AWCPNL)

Standardised fundal height (SFH) measurement during initial labour assessments (SBAR 5).

Recommendations

A full review of overall antenatal fetal growth (via Growth Assessment Protocol (GAP) [28]) and current fetal wellbeing should be undertaken as per part 2 of the AWCPNL, this should occur at each face-to-face initial labour assessment.

- Where there has been no assessment of fetal growth for 2 weeks, or more, SFH measurement and overall growth assessment via the GROW chart should be undertaken in all women.

- If antenatal growth surveillance has been via serial USS (e.g. BMI 35, smoker, previous SGA), SFH measurement is not predicative or valuable and should not be undertaken. Suitability for intrapartum fetal surveillance via intermittent auscultation and midwifery-led care should be considered within the context of all serial scan results in line with GAP and the GROW chart.

- Do not measure SFH during initial labour assessments (AWCPNL part 2), where; women have no additional care needs, there are no concerns on abdominal palpation and antenatal surveillance and assessment has; ○ been completed antenatally in line with GAP ○ shown a normal growth trajectory on GROW chart ✓
  ○ been completed and plotted as normal within 2 weeks of the initial labour assessment. ✓

*Note that where SFH measurement is not undertaken, the rationale (as above) for this should be documented in the AWCPNL.

7. Intrapartum Care-

The balance of 'too much too soon' versus 'too little too late' is a contemporary issue[1] which should be a guiding principle in care planning and philosophy when caring for healthy women during an uncomplicated physiological labour and birth.

7.1 Definition and Criteria

'*Established first stage of labour – when there are regular painful contractions and there is progressive cervical dilatation from 4 cm*.' [6 (Pg19)]

- Criteria for midwifery-led intrapartum care should be in line with NICE 6,19 the AWCPNL (2020) and the All Wales Place of Birth Assessment Criteria (Appendix 2) but will include:
  - a healthy pregnancy without complications ✓
  - labour occurring between 37+ 0 to 41+ 6 completed weeks ✓
  - a singleton pregnancy with a cephalic presentation ✓

7.2 Intrapartum care provision

Recommendations

- Care should be provided in line with the AWCPNL.

  Ongoing holistic assessment should continue throughout labour and birth. Any changing or emerging complexities should be identified, and place of birth and model of care should be re-evaluated in light of new/emerging information.

- Birth environments should be assessed in line with the Midwifery Unit Standards[35] and should support the known physiology of birth including hormonal feedback mechanisms.

- There should be a locally agreed essential skill set for midwives working in midwifery-led areas[35] (an example can be found in standard 12 of the Midwifery Unit Standards). Annual midwifery training should include education supporting this expert skill set.

7.3 Intrapartum Fetal Surveillance

Recommendations

- Assessment of fetal wellbeing during each initial labour assessment should occur in line with the AWCPNL part 2 assessment.

- Fetal surveillance using intelligent intermittent auscultation (IIA) should be offered to all women who meet the criteria for midwifery-led intrapartum care, regardless of birth setting [6,36,37.]

- Midwives should be aware of all physiology which may indicate transition from latent phase to active labour, and from the 1st and 2nd stage of labour. Fetal surveillance should be appropriately increased where this transition is suspected or confirmed[35].

- Increased surveillance where any deviation is suspected should occur in line with the AWCPL, and a care plan documented in the AWCPNL accordingly as a variation.

- Where there are any difficulties in effectively monitoring fetal wellbeing via IIA, transfer to the obstetric unit for continuous electronic fetal monitoring should be recommended [6,36.]

- Training in fetal surveillance including IIA should occur annually [35,36].

7.4 Special considerations for intrapartum care

7.4.1 Cervical dilatation at onset of labour (SBAR 6)

Recommendations for nulliparous women ONLY

- Where cervical dilatation is assessed as 4cm at the onset of active labour in nulliparous women;

○ if at the next 4 hourly assessment cervical dilatation remains 4cm or is 5cm, **with** effective contractions, a holistic assessment should be undertaken. ○ Where there are no maternal or fetal concerns, continue 1:1 midwifery intrapartum care and observation in line with AWCPNL, without further intervention, and plan for further vaginal examination in 4 hours.
○ Where the cervical progress is <2cm at the next 4 hourly assessment, then intervention for slow progress in labour should occur in line with the AWCPNL, with further vaginal examination planned in 2 hours. ○ Where there is no further cervical dilation at the next vaginal examination, then the AWCPNL should be exited and transfer initiated (see appendix 3).

- Where the cervix is at least 5 cm at the onset of active labour, expected rate of cervical dilatation and a diagnosis of slow progress in labour should be considered in line with the AWCPNL.

- Regular (monthly audit) should occur in each Health Board for 1 year to provide assurance of the safety of this evidence-based change in midwifery practice. Any unexpected change in rates of outcomes should be escalated via the Wales Maternity and Neonatal Network maternity steering group.

7.4.2 Meconium Stained Liquor (SBAR 7)

Recommendations

- Ensure that women are aware that meconium is a variation and not necessarily a complication.

- Consider the whole clinical picture.

- Where meconium is considered to be non-significant (and in the absence of other risk factors), then the pathway of care should be for women to be supported to receive midwifery-led care.

- Where meconium is considered significant (evidence of dark green or black amniotic fluid that is thick or tenacious, or any meconium stained amniotic fluid containing lumps of meconium), transfer should be recommended to obstetric led care. Recommended care will include CEfM.

- Where liquor is clear but becomes meconium-stained during the intrapartum period, to any degree, this should be considered an emerging risk factor and more likely to be linked to intrapartum events. This should prompt holistic assessment and consideration of transfer.

7.4.3 Care during Water Immersion for Labour and Birth (SBAR-8)

Recommendations

- The choice to labour and birth in water should be available to all women without additional care needs[6].

- Health Boards should ensure access to water immersion is equitable in all midwifery-led units[35].

- For women labouring in water, monitor the temperature of the woman hourly to ensure the woman is comfortable and not becoming pyrexial[6].

- Pool temperature should be regulated by the woman but should be monitored hourly and should not exceed 37.5°[6].

- Keep birth pools and water birth equipment clean using a protocol agreed by microbiology/infection prevention and control (IPC) department, and in accordance with manufacturer's guidance[6].

- Midwives providing care during water birth should be aware of and prepared to respond to cord rupture/snap.

- There is no evidence to advise or discourage management of 3rd stage of labour in water. Local guidelines should support midwives to undertake a third stage during immersion where this is the woman's wish.

- Intramuscular uterotonic can be given into the deltoid muscle if an active 3rd stage of labour is requested in water. This is common practice in many units in the UK.

- Health boards should have local guidance available to support midwives to provide care in water. This should include IPC and health and safety information including ergonomic guidance for attending women in birthing pools, and the detail of emergency pool evacuation training method and expectancy[35].

- Continued professional development (CPD) for midwives, working in areas with accessibility to water immersion, should include safe care during water immersion. This should include estimation of blood loss/ hydration, physiology, activation of hormonal response and management of obstetric emergency during water immersion.

- Evaluate publication of further evidence around water immersion during labour and birth as it is published[38].

7.4.4 Fluid balance and hydration during labour and birth, preventing hyponatraemia. (SBAR 9)

Recommendations

- Discuss with women the importance of remaining hydrated, but also the potential dangers related to fluid overload during labour. Advise women to drink naturally and comfortably to thirst.

- Midwives should have an awareness of a normal safe oral fluid intake during labour and birth which should not exceed approximately 2500 Millilitres (mls) in a 24-hour period.

- Documentation of urine voids and urinalysis should be recorded in line with the AWCPNL.

- There is not enough evidence of effects of hyponatremia in women without additional care needs to recommend intrapartum fluid balance measurement.

- Midwives should be aware of the signs and symptoms of hyponatraemia in women which include:
  - Nausea/vomiting
  - Headache/ Confusion or fatigue
  - Low blood pressure
  - Muscle weakness/twitching or cramps
  - Restlessness or bad temper
  - Seizure

- Midwives should be aware that water freely crosses the placenta, thus neonatal hyponatraemia may co-exist. Signs and symptoms of hyponatraemia in the neonate include seizures similar to those caused by hypoxic ischaemic encephalopathy (HIE).

- Where symptoms are suggestive of hyponatraemia, women/neonates should be transferred for emergency obstetric/neonatal care.

7.4.5 Blood loss measurement during labour and birth (Also See All Wales Post-Partum Haemorrhage Guideline[37]).

Recommendations

- At the onset of every birth in any setting, risk assessment for postpartum haemorrhage (PPH) should be made in line with OBS Cymru stage 0 .

- Risk factors identified on stage 0 do not necessarily mean women need to be advised to birth in an obstetric unit (assessment of this should be made in line with appendix 2), but it does prompt a proactive response to ongoing assessment and 3rd stage of labour management.

- An active 3rd stage of labour should be recommended if any risk factors are identified on the stage 0.

- All blood loss should be measured (MBL), apart from during water birth where it is accepted that blood loss will be estimated. Where visual estimation occurs, the overall clinical picture should also be considered.

- Calculation of cumulative blood loss will be made in line with OBS Cymru and supporting documentation will be completed as required.

- Where MBL reaches 500mls and is ongoing, management should be guided by use of the OBS Cymru PPH management checklist and include initiation of transfer process.

- Where there have been no concerns around atony but total measured blood loss at haemostasis (after perineal inspection and suturing) is between 500-999mls, transfer is not always required[37]. Full assessment of haemodynamic status should be undertaken, which should consider the stage 0 risk assessment as well as the woman's vital signs and feeling of wellbeing.

- Where women are remaining in a midwifery-led area and have experienced MBL 500mls-999mls, a plan should be made for a full blood count (FBC) after 24 hours to identify women who may benefit from postnatal iron therapy.

- If at any time bleeding is regarded as excessive, or the woman is showing signs of hypovolaemia, then emergency action as per OBS
  Cymru should occur, including emergency transfer to the obstetric unit.

8. Transfer from Midwifery-led Care to Obstetric Led Care during labour and birth

8.1 Reasons to exit midwifery-led intrapartum care

Recommendations

- All women who receive midwifery-led care during labour will have ongoing holistic assessment during labour and birth.

- Where deviations occur, in line with the AWCPNL, women will be advised to transfer to the obstetric unit, providing reason for this recommendation.

- All deviations from the AWCPNL must be documented accordingly. Appendix 4/5 is not exhaustive but identifies common maternal and neonatal concerns where transfer would be indicated.

- Where there are two midwives present for transfer, a conversation should occur around who is most appropriate to lead the transfer.

- There should be clear localised guidance for midwives to follow during maternity transfers. These should include escalation process and telephone contact numbers to aid appropriate escalation, as required, to both midwifery on call managers and Welsh Ambulance Service Trust- duty managers.

8.2 Mode of transfer.

Recommendations

- Transfers from AMU's will usually be completed on foot or via wheelchair.

- Women who require transfer from home or FMU's will be risk assessed, and all available transportation resources should be considered as per local arrangements.

- Localised standard operating procedures should be available to support transfer process.

- Local transfer processes must be developed in conjunction with Welsh Ambulance Service NHS Trust (WAST) criteria and resource (Appendix 6), and local Health and Safety teams.

- Modes of transportation may include paramedic 999 ambulance, Urgent Care Services (UCS), Non-Emergency Patient Transport Service (NEPTS), hospital taxi service or the woman's own car.

- Where indicated and available, the Emergency Medical Retrieval Team (EMRTS) will provide an enhancement of pre-hospital critical care to women and neonates in both the home and FMU settings where either are deemed to be in a critical/ life threatening condition (see Appendix 6). The team can support midwives or lead in providing care to stabilise and safely transfer the woman and/or the neonate. Transfer mode may be air or by road and will be decided on a case-by-case basis.

8.3 Principles of Transfer

Recommendations

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- Any deviations requiring transfer should be discussed with the woman and her birth partner and documented within the AWCPNL. Ongoing communication with the woman and her birth partner is paramount during transfer.

- Health Boards should have agreed criteria for maternity transfers around the time of birth. These should be categorised as Non-Urgent, Urgent and Emergency, with suitable modes of transportation for each of these groups.

- Emergency transfers will always be managed via 999 emergency medical service.

- Midwives present with the woman should coordinate the transfer, where possible, to aid effective communication of current clinical information.

- Where using the Emergency Care Service (999), call handlers will use predefined scripts/call cards to prioritise all calls.

- In the event of an emergency transfer, when asked 'what is your emergency?', midwives should confirm where there is an 'immediate threat to life'- and state the obstetric/neonatal emergency clearly.

- The Midwife should request Emergency Medical Retrieval and Transfer Service (EMRTS) attendance where the criteria is met (Appendix 6)

- At the end of all 999 calls, the midwife should confirm with the call handler the grade of response designated (see appendix 6) and provide any advisory information to the call handler, e.g.- paramedic to bring tranexamic acid/neonatal harness to the bedside.

- The midwife in charge and an obstetrician of at least registrar level at the obstetric unit will be informed of the urgency of transfer and recommendation, including preparing the receiving team and/or theatre as required.

- In the case of a transfer of a baby, midwives will liaise with the neonatal registrar who will inform the consultant neonatologist, stating urgency of transfer and to confirm which area the baby should be admitted to.

- Where transfer is in an ambulance, the midwife remains the lead carer and should advise WAST health care staff on their arrival at the birth area around: ○ The reason for transfer, stating when it is an emergency. ○ What paramedic intervention, if any, is required to stabilise prior or during transfer. ○ Need for ongoing monitoring during transfer- including monitoring oxygen saturation.
  - Likeliness of a change in clinical picture during transfer. ○ The level of urgency of transfer/if blue light and sirens are required.
  - Required destination.

- If EMRTS are at the scene, it may be acceptable for care to be handed over to the medical team. Otherwise, the midwife should remain with the woman or baby

- throughout the transfer process, unless transfer has been assessed as appropriate to be conducted in the woman's own transport.

  In all circumstances a transfer team 'leader' should be identified.

- Where possible, midwifery staff should confirm with obstetric unit that the ambulance has left and is en-route.

- On arrival at the obstetric/neonatal unit, the midwife should escort the woman to the appropriate area and hand over to the appropriate medical team in SBAR format. A midwife-to-midwife handover is not usually acceptable.

- Partners to accompany in own transport/taxi.

- Where a baby is being transferred, the mother may be able to accompany in ambulance if her baby does not require resuscitation. A second ambulance may be required to transfer the mother depending on her clinical condition. Where possible, the woman and her baby should not be separated.

- Where both the woman and her baby require transfer for medical reasons, then usually two ambulances will be necessary. This should be communicated with the WAST Call handler.

- All neonatal transfers should be undertaken with appropriate safety restraints/harness in line with WAST protocols. In instances where neonates are transferred via taxi or women's own car, this will be in a British safety approved car seat. No car seats are proven suitable for use in ambulances.

- All WAST 999 vehicles carry neonatal warming equipment, and midwives should request use of this in all emergency neonatal transfer to optimise neonatal thermoregulation and clinical condition.

- All documentation must be completed and accompany the woman in to the receiving OU.

- Timings should be recorded for: ○ time of decision to transfer ○ time transport called (if required),
  - time of arrival of transport at birth setting (if required) ○ time left birth setting
  - time of arrival at obstetric unit/neonatal unit
  - time seen by medical staff

- The midwife should return to his/her area of work via locally agreed mechanism, usually taxi. It is not appropriate to use WAST transportation for this means.

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- There is currently no accepted standard in relation to reasonable transfer times for maternity cases. It is a recommendation that national transfer standards are devised in conjunction with WAST.

- Any delays experienced should be escalated as per local guidance and investigated at the earliest convenience.

- Where home birth is planned, ambulance access to the home address should be assessed by the midwife before 36 weeks of pregnancy.

- Where difficulties are expected in ambulance access, or egress, midwives should liaise with local WAST services, who will undertake a risk assessment in the antenatal period to aid planning for if transfer is required during a homebirth. The risk assessment would normally be completed by the hazardous area response team (HART) leader, a duty operational manager (DOM), or a senior paramedic. Requests should be forwarded to the local WAST operational team for the relevant area.

- On completion of any transfer, the midwife will ensure recording of the transfer as per AWCPNL and local guidance.

- Where possible, WAST and midwifery services should complete simulated learning in emergency transfer via Community PROMPT Wales.

8.4 Escalation at times of known transfer delay.

Recommendations

- In the event of a transfer request not being categorised appropriately by the WAST call handler, the midwife should request a call back from the clinical desk for a clinician-to-clinician discussion.

- This discussion will outline all clinical details and the response the midwife feels is required. Where appropriate, the clinical desk can upgrade the call and/or consider all available resources to get the most appropriate response.

- If the required ambulance response is still not designated, the midwife should escalate concerns to the duty control manager of WAST and the manager on call for maternity services to obtain support in coordinating safe transfer.

- Contact details of on call managers and the duty control manager (to support escalation) should be available to midwives.

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- In the event that an emergency transfer cannot be accommodated by WAST despite escalation due to WAST acuity, then a senior midwifery manager should be informed of the delay to support the team appropriately and consider if further escalation is required.

- Any delays should be reported via Datix Cymru.

  Any learning from transfer cases should be widely disseminated via the WMNN maternity steering group and include WAST and Maternity services.

- Health Boards should have a governance process in place for the review of all transfers from midwifery-led settings, including regular meetings with WAST to discuss any issues experienced.

- The possibility of delay in maternity transfer in home birth and FMU's should be recognised in each Health Board's own governance framework and appear on departmental risk registers.

9. Emergency care/Obstetric emergencies in Midwifery-led settings

The aim of management in any emergency situation arising in any midwife-led setting is to sufficiently stabilise the condition of the woman/fetus and/or neonate to enable safe transfer to the obstetric or neonatal unit.

Recommendations

- All midwives working in midwifery-led settings should undertake Community PROMPT Wales training (and PROMPT Wales if required) annually.

- Community PROMPT Wales training should aim to include paramedical faculty and delegates.

- All midwives providing home births should carry community PROMPT Wales and nationally agreed algorithms and proformas where available to support emergency care provision.

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- Community PROMPT Wales or national algorithms and proformas should be used to manage any evolving emergency and for contemporaneous documentation of procedures during an emergency situation. PROMPT Wales (sharepoint.com)

- Community PROMPT Wales **algorithms** are available for: ○ Antepartum Haemorrhage ○ Basic Life Support ○ Vaginal Breech Birth ○ Cord prolapse ○ Eclampsia ○ Shoulder dystocia
  ○ Uterine inversion

  Other national **algorithms** should be used for ○ Post-Partum Haemorrhage –OBS Cymru
  ○ Suspected maternal sepsis- ○ Newborn Life Support (RC,2021)

- Community PROMPT Wales **proformas** are available for: ○ Vaginal Breech Birth ○ Cord prolapse ○ Eclampsia ○ Shoulder dystocia

- National **proformas** are available for: ○ PPH

- These documents will accompany the woman/baby to the obstetric unit and be available to the receiving team.

- All Midwives working in midwifery-led settings should have completed cannulation training and updates as required[35].

- All AMU's and FMU's should have an agreed emergency equipment list[40]. These should be based on the skills of the professionals likely to attend and agreed with the multi-professional team[35].

- All community midwives who attend home births should carry a locally agreed kit. This should include equipment required for maternal and neonatal emergency care.

- Midwifery kit bags should be standard in design and layout to aid care provision.

- Evidence of regular checking of this equipment should be kept by the midwife in line with local guidance. Kit lists should take into account recommendations from: ○ The Midwifery Unit Network. ○ NICE
  ○ The Resuscitation Council UK ○ BAPM

- A Datix Cymru form should be completed at the earliest opportunity for any emergency situation arising in a midwifery-led setting.

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- All staff involved in an emergency situation should be provided with an opportunity to debrief following the event.

10. Inter-Professional Working and emergency care provision.

Recommendations

All midwifery-led areas should have an identified lead link for obstetrics and neonatology to enhance multi-disciplinary communication and working, maximising quality and safety in these areas[35].

- It would normally be expected that any professional groups who may be called upon to provide emergency care in midwifery-led settings, would be consulted in the planning and equipping of any midwifery-led unit.

- In FMU's and homebirth, the equipment available would only include that required for midwifery stabilisation, with the exception of maternal arrest in FMU's where the cardiac arrest team would attend to provide emergency care in a hospital setting.

- It is accepted and expected that both obstetric and neonatal teams may be called to AMUs in an acute emergency, therefore emergency equipment lists should include anything required by these medical staff groups and medical skill set.
- Once the woman or baby is stable, care should then be transferred to the OU.

11. Management of unexpected intrauterine or neonatal death

Recommendations

- In the event where an intrauterine death is suspected, arrangements should be made to transfer the woman to the obstetric unit by initiating an emergency transfer (999).

- In the event of an unexplained stillbirth in a midwifery-led setting, the midwife will initiate the resuscitation and summon emergency transfer (999 and EMRTS), unless the baby is clearly macerated.

- The EMRTS duty consultant has the authority to make a decision to stop resuscitation and confirm neonatal demise and record this information prior to moving a baby. In this instance, it is essential that the duty EMRTS consultant at the time of death passes their contact details to the receiving hospital, ideally within 24 hours (excluding weekends and bank holidays).

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- The need, and information, of transfer will be communicated with both the senior midwifery and consultant medical staff in the receiving OU.

- The Midwife should document all actions taken and explain all events to the woman and her family.

- Offer post-mortem as required.

- In both scenarios, the manager on call should be informed immediately and the Head of Midwifery needs to be informed as soon as possible.

- A Datix Cymru should be completed as soon as possible, and reporting should be in line with agreed National Patient Safety Incident Reporting policy[41].

- Ensure all staff are offered support and given opportunity for clinical and psychological debrief.

- A strategy meeting should be held, usually within 24 hours of the event and include all clinicians involved. The purpose of this meeting is to discuss the cause of death and any legal concerns including issuing of a death certificate if required. It will be the receiving unit's responsibility to organise the meeting, which can be undertaken by video conferencing or telephone if desired. Professionals in attendance should include EMRTS consultant, Consultant Obstetrician, Paramedic, Midwife, Consultant Neonatologist and the named professional for safeguarding. This meeting must decide whether the
  Procedural Response to Unexpected Death in Childhood or Infancy Investigation (PRUDIC) is applicable.

12. Postnatal Care

All postnatal care should be provided in line with the AWCPNL and NICE Postnatal Care Guideline[42] and should be individualised to the needs of the woman and her baby.

12.1 Immediate postnatal care (golden hour)

The Golden Hour encompasses a set of evidence-based practices which are outlined in the recommendations below that contribute to the physiological stabilisation of the mother and infant after birth[43].

Recommendations

- There should be optimal cord clamping after at least 1 minute- up to 5 minutes may provide further benefits[6].

- Skin-to-skin contact should be recommended for at least an hour, regardless of intended method of infant feeding[42].

- Perform newborn assessments whilst the baby is held safely in skin-to-skin contact to avoid mother infant separation.

- Non-urgent tasks should be delayed (e.g. weighing) for at least 60 minutes.

- First feed should be given in skin to skin regardless of feeding method[42].

- Early initiation of infant feeding[42,43].

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- Newborn feeding behaviours should be acknowledged and supported via bionurturing methods where possible[42].

  These practices should be encouraged, and midwives, women and families should be aware of supporting safe skin to skin practices in all environments[43,44,45,46].

12.2 Physical examination of the Newborn.

The NHS Newborn and Infant Physical Examination Screening Programme (NIPE) sets standards to ensure all parents are offered the opportunity of a head to toe physical examination for their baby.

Recommendations

- This examination is to check for abnormalities within 72 hours of birth and clear referral pathways must exist where any abnormality is identified or routine follow up is required, including hip dysplasia screening or Bacillus CalmetteGuerin (BCG) vaccination.

- Midwives who have undertaken the relevant training will provide this screening for all women and babies under midwifery-led care. A training needs assessment should be undertaken to support this recommendation.

- Midwives must appropriately maintain these skills and attend relevant update training.

12.3 Discharge from midwifery units and community care

Length of stay in a midwifery unit or midwifery presence in the woman's own home should be discussed with the individual woman, taking into account the health and wellbeing of the woman, her baby, and the level of support available following discharge. Midwives should remain immediately accessible to a newly postnatal woman for at least 2 hours, unless the woman declines this.

Recommendations

- The timing of postnatal care should be offered in line with NICE[42] and be adaptable to meet the family's needs.

- Contraceptive needs should be discussed during the antenatal period.

- Discuss and/or initiate postnatal contraception prior to discharge to community care[45].

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- The named midwife should remain the coordinator of care during the postnatal period (up to and including 28 days)[8,42.]

- The final midwifery discharge should be completed by the named midwife after the health visitor contact is established[8,42].

Transfer of care between midwifery and health visiting should be seamless[40].

12.4 Birth after thoughts, future birth planning and signposting for trauma support.

It is suggested that over 40% of women have trauma responses to giving birth and experience one or more of the symptoms of Post-Traumatic Stress Disorder (PTSD), such as re-experiencing, negative cognitions and avoidance[48,49].

Recommendations

- All emphasis should be on psychological harm prevention during birth experiences.

- Poor communication, lack of understanding, and a lack of control and consent are all key themes in diagnosed psychological birth trauma[48].

- All women should be given opportunity to discuss their birth experience with their named midwife in the postnatal period[42].

- Women should be given the opportunity to ask questions about the care they received during labour by the relevant clinician[42,,49].

- Where women have unresolved questions that may need further exploration at an appropriate time, this should be facilitated by the relevant clinician.

- Local multi-professional pathways for discussing birth experience should be established. These may include listening opportunities as well as techniques for treatment of psychological trauma, where supported by evidence.

- Further research is required to consider techniques of debrief or birth trauma support to identify the most effective method[48].

- Referrals to perinatal mental health teams should be made where psychological assessment and diagnosis are required.

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13. Supporting Alternative Choice

There is a clear traditionally accepted model of midwifery-led antenatal[17], intrapartum[6] and postnatal[42] care in the UK. Consent is a legal requirement for all clinical care, and women may decline/opt out of any aspect/s of traditional maternity care in line with the Human Rights Act[10] , including recommended birth setting.

Recommendations

- Women who are planning care outside of local/national guidance should be encouraged to;
  - have a full evidence-based discussion explaining the best available research, and information around professional opinion in the absence of research. ○ understand why their health care provider is recommending care models, including place of birth.
  - have a clear description and understanding of the available packages of care, and the limitations of care packages in relevant clinical scenarios in each birth setting.
  - be supported to birth in accordance with their wishes where the principles of informed decision making have been achieved[14].

- All women should be aware of all four birth settings available, along with the rationale of standard care packages available in each setting.

- Where a woman chooses birth outside of recommendations, an alert should be circulated appropriately to the MDT following locally agreed process. This should include the neonatal team where relevant.

- In the absence of concerns relating to a family with additional vulnerabilities or safeguarding concerns, choosing place of birth outside of recommendations, does not necessarily warrant a referral to the safeguarding team or social services[50].

- For birth at home or an FMU, transfer times and methods should be discussed, with recognition of the differences between emergency/urgent (time critical) and non-urgent transfers.

- The details of women with significant known obstetric complexity who are planning to give birth in community settings, such as home or FMU, should be shared antenatally with the Specialist Response Operations Team (SORT) and or Hazardous Area Response Team (HART) in WAST. A localised pathway for this should be available to midwives.

- Discussions about models and packages of care should include; fetal surveillance, maternal monitoring and investigation, analgesia, availability and skillset of the MDT and birth environment. All conversations should be clearly documented in clinical records including the All Wales Maternity Record.

- All midwives should be able to facilitate these discussions; however, they are encouraged to discuss with a senior midwife, Clinical Supervisor for Midwives or Consultant Midwife if requests are more complex, or if the midwife needs additional support.

- Women requesting a second opinion should be referred to a senior midwifery manager or Consultant Midwife.

  When caring for women birthing outside of guidance, the AWCPNL should be used with additional long hand documentation.

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14. Governance

' The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures'[51, pg. 1].

The midwife at all times must act within the scope of professional conduct[15].

Recommendations

- The midwife has responsibility to maintain competence and experience in providing care in midwifery-led settings[15].

- All Health Boards should monitor: ○ The total number of women starting labour in a midwifery-led setting by setting and parity.
  - The detail of any transfer by parity including; Intrapartum, postnatal and neonatal transfer including:
    - Time of decision
    - Time transfer initiated
    - Time of arrival of transport if required
    - Time left the birth setting
    - Time of arrival at OU
    - Time of medical review
    - Reason/category of transfer/mode of transportation.
    - Where birth has occurred within 1 hour of transfer to OU
    - Clinical outcome and adverse clinical outcome in line with Birthplace[21] and serious incidents trigger list[41].
  - The number of women who birth in a midwifery-led setting by setting and parity.

- Midwifery-led Units should utilise the Midwifery Unit Standards[35]. This framework should be used to assess and guide governance approaches in Midwifery Units in Wales.

- Multidisciplinary governance structures should be in place to enable oversight of all birth settings[33,35].

- Clinical governance structures and process should be transparent in all places of birth including home birth.

- Pre-birth planning for women where recommended place of birth is not clear should occur in conjunction with the most appropriate clinician i.e. consultant midwife, lead midwife, obstetrician, anaesthetist and/or neonatologist.

- Inter-professional working and referral pathways should be evident and seamless.

- All caregivers should consider safeguarding of both the woman and her baby, including routine enquiry at every given opportunity but at least twice during care provision. Wales Safeguarding Procedures should be followed as required[52].

- Auditable standards should include benchmarking against Birthplace[21] and include all transfers from any setting around the time of birth.

- Auditable standards for timing of maternity transfers should be developed and include different recommended transfer times for Emergency, Urgent and Non-Urgent cases.

- At least annual meetings should take place with WAST to discuss learning from transfers and improve future pathways.

- The WMNN should play a lead role in dissemination of learning in Midwiferyled settings including learning from maternity transfer cases.

15. Auditable standards

- Documentation of Birthplace discussion.
- Holistic ongoing antenatal assessment of care need and care planning in line with All Wales Maternity Record and AWCPNL[19].
- Suitability of birth environment as per appendix 2[19]
- Number of women staring labour in midwifery-led settings by birth area.
- Maternal care provided in line with AWCPNL part 1,2 and 3
- Fetal initial assessment and intrapartum surveillance is completed in line with AWCPNL.
- All emergency care provided in line with guidance and community PROMPT Wales algorithms where available.
- All emergency care is documented using Community PROMPT Wales proformas where available.

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- Clinical outcomes, by parity and setting, for all women and babies (suitable for Midwifery-led care at the onset of labour) where onset of care in labour is provided in a midwifery-led setting (benchmarking with Birthplace[21]).
  Transfer rates by parity and reason for transfer including antenatal, intrapartum, postnatal and neonatal transfer (benchmarked Birthplace[21]).
- Transfer times using time of decision, time transfer initiated, time transportation arrival, time transport left birth area, time of arrival at OU, time of review by medical team.
- Completion of transfer SBAR document in AWCPNL.

16. Call for future research

Maternal and Neonatal outcomes during water birth (Pool Study[38] in progress)

The impact of EFW >97th centile, suspected on USS after 36/40, on maternal and neonatal outcome where birth is planned in an AMU, FMU, home compared to each other and the OU.

The effects of antenatal thromboprophylaxis on PPH rates in women otherwise suitable for midwifery-led care who birth in midwifery-led settings.

Advancing maternal age > 40 years; Maternal/fetal/neonatal outcomes during labour and birth by parity and chosen place of birth.

The incidence of hyponatraemia during physiological birth in healthy women with uncomplicated pregnancy.

The effects of 'proactive hydration routines' by midwives versus woman guided hydration during the intrapartum period on blood profile, via Ramen spectroscopy, and birth outcome.

The safest place of birth and care provision for women with stable GDM treated with diet control or metformin.

Use of routine intervention in diagnosed slow progress in labour using 4cm as diagnosis of active labour compared to 5cm.

Comparison of birth outcomes in women receiving routine intervention for slow progress of labour offered at cervical dilatation of 4cm, compared to 5cm, in midwifery-led settings.

Impact on maternal experience where 1:1 care in labour is provided from 5 cm versus 4cm.

- The use of biomechanical techniques versus routine care, on birth outcomes where delay in labour is first diagnosed and the fetus is considered to be in a suboptimal position (OP/OT) for birth.

- The use of rewind techniques in the treatment of diagnosed psychological birth trauma.

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Appendix 1: All Wales Antenatal Care Criteria

Women booked by community midwives by 10 + 6 weeks
Additional care needs and recommended antenatal care pathways

Where women are under OLC the initial appointment should be with the named consultant, where possible, to aid efficient care planning.

Pathway A Additional Care needs requiring - Obstetric led antenatal care (OLC)	Pathway B Where some level of additional monitoring is required and/or initial Obstetric antenatal care planning.	Pathway C Midwifery-led antenatal care (MLC)
Cardiovascular and medical • Confirmed cardiac disease • • Substance Misuse • Epilepsy • Previous epilepsy • Hypertension • Malignant Disease • Renal disease.	**Cardiovascular and medical**	**Cardiovascular and medical**
Respiratory conditions • Asthma requiring oral steroid treatment • Asthma requiring in-hospital treatment or an increase in treatment during pregnancy • Cystic Fibrosis	**Respiratory conditions**	**Respiratory conditions** • Well controlled Asthma

Haematological • Blood clotting disorders • Autoimmune disorders e.g. Systemic Lupus, Antiphospholipid syndrome • Haematological – History of sickle-cell, beta thalassemia Major • History of thromboembolic disorders • Hb less than 110 g/l at booking or < 105 g/l at 28/40 with no response to oral iron therapy after 4 weeks.	**Haematological** • Women scoring 3 on VTE assessment should be offered an obstetric appointment to discuss thrombo-prophylaxis from 28/40. • Women scoring 2 on VTE assessment should have discussion around postnatal thrombo prophylaxis this should be prescribed antenatally where accepted.	**Haematological** • Hb of <110g/l at booking and <105g/l at 28 weeks require iron therapy and 4 weekly FBC in the community. If not responsive to iron therapy or if Hb<90 g/l at any time or any concerns refer to OLC. •
• Hb < 90 g/l in isolation. • Immune thrombocytopenia purpura or platelet count below <150 (10/litre) at booking or during the course of pregnancy. • Von Willebrand's disease • Bleeding disorder in the women or her unborn baby • Atypical antibodies • Jehovah's witness • Women scoring 4 on VTE assessment • Antenatal thromboprophylaxis administration.		
Endocrine • Type 1 and 2 diabetics • Gestational diabetic • Hyperthyroidism (may present as hypo) • Hypothyroidism • Women on oral steroids	**Endocrine**	**Endocrine**
Auto-immune • Systemic lupus erythematosus, Scleroderma • Connective tissue disorders	**Auto-immune**	**Auto-immune**

Infective • Hepatitis B or C • Carriers of, or infected HIV • Toxoplasmosis currently being treated • Active infection or chicken pox/rubella • Primary episode of genital herpes or recurrent active lesions after 36/40 • Tuberculous under treatment • COVID positive during pregnancy requiring hospital admission.	**Infective** • Current COVID 19 infection • Previous baby affected by GBS or diagnosed with GBS this pregnancy.	**Infective** • Recurrent episodes of genital herpes, women to be treated by GP with Acyclovir from 36/40 • Group B streptococcus in current pregnancy, who decline IPAB (offer NN observation on obstetric unit as per SRC). • GBS in last pregnancy; Offer Vaginal/rectal swab 35-37/40. If negative IPAB not required can be MLC for birth.
Neurological • Epilepsy • Myasthenia gravis • Multiple sclerosis • Previous cerebral-vascular accident	**Neurological**	**Neurological**

Gastro-intestinal/Renal • Liver disease (not obstetric-cholestasis) • Abnormal renal functions/known renal disease • Crohn's disease or ulcerative colitis	**Gastro-intestinal/Renal**	**Gastro-intestinal/Renal**

Previous pregnancy • Previous Molar pregnancy • 3 or more consecutive miscarriage • Mid trimester (12-22 week) loss • Previous HELLP syndrome • Baby with neonatal encephalopathy • Gestational Diabetes • Pre-eclampsia • Pre term birth <34/40 • Placenta abruption • Uterine rupture • Pervious caesarean birth • Primary PPH 500-999mls requiring additional treatment for uterine atony. • Primary PPH ≥1000 mls. • Retained placenta • Shoulder dystocia • Cervical tears • 3rd degree tears with ongoing concern or continence issues • 4th degree tears	**Previous pregnancy** • Previous SGA below 10th centile at birth • Previous baby >4.5kg • Previous 3rd degree tear with no ongoing concerns around pelvic floor health, •	**Previous pregnancy** • , • PPH 500-999mls not linked to uterine atony or requiring additional treatment for uterine atony or hypovolaemia (confirmed via previous birth records).
Current pregnancy • Screening anomaly including low PAPP-A (<0.415 MOM) • Multiple pregnancy • Gestational diabetes • Placenta praevia • Pre-eclampsia /pregnancy induced hypertension • Pre-term pre-labour rupture of membranes • APH of placental origin or 2 or more episodes after 24 weeks. • Alcohol dependency • Maternal age ≥40 at booking • Primiparous BMI ≥35	**Current pregnancy** • Smoker (Serial USS in line with GAP/GROW) • Multiparous women BMI 35-39.9 with a previous vaginal birth in accordance with local criteria for serial USS and GDM screen. • Recurrent[1] Altered Fetal Movement with normal investigations .	**Current pregnancy** • BMI at booking of 30 to 34.9kg/m • Para 4 or less • Maternal age at booking 35-39 inclusive. • 2 episodes of AFM, which are more than 3 weeks apart, with normal investigations. • EFW >90 <97th centile. • 1 episode of PV bleeding of unknown origin >24/40. • BMI <18 with no history of eating disorder. .

• Multiparous BMI ≥40 • Eating disorder • Grand multiparty, P5 or > • Concerns with fetal growth or placental function.Baby with structural/ Chromosomal abnormality • Polyhydramnios/Oligohydramnios • EFW via USS ≥97th centile on GROW chart. • Gestation >41+6 • Administering antenatal thromboprophylaxis • Breech/malpresentation after 36/40		
Skeletal complications • Previous fractured pelvis	**Skeletal complications** • Spinal Issues (for consideration as to whether this will impact on birth or epidural/spinal anaesthesia).	**Skeletal complications**
Previous gynaecological history • Myomectomy • Hysterotomy • Cone biopsy • LLETZ x 2 • Any uterine perforation resulting from previous STOP or surgery.	**Previous gynaecological history** • LLETZ X1 (for review of depth of excision) • History of significant cervical excisional event i.e. LLETZ where >10mm depth removed, OR >[1] LLETZ procedure carried out OR cone biopsy (knife or laser, typically carried out under general anaesthetic).	**Previous gynaecological history** •

[1] = Definition of recurrent altered fetal movement = at least 2 episodes of altered fetal movements are reported within a 21-day period (All Wales Altered Fetal Movement Guideline, WMNN 2021).

Mental health • Known serious mental health illness such as bi-polar disorder	**Mental health** • Women taking antidepressants prescribed by GP (may need additional support plan	**Mental health** • History of mental health problems/depression not currently taking medication and stable

*It is noted that the above is not exhaustive and clinicians should exercise clinical judgment

Appendix 2: All Wales Place of Birth Assessment Criteria

Place of birth assessment at around 36/40, to be completed by the lead carer giver, and at each antenatal contact after this time including at each labour assessment .

Pathway A **Additional care needs requiring Obstetric led intrapartum care (OLC)**	**Pathway B** **Individual assessment and intrapartum care planning.**	**Pathway C** **Midwifery-led Intrapartum care (MLC)**
Cardiovascular/other medical conditions • Confirmed cardiac disease • Hypertension • Malignant Disease	**Cardiovascular/other medical conditions** • Cardiac disease without intrapartum implications.	
Haematological • Autoimmune disorders e.g. Systemic Lupus, • Antiphospholipid syndrome • Haematological – History of sickle-cell, beta thalassemia Major • History of thromboembolic disorders • Hb less than 85g/l • Immune thrombocytopenia purpura or platelet count below 100 10/litre. • Von Willebrand's disease • Bleeding disorder in the women/fetus • Atypical antibodies known to cause HDN • Jehovah's witness with additional care needs • Women scoring 3 or 4 on VTE assessment and on prophylactic or therapeutic antenatal anticoagulants.	**Haematological** • Atypical antibodies not known to cause HDN • Platelets >100 <150 10/litre. • Hb between 85-105 g/l and asymptomatic of anaemia.	**Haematological** • Hb of <110g/l at booking and <105g/l after 28 weeks, require iron therapy and recheck Hb at 34/40 OR 4 weeks after commencing iron therapy. • • Women scoring 2 on VTE assessment where postnatal thrombo-prophylaxis has been prescribed or declined.
Endocrine • Hyperthyroidism (any history of hyper, may present as hypo) • Women on oral steroids • Type 1 and type 2 diabetes	**Endocrine** •	**Endocrine** • Adequately treated primary hypothyroidism

• Gestational diabetes		
Auto-immune • Systemic lupus erythematosus, Scleroderma • Connective tissue disorders	**Auto-immune** • Connective tissue disorders (non-specific)	**Auto-immune**
Infective • Hepatitis B or C Carriers of, or infected • HIV • Toxoplasmosis in pregnancy • Active infection or chicken pox/rubella • Primary infection of genital herpes (First lesion) diagnosed in pregnancy or recurrent active lesions after 36/40. • Tuberculous under treatment	**Infective** • Covid 19-symptoms or positive test within 10 days of onset of labour or previous hospital admission due to Covid-19 during pregnancy. • Previous baby affected by GBS, diagnosed with GBS this pregnancy, or opting for Intrapartum Antibiotic Prophylaxis (IAP).	**Infective** • History of genital herpes, and lesion free throughout pregnancy, offer prophylactic acyclovir from 36/40. • Reoccurrence of genital herpes in this pregnancy but lesion free prior to 36/40, offer prophylactic acyclovir from36/40. • Group B streptococcus in current pregnancy, declining Intrapartum Antibiotic prophylaxis (recommend neonatal observation as per EOS calculator). • GBS in last pregnancy; Offer Vaginal/rectal swab 35-37/40. If negative IAP not required, can be MLC for birth unless mother wishes IAP in which case this should be supported.
Neurological • Epilepsy • Myasthenia gravis • Multiple sclerosis • Previous cerebrovascular accident	**Neurological** • Previous epilepsy not medicated and no seizures for 3 years.	**Neurological**
Gastro-intestinal/Renal • Liver disease (not obstetric-cholestasis) • Abnormal renal functions/known renal disease	**Gastro-intestinal/Renal** • Crohn's disease or ulcerative colitis	**Gastro-intestinal/Renal**

Previous pregnancies • Previous Molar pregnancy • Previous HELLP syndrome • Severe pre- eclampsia/eclampsia • Pre-eclampsia requiring preterm birth, • Baby with neonatal encephalopathy • Uterine rupture • Placental abruption	**Previous pregnancies** • Pre-eclampsia at term and asymptomatic this pregnancy. • 3rd/4th degree tears with no ongoing issues.	**Previous pregnancies** • 3 or more consecutive miscarriage • Mid trimester miscarriage (12-22 weeks). • Previous SGA below 10th centile (Suitable for Midwifery-led birth where USS's are Normal) • Previous pre-term birth now >37/40. • Previous PPH 500-999mls with no treatment or evidence of bleeding due to uterine atony,
• Previous PPH 500-999mls requiring treatment or blood transfusion. • Primary PPH >1000 mls or any amount causing symptoms of hypovolaemia. • Retained placenta • Caesarean section. • Shoulder dystocia • Cervical tears • 3rd /4th degree tears with ongoing concern or continence issues		previous birth record to be reviewed to confirm clinical picture.

Current pregnancy • Multiple pregnancy • Low PAPP-A and concerns around fetal growth. • Gestational diabetes • Placenta praevia • Pre-eclampsia /pregnancy induced hypertension • Pre-term pre-labour rupture of membranes • APH of placental origin or > 1 episode after 24 weeks • Alcohol dependency • Maternal age ≥40 at booking (SBAR-10). • Nulliparous BMI ≥35-39.9 with normal GDM screen and USS's. • All parity BMI>40 • Grand multiparity P6 >. • Concerns with fetal growth or placental function. • Concerns around fetal movement within 24 hours of the onset of labour. • EFW ≥97th with any other additional care needs • Polyhydramnios/oligohydramnios • Gestation >41+6 • Therapeutic or prophylactic thromboprophylaxis • Wt. <50kg with anaemia • Persistent breech/mal presentation.	**Current pregnancy** • Women declining booking/anomaly USS • APH of unknown origin,1 episode after 24/40 • Substance misuse • Para 5 • EFW via USS > 97th centile with normal GDM screen and otherwise uncomplicated pregnancy. • 2 episodes of raised blood pressure antenatally, taken more than 4 hours apart. • Recurrent[1] episodes of AFM (2 or more within 21 days) with reassuring outcomes of investigations and where fetal movements have been normal in the last 24 hours. • Booking WT<50kg , no concerns around fetal growth and normal haemoglobin. • Low PAPP-A with normal fetal growth on serial USS	**Current pregnancy** • BMI at booking of 30 to 34.9kg/m • Multiparous BMI 35-39.9 with previous vaginal birth who are otherwise suitable for Midwifery-led birth with normal GDM screen and normal routine USS's. • Maternal age 35-39 inclusive at booking. • Smoker (Suitable for Midwifery-led birth where USS's are normal). • P4 or < • EFW >90th <97th centile on USS at 36/40 with otherwise uncomplicated pregnancy. • Assisted conception • A single episode or >1 episode of AFM (occurring > 21 days apart), with reassuring investigation and normal fetal movement in the last 24 hours.
Previous gynaecological history • Myomectomy • Hysterotomy • Cone biopsy	**Previous gynaecological history** • Extensive vaginal repair/re fashioning • LLETZ x2 laparoscopy/laparotomy	**Previous gynaecological history** • LLETZ x 1
• Any uterine perforation resulting from previous STOP or surgery.		

Respiratory • Severe asthma requiring increase in treatment of hospital admission during pregnancy • Cystic fibrosis	**Respiratory**	**Respiratory** • Mild asthma women only using inhalers prescribed by GP. Steroid inhalers where asthma has been stable during pregnancy
Mental Health • Where intensive maternal or neonatal monitoring is required during labour and/or postnatally.	**Mental Health** • Stable mental health illness on various psychotropic medication, including antipsychotics. (Plan neonatal care as per maternal psychotropic drug pathway)	**Mental Health** • Women on SSRIs and stable (neonatal care as per All Wales maternal psychotropic drug pathway).

Advise to give birth in an obstetric unit. Any women who are planning birth outside of the OU will be planning birth 'outside of guidance' and will require detailed care plans as per local pathways.

After an individual discussion and assessment may be suitable to give birth in a midwifery-led setting.

Advise to give birth in a midwifery led setting.

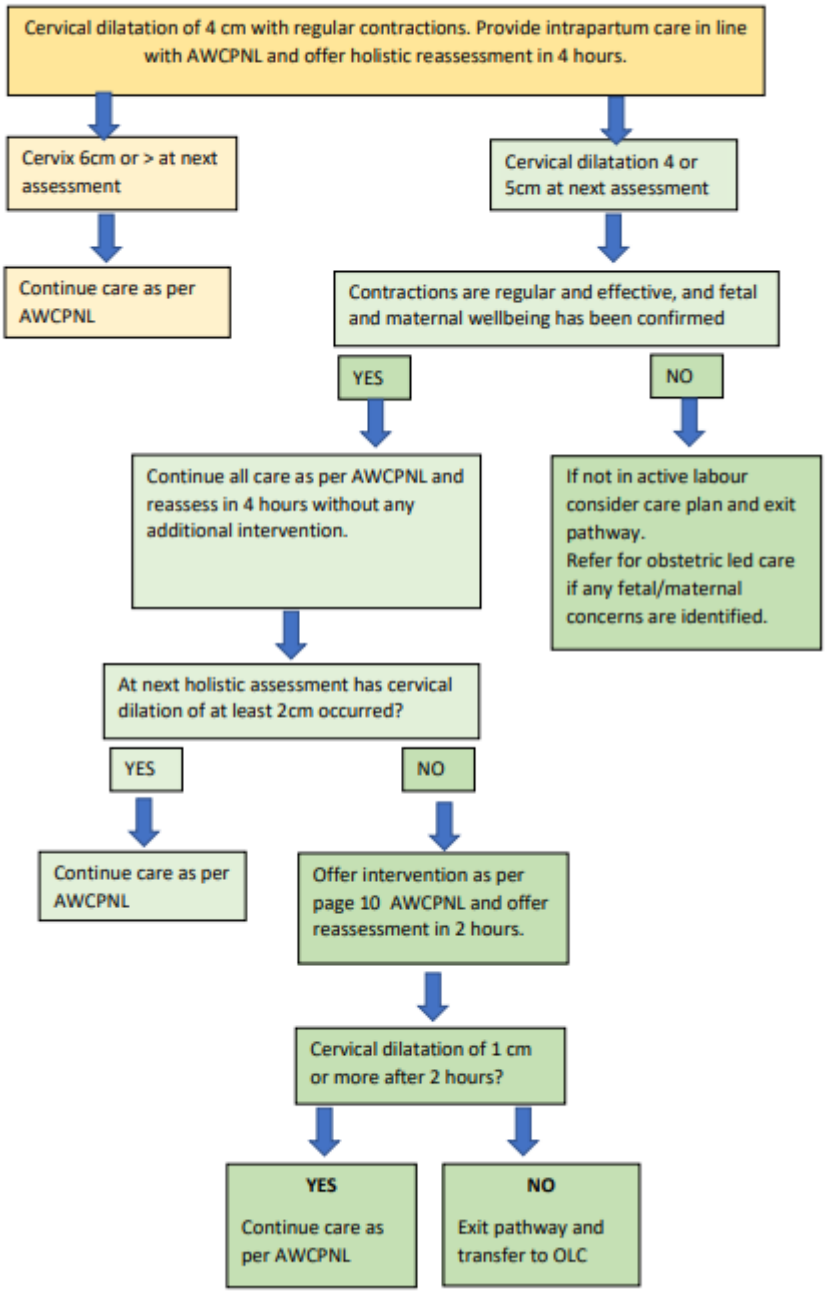
At every antenatal assessment, by midwives and the medical team, review of the antenatal care pathway should occur and the lead professional and place of birth recommendation changed where required.

1 =Definition of recurrent altered fetal movement =is where at least 2 episodes of altered fetal movements are reported within a 21-day period.

*It is noted that the above is not exhaustive and clinicians should exercise clinical judgment.

*Midwives should be aware of the impact of multiple complexity, even where these are in care pathway B, multiple factors in any pathways may move the care need to pathway A.

Appendix 3: Intrapartum care for nulliparous women where cervical dilatation is 4cm at the onset of labour.



Appendix 4: Reasons to exit midwifery-led intrapartum or early postpartum care.

Part 2 of All Wales Clinical Pathway for Normal labour (AWCPNL) assessment deems woman unsuitable for midwifery-led intrapartum care

Slow progress in the first or second stage of labour in line with the AWCPNL

Indication to offer continuous Electronic Fetal Monitoring including inability to effectively monitor via Intelligent Intermittent Auscultation (IIA).

- Outside of criteria for midwifery-led care due to risk factors for hypoxia
- Concerns identified on part 2 (AWCPNL) fetal assessment including concerns around fetal growth and or altered fetal movements in the 24 hour prior to assessment.
- Raising baseline suspected on IIA.
- Suspicion of the presence of overshoots, not excluded from increased auscultation.
- Identification of decelerations heard immediately after a contraction, confirmed with increased auscultation.
- Prolonged deceleration or bradycardia.

Significant meconium stained liquor or change in liquor from clear to meconium stained in the intrapartum period.

Maternal observations indicating that the AWCPNL should be exited and obstetric opinion sort.

Offensive vaginal loss or vaginal bleeding

Suspected Mal presentation

Retained placenta

3rd or 4th degree tear

All obstetric emergencies, including postpartum haemorrhage suspected sepsis and neonatal resuscitation.

Infants at risk of Hypoglycaemia who may be born in a midwifery-led setting

- IUGR or birth weight <2nd birthweight centile/clinically wasted
- Temp <36 degrees at any time
- Suspected sepsis

Neonatal concerns where by a medical opinion/review is required and or additional neonatal monitoring including via the hypoglycaemia pathway or All Wales Early Onset Sepsis Calculator (Link) follow local addendums for total duration rupture of membranes.

Problem Identified	Parameters	Action
Low Apgar Score	Apgar < 5 at 5 minutes	Emergency Transfer Via 999 and EMRTS (where available) discuss with Neonatal consultant at receiving unit.

Low Apgar Score	Apgar 5-7 at 5 minutes	Discuss with neonatal team as to destination for review either PN ward or NNU, transfer via 999.
Cold	1)Babies with temperature <36 which persists after environmental controls.	1)Arrange transfer via 999. Discuss with neonatal team and arrange place of
	2) Babies with a temperature of ≥36 but <36.4 (Auxiliary temperature). Maintain Skin to Skin Contact and where temperature does not increase within 1 hour (or if accompanied with signs of RDS) Midwife to arrange transfer and discuss with neonatal team ref appropriate place for review.	review. (Transfer with neonatal warming device).
Signs of Respiratory Distress	Grunting Respiratory rate >60 Breaths per minute. Sternal recession Nasal flaring	Midwife to arrange emergency transfer via 999 and discuss with neonatal team ref place of review.
Insignificant Meconium		Observation in line with NICE at 1 hour and 2 hours and documented on NEWTTS. Where these are normal continue routine PN care.
Significant Meconium		Observations should be recorded on a NEWTTS chart at 1 hour and 2 hours discuss with neonatal registrar and transfer with midwife to the PN ward for recommended ongoing observation. If any concerns on observation noted then an emergency transfer will be required.
Suspected Meconium aspiration	Meconium at birth with respiratory distress	Arrange Emergency Transfer via 999 and EMRTS (if required/possible) discuss with Neonatal Consultant.

Total duration rupture of membranes of more than >24 hours		Identify and act to provide parental information around Early onset sepsis and the sepsis risk calculator. Follow addendum for midwifery-led settings appendix 5 (WMNN,2021).
Unexpected Fetal Anomaly	Extra digits, ear tags, talipes, cleft lip and or pallet, hypospadias, hydrocele, skin lesions, dislocation of hip, cardiac murmurs	Midwife to discuss with the neonatal team and arrange non urgent transfer where required.
Signs of Infection	Pyrexia >37 (Axillary temp) on 2 readings 1 hour apart or >37.5 on 1 occasion.	Arrange emergency transfer via 999 discuss best place for review with the neonatal team.
	Hypothermia < 36 on 1 after initial normothermia actions. Respiration >60 BPM HR >160 BPM Pale pallor Offensive smelling liquor Poor feeder	
Atypical antibodies known to cause Haemolytic disease of the Newborn. Jaundice within 24 hours Birthweight < 2nd centile Mother GBS positive and declining IPAB or positive in previous pregnancy but Unknown status this pregnancy.	Atypical antibodies known to cause Haemolytic disease of the Newborn. Jaundice within 24 hours Birthweight < 2nd centile Mother GBS positive and declining IPAB or positive in previous pregnancy but Unknown status this pregnancy.	Advise neonatal review with the neonatal team- discuss with neonatal specialist trainee. Follow local guidance around transfer mode and timing. Recommend review with neonatal team for EOS screening (appendix 5).

Appendix 5: All Wales Neonatal Network Guideline. Early Onset Sepsis Risk Assessment for Infants >37 Weeks Gestation Born in Midwifery-led settings with total duration rupture of membranes >24 hours. (HYPERLINK to Doc)

MAT 080 All Wales Early Onset Sepsis Risk Assessment for Infants Over 34 Weeks Gestation.pdf

Appendix 6: WAST transfer information

There are various ways in which a midwife may choose to transport a woman or baby into an obstetric/neonatal unit during labour or in the early post-birth period if required. Transfers should be categorised as Non-Urgent, Urgent and Emergency.

Calls to WAST are managed in accordance with the WAST Clinical Response Model:

Calls are divided into four categories:

Red- Emergency

Amber- Urgent

Green- Non urgent

Health Care Professional

Red calls – Immediately life threatening. (Ambition of 8-minute response time)
Red calls are those where immediate attendance is required to save life and have a time based response target set by Welsh government. Red calls are the only reportable time based target used by WAST. Target response aim of 8 minutes in 65% of cases

Amber 1 calls – Life-threatening. (Ambition of 20-minute response time but no performance measure target)
Amber 1 calls are calls that could be deemed a threat to life but do not pose an immediate threat. Amber 1 calls are responded to as soon as possible using lights and sirens.
Amber 2 calls – Serious but not immediately life-threatening. (Ambition 1-4 hours but no performance measure target)
Amber 2 calls are calls that could be deemed serious but not life-threatening Amber 2 calls are responded to as soon as possible at normal road speed, sometimes with lights and sirens if considered appropriate.

Green calls - Not immediately serious or life-threatening
Green calls are calls where there is an urgent problem which is not life threatening. Green calls are responded to as soon as possible at normal road speed without lights and sirens, sometimes green calls are responded to by self-care advice following a telephone assessment.

Health Care Professional calls – Calls placed by health care professionals via a dedicated line.
Health Care Professional (HCP) calls are calls placed by healthcare professionals. Health Care Professional calls are responded to as soon as possible, within an agreed timeframe of between 1-4 hours.

Ambulance Response Capabilities:

WAST currently provides three types of clinical service:

Non-Emergency Patient Transport Service (NEPTS):

The NEPTS is the non-emergency service offered by WAST. NEPTS can provide seated ambulances or ambulances that are equipped with a stretcher. All NEPTS ambulances are equipped with an AED and oxygen and the crew are trained in first aid and manual handling. NEPTS ambulances do not provide emergency transfers and are not equipped with blue lights. NEPTS crews are able to undertake routine inter-hospital transfers. An appropriate nursing escort may be required depending on the patient's condition.

Urgent Care Service:

The UCS (formerly known as HDS – High Dependency Service) provides ambulances with a basic life support capability. UCS ambulances are staffed by two Urgent Care Assistants who are trained in ambulance aid including basic patient observation. UCA staff have a limited clinical skillset and are not trained in managing emergency childbirth. The majority of UCS ambulances are unable to provide emergency transfer as the staff are not trained in emergency driving techniques; there are some exceptions but these vary from Heath Board to Health Board. A suitable midwifery escort will be required.

Emergency Medical Service (EMS):

EMS ambulances are staffed by Registered Paramedics and Emergency Medical Technicians (EMT). Registered Paramedics are also provided in single crewed Rapid Response vehicles.

An EMS crew can provide the full range of immediate aid to a seriously ill or injured patient. There is not a Registered Paramedic on every EMS ambulance. Some EMS ambulances are crewed by two EMT staff.

EMS crews are able to provide emergency transfers using blue lights and all EMS staff including EMT staff are trained in emergency childbirth.

Whilst Registered Paramedics are trained in emergency childbirth and common obstetric emergencies it should be noted that their exposure to these cases is thankfully rare. An appropriate midwifery or medical escort will still be required in some cases.

EMRTS Cymru: Support for Neonatal and Maternal Emergencies; Version 4; 03 March 2021

EMRTS Available 24hours/day, 7 days/week

Able to provide a range of critical care support for obstetric and paediatric calls:

Neonatal Emergencies:	Maternal Emergencies:
NLS Commenced	ABCDE Compromise (incl. Cardiac Arrest)
Respiratory Distress	Suspected Eclampsia
Any Unwell Baby (e.g. sepsis)	Severe haemorrhage of any kind

Neonatal and/or Maternal Emergency identified by:

- MIDWIFE in attendance (in free standing Midwife Led Unit or Home Birth)
- BYSTANDER (i.e. member of public, where midwife not in attendance)

1

Dial 999 -- Call will be handled in accordance with standard WAST procedures

WAST EMERGENCY RESPONSE PROCEEDS AS NORMAL

2

EMRTS available 24hrs/day, 7 days/week

EMRTS Critical Care Hub will send EMRTS team if available

- EMRTS may need to speak to 999 caller for more info
- EMRTS will inform midwife or WAST that team is on way
- EMRTS will inform midwife or WAST if team unavailable

Please Inform EMRTS if they are not required:

- Not clinically indicated (EMRTS will require a clinical update in all cases)
- Short distance from consultant led unit (eg. <15mins road transfer and resource on scene ready to go)

EMRTS Critical Care Hub: 03001232301

3

EMRTS Top Cover Consultant will provide clinical advice to midwife and/or WAST crew while EMRTS team on way

4

EMRTS arrive and treat patient using a team approach, with full involvement of the midwife and WAST crew on scene. EMRTS consultant will lead resuscitation.

EMRTS Teams can offer a range of possible interventions, including:

Neonates:	Mothers:
Ventilatory Support (eg BVM, CPAP, IGel, Intubation)	Intubation and Ventilation
Circulatory Support (eg IO access, IV fluids, Inotropes)	Blood & Blood Product Transfusion
Glucose and Temperature Control (Incubator System)	Haemorrhage Controlling Agents
	Peri-Mortem Caesarean Section

5

A team decision will be made on the following prior to transfer:

- Appropriate receiving hospital (all neonatal cases will be discussed with CHANTS).
- Travel by air or road (in EMRTS or WAST vehicle). Generally women in active labour will not travel by air. (Birth in flight is very difficult to manage)
- Whether mother and baby travel together or separately.

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