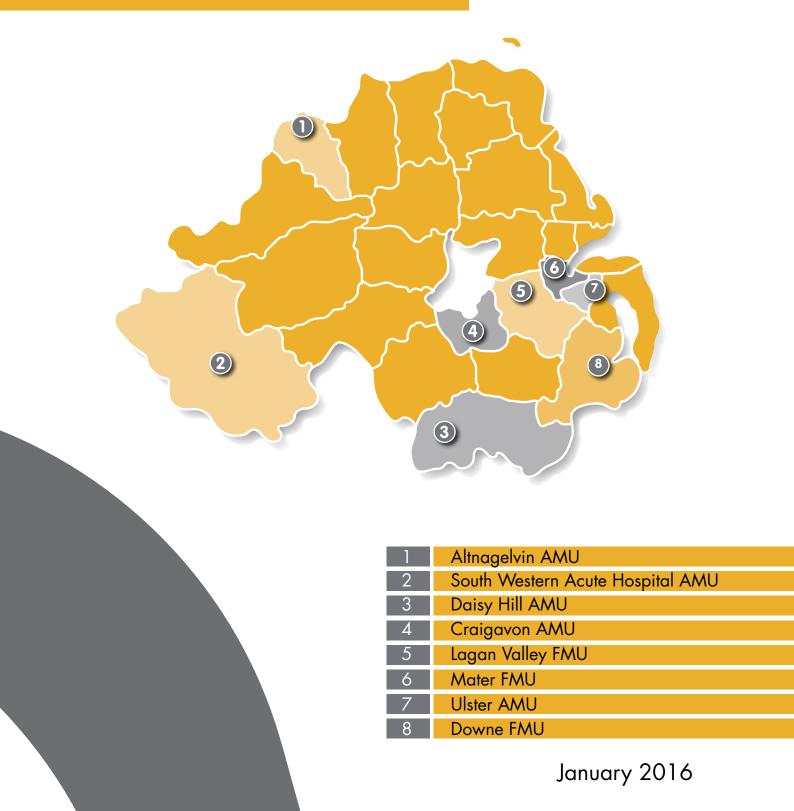
GUIDELINE FOR ADMISSION TO MIDVVIFE-LED UNITS IN NORTHERN IRELAND & NORTHERN IRELAND NORMAL LABOUR & BIRTH CARE PATHVVAY





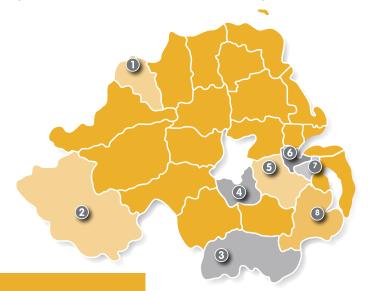


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INTRODUCTION

The Strategy for Maternity Care in Northern Ireland 2012-2018 (DHSSPS, 2012) places a strong emphasis on the normalisation of pregnancy and birth as a means of improving outcomes and experiences for mothers and babies. Recent intrapartum care guidelines and an intrapartum care quality standard from National Institute for Health and Care Excellence (NICE, 2014; NICE, 2015) also highlight the importance of women with a low risk of complications during labour being given the choice to birth in any of the four different birth settings; these include: home, freestanding midwifery unit, alongside midwifery unit or an obstetric unit. There has been on-going growth in the provision of a network of midwife-led units (MLUs) throughout Northern Ireland (NI) as supported by the Maternity Strategy Implementation Group. Currently, there are eight MLUs in NI, five alongside units (AMU) and three, which are freestanding (FMU). The network of MLUs has expanded from the first AMU opened in the Southern Trust in 2001 to the most recent AMU in January 2014, with plans for further MLUs to be developed.

Map of MLUs in Northern Ireland



- Altnagelvin AMU
- 2 South Western Acute Hospital AMU
- 3 Daisy Hill AMU
- 4 Craigavon AMU
- 5 Lagan Valley FMU
- 6 Mater FMU
- 7 Ulster AMU
- 8 Downe FMU

Childbirth is a physiological normal life event which for 'the vast majority of women is a safe event' (DHSSPS, 2012, p.7). Planning to birth in a MLU is therefore appropriate for most women who have had a straightforward pregnancy. The Guideline Development Group (GDG) have defined a straightforward pregnancy as 'a singleton pregnancy, in which the woman does not have any pre-existing condition impacting on her pregnancy, a recurrent complication of pregnancy or a complication in this pregnancy which would require on-going consultant input, has reached 37 weeks gestation and \leq Term +15'.

In these times of financial constraint, midwife-led care has been shown to have economic benefits (Devane *et al.*, 2010) as well as, social and health benefits for the woman and her family (Tracy, 2005, Sandall et al., 2013; Tracy et al., 2013; NICE, 2014; Renfrew et al, 2014). Indeed, women who plan to birth in a MLU have been shown to experience fewer interventions than those who gave birth in an obstetric unit and their babies are less likely to need admission to a neonatal unit (Hollowell et al, 2015).

Currently in NI, eligibility criteria are used as a screening tool for admission to MLUs in line with accepted practice in many other countries. However, each MLU in NI has developed their own admission criteria to guide both maternity care professionals and women. In practice, this means that there is lack of consistency across NI, as the differences in the criteria and their application, impact on women's planned place of birth. This may lead to some women being either inappropriately refused admission to the MLU, incorrectly admitted to a MLU or transferred unnecessarily to an obstetric unit. It has been highlighted that the admission criteria vary from one MLU to another and are often not clearly defined and midwives in NI have expressed the need for clear evidenced-based guidelines (Healy, 2013).

There were 24,394 live births in NI during 2014 (NISRA, 2015) with the total number of MLU births being 2,960 - equating to 12.1% of births. This figure clearly indicates that MLUs and the benefits they afford mothers, babies and their families are currently not being used to their full potential. Access to and utilisation of these important resources can be enhanced through the adoption of consistent evidence based guidelines that have been developed using the knowledge and expertise of

key stakeholders, including women and the multidisciplinary team from maternity services in NI. Women are increasingly aware of MLUs in NI and are keen to access these high quality services, with service users actively lobbying for their provision (NCT 2011). Guidelines for the admission to MLUs can enhance policy and service delivery decision-making for planned place of birth.

Recent evidence has highlighted the main reason for a woman being transferred from an MLU to a Consultant-Led Unit is delay during the first or second stage of labour (NICE, 2014; Hollowell et al., 2011). However, this may arise as a result of women being admitted to MLUs who are not in established labour or maternity care professionals not basing their clinical decisions on the evidence relating to the care of women in labour. The GDG agreed that it was necessary to develop a NI Normal Labour and Birth Care pathway to encourage and support maternity care staff and women in their decision making during labour and birth.

METHODOLOGY

Who is the guideline intended for?

The guideline is relevant to all healthcare professionals who come into contact with pregnant women at all stages of their antenatal care, up to and including the onset of labour and birth, as well as to their partners/significant others and their families. It is also expected that the guideline will be of value to those involved in the clinical governance of maternity service provision.

The Terms of Reference for the Guideline

The Terms of Reference were developed by the GDG. These guidelines aim to standardise guidance for women and maternity care staff with regard to the admission to MLUs in NI and a pathway of care for normal labour and birth ensuring a consistent approach for women seeking access to a MLU and care during normal childbirth in any birth setting.

Objectives

- To review the current local, national and international evidence for criteria as applied to women seeking admission to MLUs and normal labour and birth care pathway.
- 2. To develop a standardised guideline and care pathway based on the current evidence in conjunction with an expert panel of maternity care staff and service users.
- 3. To disseminate guidelines to regional primary and secondary maternity care staff, MLUs and service users in NI.
- 4. To develop and disseminate a user-friendly information leaflet relating to the criteria for admission to a MLU.

Needs Assessment

Findings from a Short Term Scientific Mission research project, funded by Co-Operation Science and Technology (COST) Action ISO907 (Healy, 2013) http://www.iresearch4birth.eu/iResearch4Birth/en/stsm5.wp uncovered a variation in application and content of criteria used in the assessment of women planning to birth in MLUs. This research involved the collation and synthesis of policy and practice documents, along with in-depth discussion with midwives and maternity care professionals. The results pointed out the need for an evidenced-based guideline for the admission to MLUs to be used by professionals in NI and the need to create a service user leaflet.

The literature review retrieved papers, which related to each of the criteria included in the guideline. The database search included Medline, Pubmed, Maternity and Infant Care Database and Cochrane databases. These were supplemented by back-chaining the reference lists of relevant papers and documents. An online search of Departmental Strategic and professional resources was also undertaken. These included:

- American Nurse Midwifery Association (www.midwife.org)
- Department of Health Social Services and Public Safety (www.dhsspsni.gov.uk/)
- Guidelines and Audit Implementation Network (www.gain-ni.org)
- National Institute for Health and Care Excellence (www.nice.org.uk/)
- Regulation and Quality Improvement Authority (www.rqia.org.uk)
- Royal College of Midwives (www.rcm.org.uk)
- Royal College of Obstetricians and Gynaecologists (www.rcog.org.uk)
- Scottish Intercollegiate Guideline Network (www.sign.ac.uk)

In addition, the GDG members contributed evidence, which they drew from their own areas of expertise and knowledge including, local, national and international sources.

INVOLVEMENT OF STAKEHOLDERS

Who Developed the Guideline?

A team of health professionals, lay representatives and technical experts known as the GDG (See Appendix 1), with support from GAIN, undertook the development of this clinical guideline. In the process of developing this guideline the information was tabled at the Maternity Strategy Implementation Group in 2015. The basic steps in the process of developing a guideline were also taken from Appendix 5 of the 'Advice for Guideline Development in Northern Ireland Manual,' (GAIN 2014).

The Guideline Development Group (GDG)

The GDG for the 'Guideline for Admission to Midwife-Led Units in Northern Ireland and the Northern Ireland Normal Labour and Birth Care Pathway' was recruited in line with the existing GAIN protocol (2014). Following approval of the GAIN Operational Committee to fund this project requests for nominations were sent to the main stakeholder organisations as well as women's and parents groups, for example Health and Social Care Trusts (HSC Trusts), general practitioners (GPs), Professional Organisations, Surestart, Parenting NI and Woman's Voices.

The guideline development process was supported by GAIN staff. At the start of the guideline development process all GDG members' interests were recorded on a standard declaration form that covered consultancies, fee-paid work, share-holdings, fellowships and support from the healthcare industry. At all subsequent GDG meetings, new members completed a declaration form if appicable and existing members declared new, arising conflicts of interest, which were recorded.

Guideline Development Group Meetings

Twelve meetings were held between February 2014 and July 2015. During each meeting clinical questions and clinical and economic evidence were tabled, reviewed and assessed against the criteria within the guideline. The wording of the criteria was informed by the relevant evidence and expert opinion, and was made following robust inclusive discussion and challenge. At each meeting women/partner/significant other concerns were routinely discussed as part of the guideline process.

The Chair divided the GDG into two groups (Steering and Working Group), which had multidisciplinary members on each. The Working Group focused on specific criteria and considered the relevant evidence. The agreed criteria and evidence was then reviewed by the Steering Group and further refinement took place. The guideline was developed as the result of an in-depth iterative process, which utilised expert knowledge and a range of robust evidence.

Maternity Care Service Users and Representatives

Maternity Service Users from a range of organisations were involved throughout the guideline process as core members of the GDG and also feedback through social media, including Twitter and Facebook. Consultations with Service Users took place in four different settings across Northern Ireland.

A user-friendly information leaflet relating to the criteria for admission to a MLU has been developed in order that the guideline is in an accessible format for women and their families (See Appendix 2).

At an early stage in the guideline development, contact was made with the lead of the '10,000 Voices' project who agreed to undertake qualitative research on women's experiences of their care in MLUs in NI. The results were consistently positive, highlighting how women and their partner experienced a high level of care satisfaction (Public Health Agency, 2014). This evidence supports MLUs in NI as a setting for women to plan to give birth.

Expert Advisers

During the development phase of the guideline, the GDG identified areas where there was a requirement for expert input on particular specialist topic areas. These topics were addressed by one of the expert GDG members who brought the additional evidence to the table for the group to discuss and agree.

The guideline was also peer reviewed and informed by two Professors of Midwifery with expertise in the normalisation of labour and birth within MLU settings, an obstetrician and a midwife lecturer.

Updating the Guideline

In keeping with GAIN requirements these guidelines will be reviewed in 2018 or sooner in light of any emerging evidence.

Funding

The GDG was commissioned by GAIN to develop this guideline.

PLANNING PLACE OF BIRTH

This guideline predominantly relates to women with a straightforward singleton pregnancy (1) at the point of labour (2). It is important to note that at each point of maternity care, all women should be assessed to ensure that they are receiving care from the most appropriate professional; that is, continue with midwife-led care (MLC), transfer to consultant-led care or transfer back to MLC (3); in particular, women who have been referred for investigation(s) or treatment which has been resolved. If there is any uncertainty, multidisciplinary discussion is necessary, with appropriate documentation. Further clarification with regard to place of birth can be facilitated by a senior midwife or supervisor of midwives.

The following boxes provide specific criteria for planning birth within MLUs, Green box criteria relating to FMU and AMU (4) and Blue box criteria relating to AMU only.

1.

Planned Birth in any MLU (FMU & AMU) for women with the following:

Planned Birth in AMU only for women with the following:

- Maternal Age ≥16 years and ≤40 years
- BMI at booking $\geq 18 \text{ kg/m}^2$ and $\leq 35 \text{ kg/m}^2$
- Last recorded Hb≥100g/L
- No more than 4 previous births
- Assisted conception with Clomifene or similar
- SROM ≤ 24hrs and no sign of infection
- Women on Tier 1 of the SEHSCT Integrated Perinatal Mental Health Care Pathway^(6a)
- Threatened miscarriage, now resolved
- Threatened preterm labour, now resolved
- 10. Suspected low lying placenta, now resolved
- 11. Medical condition that is not impacting on the pregnancy or the woman's health
- 12. Women who have required social services input and there is no related impact on the pregnancy or the woman's health
- 13. Previous congenital abnormality, with no evidence of reoccurrence
- 14. Non-significant (light) meconium in the absence of any other risk (6b)
- 15. Uncomplicated third degree tear
- 16 Serum antibodies of no clinical significance
- 17. Women who have had previous cervical treatment, now term

- Maternal age <16 years or >40 years(6c) 2. BMI at booking \geq 35 kg/m2 and \leq 40 kg/ m² with good mobility
- 3. Last recorded Hb >85g/L (6d)
- No more than 5 previous births (6e)
- IVF Pregnancy at term (excluding ovum donation and maternal age >40 years)
- 6. SROM >24hrs, in established labour and no sign of infection
- 7. Women on Tier 2 of the SEHSCT Integrated Perinatal Mental Health Care Pathway, following individual assessment (6f)
- Previous PPH, not requiring blood transfusion or surgical intervention
- Previous extensive vaginal, cervical, or third degree perineal trauma following individual assessment
- 10. Prostaglandin induction resulting in the onset of labour (6g)
- 11. Group B Streptococcus positive in this pregnancy with no signs of infection (6h)

Notes relating to Planning Place of Birth

- (1) Straightforward singleton pregnancy, is one in which the woman does not have any pre-existing condition impacting on her pregnancy, a recurrent complication of pregnancy or a complication in this pregnancy which would require on-going consultant input, has reached 37 weeks gestation and ≤ Term +15.
- (2) The Northern Ireland Normal Labour and Birth Care Pathway provides an evidence-based framework for normal labour and birth.
- (3) It is the responsibility of the professional undertaking the assessment to document in the maternity care record the reasons for change of lead-maternity care professional.
- (4) FMU Freestanding Midwife-led Unit, AMU Alongside Midwife-led Unit (i.e. adjacent to consultant-led Unit).
- (5) Women with BMI 16–18 kg/m² require medical review to assess suitability of birthing in MLU.

Additional supporting midwifery practice recommendations

(6a) South Eastern Health and Social Care Trust (SEHSCT, 2013) Integrated Perinatal Mental Health Care Pathway Northern Ireland

'Tier 1 - Women with mild depressive illness, anxiety, adjustment disorders and other more minor mental illnesses associated with Pregnancy or the Postnatal Period are unlikely to require referral to Psychiatric Services. In general, they can be managed within the Primary Care Team, by their own GP, Health Visitors and Practice Based Counsellors if required. Social factors should always be considered and social support offered. Most of these women will not require medication' (p. 3).

- (6b) Definition of Significant Meconium: 'Dark green or black amniotic fluid that is thick or tenacious or any meconium-stained amniotic fluid containing lumps of meconium' (NICE Intrapartum Care Guideline, p. 32 www.nice.org.uk/ guidance/cg190/
- (6c) Women who are aged >40 years and ≤43 years and wish to give birth in an AMU should be no more than 40 weeks gestation. Primigravid women who are >40 years of age and women who are 44 years and older also require individual assessment with a consultant obstetrician. In the case of a pregnant teenager who is under 16 requiring intravenous fluids in labour, the paediatric fluid protocol must be followed, and care transferred to a consultant-led unit.
- (6d) A woman presenting with last recorded Hb <100g/L requires a repeat FBC at point of admission. If rechecked Hb is <100g/L, secure IV access, take blood and send to laboratory for Group and Hold. Then follow the Northern Ireland Normal Labour and Birth Care Pathway for active management of third stage.
- (6e) A woman with more than 5 previous births should normally have IV access secured (on admission), blood taken and sent to laboratory for Group and Hold and follow the Northern Ireland Normal Labour and Birth Care Pathway for active management of third stage.
- (6f) South Eastern Health and Social Care Trust (SEHSCT, 2013) Integrated Perinatal Mental Health Care Pathway Northern Ireland.
 - 'Tier 2 These are women with more significant illness who may require medication as well as some form of psychological intervention. In [some Trusts] women may be referred to antenatal perinatal mental health clinic. However, some women may be managed by their own GP, Midwife/ Health Visitor. If a significant illness develops and if GPs have concerns about prescribing in Pregnancy or in the postnatal period, they should be referred to Mental Health Services via the Mental Health Assessment Centre. The referral will then be seen as a priority, triaged and forwarded to the relevant Team depending on a [woman's] past mental health history, current mental health service input and severity of illness. At this level most of the referrals will be assessed by the

Assessment Centre Staff, which can include assessment by a Psychiatrist if it is deemed appropriate. Medication may be started or a brief focused psychological intervention may be offered. In this event those women who are within Midwife-Led services will be referred to a Consultant Obstetrician due to the medical management needed of their mental health condition' (p.3).

- (6g) A woman who has gone into labour following induction with either 1 Propess[®] or up to 2 Prostin[®] only.
- (6h) Women with Group B Streptococcus positive in current pregnancy require intravenous antibiotics in labour as per NICE Guideline cg 149 'Antibiotics for early-onset neonatal infection: Antibiotics for the prevention and treatment of early-onset neonatal infection' (NICE, 2012) https://www.nice.org.uk/guidance/cg149/. In the absence of a midwife prescriber, the doctor on call should be consulted to prescribe antibiotics as per guideline.

In Utero Transfer

When transferring a woman and/or baby from MLU to a consultant-led unit, document the evidence, rationale and collaborative communication held with colleagues. In addition, complete the Regional In Utero Transfer Proforma – MLU Version January 2016 (see appendix 3); document the time of decision, time of transfer and measures taken in the event of delay.

Insert Woman's Health & Care Identification sticker

NORTHERN IRELAND NORMAL LABOUR AND BIRTH CARE PATHWAY*

Woman/Partner/Significant other Information

Following discussion with you/and your partner/significant other, a normal labour and birth care pathway will be designed that fits your needs and values. There will be ongoing discussion with you and your partner/significant other during your admission, labour and birth. If as an individual, your health requirements vary from those outlined in this pathway, members of the maternity care team will in discussion with you and other members of the team (if appropriate), adapt your care accordingly. You will be involved in all discussions and decision-making surrounding your care.

Staff Information

This Pathway aims to provide a structured, evidence based framework for normal labour and birth. It is not intended to be prescriptive but should act as a guide and encourages clinical judgment to be used and documented in partnership with the woman/and her partner/significant other. Each step of the pathway must be signed off as care is provided. Anyone completing any part of the document must ensure that it is secured within the **regional maternity hand held records** and sign the signature sheet. Remember to complete VTE assessment and review the woman's Group B Streptococcus status.

^{*}Based on the SE Trust, Belfast Trust & Welsh Integrated Care Pathway for Normal Labour © Northern Ireland Normal Labour and Birth Care Pathway

Topics for Discussion	Discussed Yes/No/NA
Labour and birth related topic(s) that the	
woman/partner/significant other may wish to	
discuss	
Birth preference(s) including water birth	
Mobilising and changing positions during	
childbirth	
The benefits of rest, massage, including	
reflexology	
Consider environment e.g. dimming of lights,	
music	
Refreshments - Light diet/isotonic fluids	
Pain relief – options e.g. labour in water,	
TENS, hypnobirthing, visualisation	
Importance of attempting to pass urine	
regularly	
Fetal heart rate monitoring	
Rupturing membranes	
Progress in labour and vaginal examination	
(with consent)	
Episiotomy and reasons why it might be done	
Third stage of labour - the choices	
Importance of skin-to-skin contact	
Who discovers the sex of the baby and cuts	
the cord	
Phytomenadione (Vitamin K)	
Timing of Cord Clamping	
If rhesus negative, need to take cord and	
maternal blood	
Transfer to consultant-led care if a problem	
arises	

Insert Woman's Health & Care Identification sticker

Initial Assessment

Date & Time of 1st assessment	Signature	
Date & Time of 2nd assessment	Sianature	

Action	Within normal limits				Normal limits
	1st Assessment		2nd Assessment		
	YES	NO	YES	NO	
Abdominal Palpation					
Normal growth for gestation					
Lie					Longitudinal
Presentation					Cephalic
Head palpable above pelvic brim	/5ths		/5ths		Palpable
Fetal heart auscultation (listened to after a contraction for a period of at least one minute)					100 - 160 beats per minute
Rate of contractions					>1:5
Palpated strength of contraction					Moderate/strong
Length of contraction					>30 seconds
Maternal Observations					
Blood pressure					Refer to MEWS
Pulse					Refer to MEWS
Temperature					Refer to MEWS
Respirations					Refer to MEWS
O ² Saturation					Refer to MEWS
Urinalysis					Blood can be present If glycosuria 2+ or more do a BM, if <8 mmol/L remain on Midwife-Led Unit. Negative to glucose Negative/Trace ketones Negative/Trace protein
Vaginal loss					Refer to MEWS
Medication including pain relief	Record i	n MHHR	Record i	n MHHR	

Insert Woman's Health & Care Identification sticker

Following verbal, informed consent from the woman, a vaginal examination (VE) is normally undertaken for confirmation of active labour within four hours of the onset of regular uterine contractions and the commencement of 1:1 midwifery care. Prior to VE, undertake abdominal palpation. If a VE is undertaken, then please complete the **appropriate VE sticker and insert in the regional maternity hand held records** and document maternal vital signs and fetal heart rate in the MEWS chart.

Date/Time of 1st Assessment Vaginal Examination: Date: Signature of midwife	Time:
Date/Time of 2nd Assessment Vaginal Examination: Date: Signature of midwife	Time:

		1st Assessment	2nd Assessment
Cervix:	Position		
	Effacement		
	Application		
	Dilatation		
Presenting Part:	Cephalic/Breech		
	Relation to ischial spines		
	Position		
	Caput or moulding		
Membranes:	Present or Absent		
Liquor:	Colour		
Cord/Limbs:	Felt/Not felt		
	Fetal heart auscultated post procedure 100 - 160 bpm		

	1st Ass	1st Assessment		sessment
	Yes	No	Yes	No
Diagnosis - In latent phase of labour				
Diagnosis – In active labour				
Continue pathway				

Commence partogram when the woman is deemed in <u>active labour</u> –

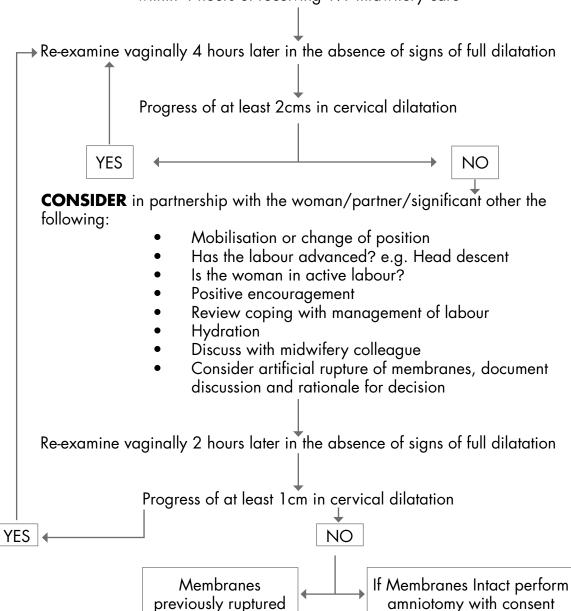
Follow Northern Ireland Normal Labour and Birth Care Pathway and document in maternal hand held records.

ACTIVE PHASE OF LABOUR - FIRST STAGE

All care provided will be in accordance with this midwifery guideline. If a deviation from normal progress in labour is suspected, seek advice from an appropriate colleague immediately.

Expected Progress in Labour - First Stage of Labour

Following abdominal examination and consent carry out a vaginal examination within 4 hours of receiving 1:1 midwifery care



Using appropriate communication tool, exit the Pathway and transfer to Consultant-Led Care

EXPECTED PROGRESS IN SECOND STAGE

Fully Dilated

Nulliparous: Delay suspected if inadequate progress after 1

hour of active second stage

Parous: Delay suspected if inadequate progress after 30

minutes of active second stage

Offer support and encouragement and consider:

- Are contractions adequate?
- Is the bladder empty?
- Change of position
- Seek opinion of colleague
- Consider analgesia/anaesthesia
- Amniotomy if membranes intact
- Document appropriately including rationale for decision-making

Nulliparous: No birth within next hour (Total active 2nd Stage - 2 Hours)

Parous: No birth within 30 minutes (Total active 2nd Stage - 1 hour)

Diagnosis of delay in 2nd stage if birth not imminent

Transfer from MLU to Consultant-Led care and document appropriately

GUIDANCE:

- Full dilatation is confirmed by a visible vertex at the perineum. In some circumstances, it may be necessary to confirm full dilation by VE.
- As a guide, the midwife will support pushing only when a woman feels expulsive contractions.
- Progress is made by advancement of the head, in the presence of expulsive contractions with a stable woman and baby.
- Undertake delayed cord clamping:
 <u>Physiological management</u> await cessation of cord pulsation
 <u>Active management</u> do not clamp the cord earlier than 1 minute from birth of the baby unless baby's heart rate <60bpm or concern for integrity of the cord, clamp cord before 5 minutes post birth to undertake controlled cord traction (NICE, 2014 https://www.nice.org.uk/guidance/cg190)

EXPECTED PROGRESS - THIRD STAGE OF LABOUR

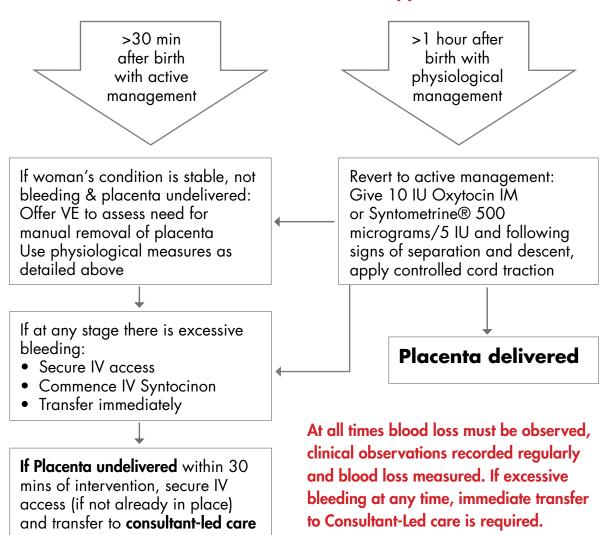
Third stage of labour may be managed actively or physiologically based on individual risk assessment and maternal choice.

Physiological measures to aid expulsion of placenta include:

- Ensuring the bladder is empty
- Encouraging the mother to breastfeed her baby to aid expulsion of placenta
- Encouraging maternal effort to expel the placenta
- Encouraging the mother to adopt an upright position

If there are no midwifery concerns and physiological management is planned it can proceed for up to one-hour duration without the need for active intervention. However, if physiological management is planned or commenced and intervention is needed, the third stage of labour must be managed actively.

Please follow this structured approach



GLOSSARY OF TERMS

Consultant-Led care – a medical model of maternity care where the woman's lead professional is a consultant obstetrician who has overall clinical responsibility. Care is predominately provided in a maternity unit (although can be community based), within a multidisciplinary team including midwives, physiotherapists, social workers etc. Other medical consultant specialists may have input into a woman's or infant's care including an anaesthetist or a neonatologist.

Midwife-led care - a model of maternity care where 'midwives are, in partnership with the woman, the lead professional with responsibility for assessment of her needs, planning her care, referral to other professionals as appropriate, and for ensuring provision of maternity services' (Begley et al., 2011)

Midwife-Led Unit (MLU) – A birth setting where women attend for maternity care and the midwife is the lead maternity carer.

REFERENCES

Begley, C; Devane, D; Clarke, M; McCann, C; Hughes, P; Reilly, M; Maguire, R; Higgins, S; Finan, A; Gormally, S & Doyle, M (2011) Comparison of midwife-led and consultant-led care of healthy women at low risk of childbirth complications in the Republic of Ireland: a randomised trail. *BMC Pregnancy and Childbirth* 2011, 11: 85 doi:10.1186/1471-2393-11-85 http://www.biomedcentral.com/1471-2393/11/85

Hollowell, J; Puddicombe, D; Rowe, R; Linsell, L; Hardy, P; Stewart, M; Newburn, M; McCourt, C; Sandall, J; Macfarlane, A. J; Silverton, L & Brocklehurst, P. (2011) The Birthplace national prospective cohort study: perinatal and maternal outcomes by planned place of birth. Birthplace in England research programme. Final report part 4. NIHR Service Delivery and Organisation programme

Devane, D; Brennan, M; Begley, C; Clarke, M; Walsh, D; Sandall, J; Ryan, P; Revill, P & Normand, C (2010) A systematic review, meta-analysis, meta-synthesis and economic analysis of midwife-led models of care. Royal College of Midwives: London.

Department of Health, Social Services and Public Safety (DHSSPSNI), (2012) A Strategy for Maternity Care in Northern Ireland 2012-2018. Belfast: DHSSPSNI.

GAIN (2014) Advice for Guideline Development in Northern Ireland Manual. Belfast: GAIN

Healy, M. (2013) An exploration of antenatal care guidelines, the development and culture of MLUs in N. Ireland. COST Action Short Term Scientific Mission Report - http://www.iresearch4birth.eu/iResearch4Birth/en/stsm5.wp

Hollowell, J; Rowe, R; Townend, J; Knight, M; Li, Y; Linsell, L; Redshaw, M; Brocklehurst, P; Macfarlane, A; Marlow, N; McCourt, C; Newburn, M; Sandall & S; Silverton, L (2015) The Birthplace in England Research Programme: further analyses

to enhance policy and service delivery decision- making for planned place of birth. http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0010/141031/SDO_FLS_10-1008-43.pdf

National Childbirth Trust, (2011) NCT Briefing: Midwife-led units, community maternity units and birth centres http://www.nct.org.uk/sites/default/files/related_documents/Midwife-led%20units,%20community%20midwifery%20units%20 and%20birth%20centres.pdf (Accessed 15 October 2013).

National Institute of Clinical Excellence (NICE, 2012) CG 149 Antibiotics for early-onset neonatal infection: antibiotics for the prevention and treatment of early-onset neonatal infection. London: NICE https://www.nice.org.uk/guidance/cg149/chapter/research-recommendations (Accessed 15th May 2015).

National Institute of Clinical Excellence (NICE, 2014) Clinical Guideline 190 Intrapartum care: care of the healthy woman and their babies during childbirth https://www.nice.org.uk/guidance/cg190 (Accessed 15th January 2015).

National Institute of Clinical Excellence (NICE, 2015) Intrapartum Care Quality Standard (QS 105) https://www.nice.org.uk/guidance/qs105/resources/(Accessed 14th December 2015).

Northern Ireland Statistics and Research Agency (NISRA, 2015) www.NISRA.gov.uk (Accessed 17 August 2015).

Public Health Agency (PHA) (2014) 10,000 Voices Experience of Maternity Care in Midwifery Led Units in Northern Ireland August 2014, Public Health Agency, Belfast.

Renfrew, M; McFadden, A; Helena Bastos, M; Campbell, J; Amos Channon, A; Fen Cheung, N; Delage Silva, D.R.A; Downe, S; Powell Kennedy, H; Malata, A; McCormick, F; Wick, L & Declercq, E. (2014) Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *The Lancet*, 384, 9948, p1129-1145 (Accessed 17 August 2015)

Sandall, J; Soltani, H; Gates, S; Shennan, A; Devane, D; (2013) Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database Systematic Review; 8: CD004667.

South Eastern Health & Social Care Trust (SEHSCT, 2013) Integrated Perinatal Mental Health Care Pathway. Belfast: South Eastern Health & Social Care Trust.

Tracy, S.K; Hartz, D; Nicholl, M; McCann, Y; Latta, D (2005) An integrated service network in maternity - the implementation of a midwifery-led unit Australian Health Review 2005: 29(3): 332–339.

Tracy, S.K; Hartz, D.L; Tracy, M.B; Allen, J.; Forti, A; Hall, B; White, J; Lainchbury, A; Stapleton, H; Beckmann, M; Bisits, A; Homer, C; Foureur, M; Welsh & A; Kildea, S (2013) Caseload midwifery care versus standard maternity care for women of any risk: M@NGO, a randomised controlled trial. The Lancet published online Sept 17. http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)61406-3/abstract

APPENDICES

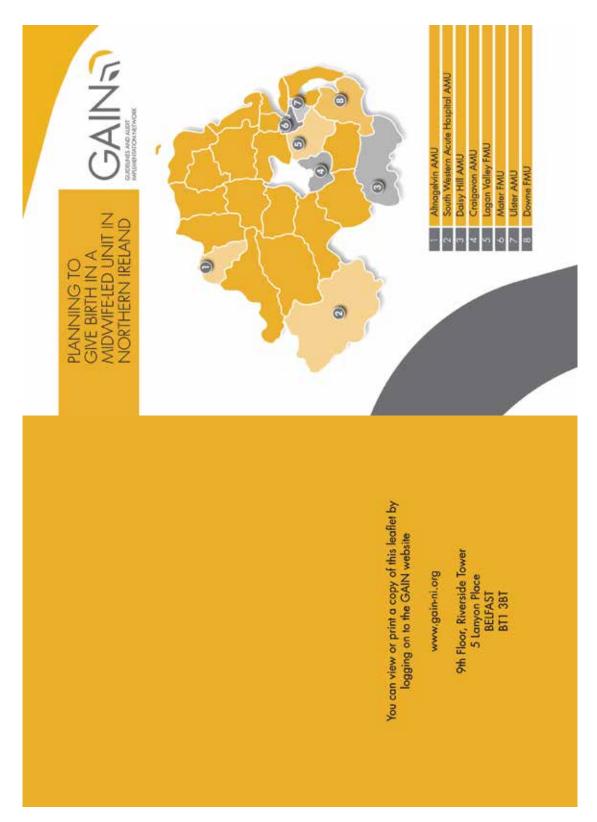
Appendix 1: Guideline Development Working Group

Name	Designation	Organisation
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Ms Zoe Boreland	Head of Midwifery	South Eastern HSC Trust
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Ms Mary Caddell	Regional Officer	Royal College of Midwives (Alternate for Ms B Hughes)
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Name	Designation	Organisation
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Ms Lorraine Ponise	Midwife Manager, Mater MLU	Belfast HSC Trust
Ms Katherine Robinson	Midwife Manager, Home from Home, MLU	South Eastern HSC Trust
Ms Amanda Sayer	Lead Midwife Community	Western HSC Trust
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Peer Reviewed by		
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Name	Designation	Organisation
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Appendix 2: Women/Partner/Significant Other Information Leaflet:'Planning to give birth in a Midwife-Led Unit (MLU) in Northern Ireland'



WHAT IS A MIDWIFE-LED UNIT (MLU)?

A MLU is a maternity unit where the midwive are the lead professional. There are currently eight MLU's in Northern Ireland (NI).

- Five Alongside Midwife-led Units (AMUs), which are situated on the same site as a Consultant-Led Unit
- Three Freestanding Midwife-led Units (FMU's)

Evidence from the National Institute for Health and Care Excellence (NICE) highlights that MLUs are particularly suitable for healthy women having a straight forward pregnancy because:

- Birthing in a MtU is just as safe for your baby as a Consultanted Unit and
- In an MLU, you are less likely to have a caesarean section, blood transfusion, require ventouse (vacuum) or forceps to assist in the delivery of your baby.

GIVING BIRTH IN AN MILL

MLUs are particularly suitable for healthy women having a straightforward pregnancy with a single baby. Definition of a straightforward pregnancy is one in which:

- You do not have any pre-existing problems which are affecting this pregnancy
- A problem you had in a previous pregnancy or birth is not likely to happen again or
- You do not have a problem in this pregnancy requiring ongoing consultant care



- are aged between 16 and 40 years at time of booking appointment
- have a Body Mass Index (BMI) at booking appointment between 18 kg/m² and 35 kg/m²
 - have a last recorded blood count (haemoglobin) of at least 100 g/L
 - have had no more than 4 previous births
 - achieved assisted conception with clomifene (Clomid) or other similar fertility treatment
- ago and you have no sign of infection and are feeling had your waters break on their own less than 24hrs
 - have or had a mental health problem requiring you to seek help from a mental health professional or counsellor
 - had a threatened miscarriage, but pregnancy continued normally
 - had a threatened early labour which settled
- · had a placenta that was previously low lying, but it is now in a better position
 - are receiving support from social services with no have a health condition that does not affect your pregnancy or your general health
 - had a baby with a health condition, but in this pregnancy your baby has no known condition impact on on your pregnancy or health

- · your waters have gone and they are slightly green in colour and otherwise you are feeling well
 - had a previous third degree tear that healed well and has not given you any ongoing problems
 - have a blood test showing 'serum antibodies with no clinical significance' (i.e. this has no effect on you or your baby
- had previous cervical treatment and have reached 37 weeks with no related problems



In addition, women who do not meet the criteria as outlined in pages 4 and 5 of this leaflet, following assessment and discussion, can plan to give birth in an Alongside Midwife-Led Unit (AMU) if you:

- are aged under 16 or aged over 40 years at booking appointment
- have a BMI at booking appointment of ≥35 kg/m² & ≤40 kg/m² and you have good mobility
 - have a blood count (haemoglobin) of at least 85g/L when last recorded and this will be rechecked on admission
- have no more than 5 previous births
- received IVF and your pregnancy is at term (excluding egg donation) and you are aged under 40 years
 - had your waters break on their own more than 24hrs ago, you are in established labour, and you have no sign of infection
 - have or had a mental health problem which has required medication, extra support and help from a mental health professional and or counsellor
- had bleeding after a previous birth, but did not need a blood transfusion or surgery
 - have had extensive vaginal, cervical, or third degree perineal trauma during previous childbirth
- are in labour following induction with prostaglandins (pessary/gel, not drip)
- have been told that you have Group B Streptococcus positive (Strep B) in this pregnancy and have no sign of infection

What if I go into labour early or I am overdue'

It is recommended that you birth in a MLU if your pregnancy is between 37 and 42 weeks (up to 15 days past 40 weeks) and you have met the criteria as outlined in this leaflet.

ill the guideline definitely apply in my local MLU?

These guidelines apply in **all** Midwife-Led Units in Northern Ireland and have been developed with the support of the Guidelines and Audit Implementation Network (GAIN), the Department of Health Social Services and Public Safety (DHSSPS) and key maternity services stakeholders.

Some women, including older women in their first pregnancy and women more than one week past their due date, have a higher chance of needing to be transferred to a consultant-led unit during or immediately after childbirth.

You should seek advice from your local midwife when planning your place of birth. If you have any queries or difficulties, you can arrange an appointment with a senior midwife or a supervisor of midwives. The local supervisor of midwives contact details are available in your maternity hand held record or ask your midwife.

Appendix 3: Regional In Utero Transfer Proforma

ORIGINAL COPY TO BE RETAINED IN WOMAN'S NOTES

Regional In Utero Transfer Proforma STOP, THINK IS THIS WOMAN AND BABY FIT FOR TRANSFER?

Woman's Details/sticker		Date and Time of Transfer:	
Name:		Time ambulance requested:	
DOB:		Name and Contact Details of Referring Unit:	
H+C number: Address:		Name and Contact Details of Referring Doctor:	
		Name and Contact Details of Receiving Unit:	
		Name and Contact Details of Receiving Midwife:	
Current Pregnancy:	Parity:	EDC:	Gestation:
No. of fetuses:			Other:
No. and mode of previous births:	Vaginal Births:	C/S Births:	

Reason for transfer:					
Maternal Condition:	Temperature	Pulse	Blood pressure	Resp Rate	
Contractions	Yes	No	Frequency/strength:		
Membranes:	Intact	Ruptured	If ruptured, date, time and colour of liquor:		
Speculum/Vaginal Examination Findings (Indicate date and time):				Speculum/VE not indicated	

Jan 2016

Permission has been requested and received to amend the Regional In Utero Transfer Proforma to reflect care in a Midwife Led Unit.

Appendix 3: Regional In Utero Transfer Proforma

ORIGINAL COPY TO BE RETAINED IN WOMAN'S NOTES

Details of any Rx given for BP:			No antihyp	
Steroids (date, time, type and dosage):				
MgSO4 infusion:	Date and time commenced:		MgSO4 not required	
Other Significant Current or Past Obstetric History:				
Significant Medical History:				
Past Drug History (Including Allergies):				
Fetal Condition (Date/ Time of USS):			Chorionicity fetal concer fetal abnor	ns (e.g.
Presentation				
EFW				
AFI				
UA Doppler				
Placental location				
Transfer Checklist (to be completed prior to ambulance departure):				
Maternity Record: Transferred with mother	Yes / No	Urinary catheter	Yes	Not required
Investigations/blood tests performed (document results in maternity record):		MgSO4 infusion	Yes	Not required
IV access secured	Yes / No	Delivery Pack	Yes	Not required
Signature of Referring Midwife:		Neonatal resus equipment	Yes	Not required

Jan 2016

Permission has been requested and received to amend the Regional In Utero Transfer Proforma to reflect care in a Midwife Led Unit.



You can view or print a copy of this Guideline by logging on to the GAIN website

www.gain-ni.org

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