Birth After Caesarean (BAC) Guideline

Guideline information

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Summary of document:
This guideline is to ensure that the appropriate information and support is given to women and birthing people who have undergone a previous caesarean birth and deciding mode of birth in their current pregnancy.

Scope:
The guideline is applicable to medical and midwifery staff who provide care to pregnant women and birthing people who have previously had a caesarean birth. It is relevant for all women who have had a previous caesarean birth to review and consider options for birth in their current pregnancy based on evidence relating to benefits and risks associated with differing modes of birth.

The guidance uses the term “woman” (pronouns she or her) to describe individuals whose sex assigned at birth was female, whether they identify as female, male or non-binary. It is important to acknowledge it is not only people who identify as women for whom it is necessary to access women’s health and reproductive services. Therefore, this should include people who do not identify themselves as women but who are pregnant or have recently given birth. Obstetric and midwifery services and delivery of care must therefore be appropriate, inclusive and sensitive to the needs of those individuals whose gender identity does not align with the sex that they were assigned at birth.

Patient information:
Birth after previous caesarean | RCOG - open in new tab

https://www.nice.org.uk/guidance/ng192/resources/caesarean-birth-pdf-66142078788805 - open in new tab

https://www.rcog.org.uk/guidance/browse-all-guidance/green-top-guidelines/birth-after-previous-caesarean-birth-green-top-guideline-no-45/ - open in new tab

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Keywords
Caesarean birth, Vaginal birth after caesarean birth, Birth after Caesarean

Glossary of terms
ARM - Artificial Rupture of Membranes
ERCB - Elective repeat caesarean Birth
VBAC - Vaginal birth after caesarean
BAC - Birth after Caesarean

Contents

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Aim

The aim of this document is to:

- Support midwives and obstetricians to provide information and plan care for women who have had a previous caesarean birth.

Objectives

The aim of this document will be achieved by the following objectives:

- Ensuring that clinicians provide consistent evidence based information is provided to women who have had a previous caesarean birth.
- Considering the benefits and risks of a planned caesarean birth compared to a vaginal birth.

Introduction

There is consensus that, for the majority of women with have had a single previous lower segment caesarean birth (LSCB), planning a vaginal birth in the next pregnancy is considered a clinically safe choice. A successful vaginal birth after caesarean birth (VBAC) is known to reduce the overall chance of adverse outcome when compared to an Elective Repeat Caesarean Birth (ERCB). Of the women who attempt VBAC, 72-75% will succeed in achieving a vaginal birth (RCOG, 2015).

This guideline will support midwives and obstetricians when discussing and planning births with women who have had a previous caesarean, with a focus on reducing maternal morbidity linked with multiple caesarean birth.

At Booking Appointment

At the initial booking appointment the clinican should discuss the pathway of care for women who have had a previous caesarean, and provide the woman with the RCOG 2016 information leaflet ‘Birth options after Caesarean’

All discussions and information provided should be recorded on the Birth after Caesarean (BAC) Checklist (See Appendix 1) which will then be filed in the hand held maternity records.

It is appropriate to advise women that planning a VBAC is usually the safest option and would generally be the professional recommendation.

Women should be informed that it is recommended that birth should be planned on an obstetric unit with immediate access to obstetric and neonatal services.

Antenatal Care

Antenatal counselling should consider all known risks and benefits of planned VBAC versus ERCB and the woman's wishes should be explored and respected. The decisions women make in planning subsequent births are multifactorial and individual, some women are particularly influenced by professional guidance (Black, Entwhistle, Bhattacharya & Gillies 2016).

Women should be informed that during spontaneous labour; the rate of uterine rupture is 1:200 and that success rates where VBAC is planned are 72-75%.

There is some evidence of a lower success rate for women with a raised BMI, previous history of labour dystocia (particularly where the cervix was less than 8cm dilated), postdates birth, induction of labour, suspected macrosomia and/or maternal age over 40 years.

It should be noted that third trimester ultra sound scanning is not a reliable predictor of macrosomia (RCOG 2015).

At the first antenatal clinic appointment with the obstetrician the previous birth records should be reviewed to ensure suitability for VBAC.

Contraindication to planning a VBAC pertain to an increased risk of Uterine rupture
Women with any contraindication or circumstance that would increase the chance of uterine rupture should be referred to a consultant obstetrician for antenatal care.

Contraindications:

- Previous uterine rupture
- High vertical classical uterine scar
- Extended uterine incision at index caesarean birth (e.g. T or J shaped incisions)
- Previous myomectomy or prior complex uterine surgery
- Other definitive contraindications to a vaginal birth irrespective of uterine scar.

Circumstances, where the possible increase in uterine rupture should be considered include:

- Short- interval between CB and VBAC (Less than12 months, risk of rupture unknown)
- Multiple pregnancy (unknown)
- Suspected fetal macrosomia (Unknown)
- Induction/augmentation of labour (2-to-3 fold increase)
- Three previous Caesarean Birth (unknown)
- The advantages and disadvantages of planned VBAC versus planned ERCB should be discussed using the RCOG information leaflet.

Discussions should be documented using the BAC Checklist.

Care planning should then follow the appropriate pathway

- Where VBAC is planned an appointment should be arranged in a consultant clinic for the third trimester of pregnancy to discuss ongoing care where required.
- Where a woman is undecided around choosing mode of birth then a referral should be made to the consultant midwife or community midwife for the opportunity of further discussion.
- Where ERCB is planned or where there are co-morbidities the woman should be offered consultant led antenatal care and an appointment arranged as appropriate.
- Where ERCB is planned, indications for this should be documented in the hand held records. A detailed plan should be completed by 36 weeks to include a date for ERCS from 39 weeks.
- 10 % of women will labour prior to 39 weeks, these circumstances should be discussed and a plan documented for this event.
- Where a consultant obstetrician has made a plan for birth this should be followed unless contraindicated.

Ongoing antenatal care

- Women should be advised to report any scar tenderness or vaginal bleeding.
- Membrane sweep may be offered from 39 weeks of pregnancy for those planning VBAC.
- Where the pregnancy is progressing normally induction of labour is offered from 41 weeks to maximise the opportunity for a spontaneous labour.
- Where spontaneous labour has not occurred and the woman declines induction of labour then ERCB should be scheduled for term + 12.
- Women presenting with pre labour rupture of membranes should be offered the same primary management as a woman with no history of prior caesarean birth.
- Antenatal assessment should include a CTG where contractions are present.

Intrapartum Care during VBAC

- Initial assessment of labour should be offered with continuous fetal monitoring as part of the assessment.
- In the latent phase where contractions are irregular, both fetal and maternal wellbeing have been confirmed, and the woman is coping, then she may be encouraged to return home to await events with relevant advice.
- A senior obstetric review should be advised on a second or subsequent admission where the woman remains in the latent phase of labour.

- Once in established labour, women should be admitted to the obstetric unit for one to one midwifery care.

- Bloods for FBC and Group and Save should be offered on admission for all women planning VBAC.

- Intravenous access should be secured if; cannulation is predicted to be difficult, or where there is any additional fetal or maternal concern. **Cannulation should not be part of routine care** (NICE, 2019).

- Women should be advised to have continuous electronic fetal monitoring following the onset of regular contractions for the duration of planned VBAC (NICE 2019; RCOG 2015).

- Telemetry is available on both labour wards and should be utilised where possible.

- Women using telemetry can be encouraged to use the birthing pool on the obstetric units, provided that; there is no contraindication to using the birthing pool, labour is progressing normally, there is no hyper stimulation and fetal and maternal wellbeing have been confirmed.

- Omeprazole 40mg should be offered followed by 20mg every 12 hours

- The normal physiology of labour and birth should be supported in all environments to optimise outcome, this includes mobilisation, bladder care and hydration with water or still isotonic drinks.

- Regular maternal observations including blood pressure, pulse, respiratory rate and temperature should be recorded at the standard interval for normal labour, unless otherwise indicated.

- Regular assessment of cervical dilatation in the 1st stage of labour should be offered, with hourly assessment in the 2nd stage.

- Expected progress is 0.5-1cm every hour depending on previous history of vaginal birth. For women who have had a previous vaginal birth progress should be expected to be 1cm per hour. Birth should be expected within 1 hour of active pushing in the 2nd stage.

- Delayed progress should be discussed with the registrar / consultant obstetrician on call.

- Early diagnosis of uterine scar rupture is essential to reduce associated morbidity and mortality in mother and infant. There is no single clinical feature that is indicative of uterine rupture but the presence of any of the following should raise the concern of the possibility of this event:

    - Abnormal CTG (present in 55-87% of uterine rupture)
    - Severe abdominal pain, especially if persisting between contractions
    - Chest pain or shoulder tip pain, sudden onset of shortness of breath
    - Acute onset scar tenderness
    - Haematuria
    - Abnormal vaginal bleeding or haematuria

- Cessation of previously efficient uterine activity - Maternal tachycardia, hypotension, fainting or shock
- Loss of station of the presenting part.

- Diagnosis is ultimately confirmed at emergency caesarean or postpartum laparotomy

Induction of Labour (IOL) and Augmentation

- The decision to induce or augment labour should be made by a consultant obstetrician together with the woman. Any plan should include proposed methods, the time intervals for vaginal examination and any parameters of cervical progress that would indicate discontinuing VBAC.

- There is an increased chance of uterine scar rupture with the use of prostaglandins/ oxytocin (2-to-3 fold increased rate of uterine rupture, 1.5 fold increased chance of LSCB, perinatal death due to rupture increases from 4.2/10000 to 11.2/10000), this should be discussed alongside the risks and benefits of ERCB.

- Clinicians should be aware that IOL using mechanical methods (amniotomy/traction catheter) is associated with a lower incidence of uterine scar rupture compared to prostaglandin (29/10000 versus 87/10000).

  Where prostaglandins are used it is important not to exceed the safe recommended limit (see induction of labour guideline). Low-dose prostaglandin E2 may be as safe as spontaneous labour however there is currently not reliable evidence to confirm this.

- The use of oxytocin to augment delayed progress or secondary arrest must be done with caution and must be a consultant obstetrician's decision.

- Where oxytocin is used contractions should not exceed the maximum rate of 4 contractions in ten minutes.

- Consider reducing or stopping any oxytocin infusion once optimum contractions are reached.

- There is some low grade evidence to suggest that the risk of uterine rupture increases 4 fold or more where the dose of oxytocin administered exceeds 20 milliunit/minute.

Planned Caesarean Birth in Special Circumstances

- VBAC can be offered as an option to women undergoing preterm birth with a history of prior caesarean birth following appropriate counselling.

- Women planning a pre term VBAC should be informed that rates of success are similar to VBAC at term, and the chance of uterine rupture is substantially less (34/10,000),perinatal outcome appears to be the same (RCOG,2015).

- A cautious approach is advised when considering planned VBAC in women with multiple pregnancy, fetal macrosomia and short inter- delivery interval (<12 months).

- Women who have under two previous LSCS can be offered VBAC after discussion with a senior obstetrician. There is an increase in hysterectomy associated with VBAC (56/10,000) after two caesarean births compared with ERCB (19/ 10,000). Rates of blood transfusion also increase in VBAC after two LSCS (1.99%) compared to ERCB (1.21%).

Counselling in this group should include chance of scar rupture (1/200), maternal morbidity and individual likelihood of success based on previous obstetric history. Where VBAC is planned in these instances then a comprehensive plan should be made for the intrapartum period. This should include a plan for cervical progress parameters and instances whereby VBAC should be discontinued.

There is no reliable evidence around planned VBAC in women with 3 or more caesareans. The relative and/or absolute risk of maternal or neonatal adverse outcome in this group is unknown. For women requesting planned VBAC with 3 or more Caesareans, antenatal counselling should occur with a consultant obstetrician. Consultations must include documented discussion around the limitations of the evidence base, and a professional opinion around risk of scar rupture considering current and previous obstetric history. A comprehensive plan for the intrapartum period, to include expected cervical progress and plan in case of primary or secondary labour dystocia.

Care for women requesting care outside of current guidelines

Where women decline to birth in an obstetric unit or choose a package of care outside of the recommendations her choices for labour and birth must be discussed and documented in detail.

Where possible the woman should be seen by the consultant midwife/community midwife to develop a plan which supports the woman in informed decision making.

Where midwives are providing care for women making birth choices outside of recommendations without antenatal counselling the manager on call should be informed and utilised for support.

It is appropriate for consultant obstetricians to discuss the plan with the consultant midwife in circumstances where woman are choosing to labour and birth in midwifery led areas.

Any antenatal counselling around birth choices outside of recommendations should be documented on the relevant discussion form (See Appendix 3), and filed in the maternal record.

Auditable Standards

- All women offered Birth Choices.
- Data to be collected monthly for all elective repeat caesarean undertaken.
- Data to be collected monthly for all attempted and successful VBACs.
- Maternal and neonatal outcomes to be reviewed.
- Datix Incident Reporting for all adverse Maternal and Perinatal outcomes

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Appendix 1 – Birth After Caesarean (BAC) Checklist

Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

<table>
<tr><td>Booking appointment</td><td>Date ……..

EDD……

Gestation: ……

Addressograph

Reason for previous CS:
……

Antenatal Risk factors? ……

RCOG (2016) information leaflet provided Yes No</td></tr>
<tr><td>BAC Discussion before 20 weeks</td><td>Discuss previous birth experience ☐

Previous obstetric notes reviewed ☐

Risks and benefits of VBAC discussed ☐

Risks and benefits of ERCS (elective repeat) ☐

Patient information leaflet given ☐ by CMW ☐

Recommendation for VBAC ☐ ERCS ☐

Recommended care in labour:
Recommendation for birth on Obstetric unit ☐

Recommendation for CEfM ☐

Use of telemetry ☐

Use of water for labour ☐

FBC/GS taken on admission and venous access assessment. ☐

Support in labour ☐

Mobility in labour ☐

Additional information
……</td></tr>
<tr><td>Plan</td><td>Woman wishes:

VBAC ☐ Appointment to be arranged for 36 weeks in ANC clinic

ERCB ☐ Refer to ANC (discontinue pathway. Detailed plan to be documented in maternal records by 36/40)

Undecided ☐ Referral to community midwife or consultant midwife by 28 weeks

Other:

Signed: …… Printed:</td></tr>
</table>

- The risk of scar rupture overall is 5:1000 (0.5%) in planned VBAC,<2/10,000 (0.02%) in ERCB
- Likelihood of successful planned VBAC; after a single previous caesarean is 72-76%, with at least 1 previous vaginal birth 85-90%.
- Pervious LSCS for malpresentation increases likelihood of successful VBAC to 84%
- Unsuccessful VBAC more likely in IOL, BMI more than 30, no previous vaginal birth, and labour dystocia .Success rate falls to 40% where all factors are present.
- ERCS increases the risk of serious complications in future pregnancies (placenta praevia/morbidly adherent placenta).
- Risk of birth-related perinatal loss during VBAC is comparable to the risk for women having their first baby **RCOG (2015) birth after previous caesarean Birth (Green-top guideline 54)**
- Maternal Mortality 4/100,000 VBAC, 13/100,000 ERCB

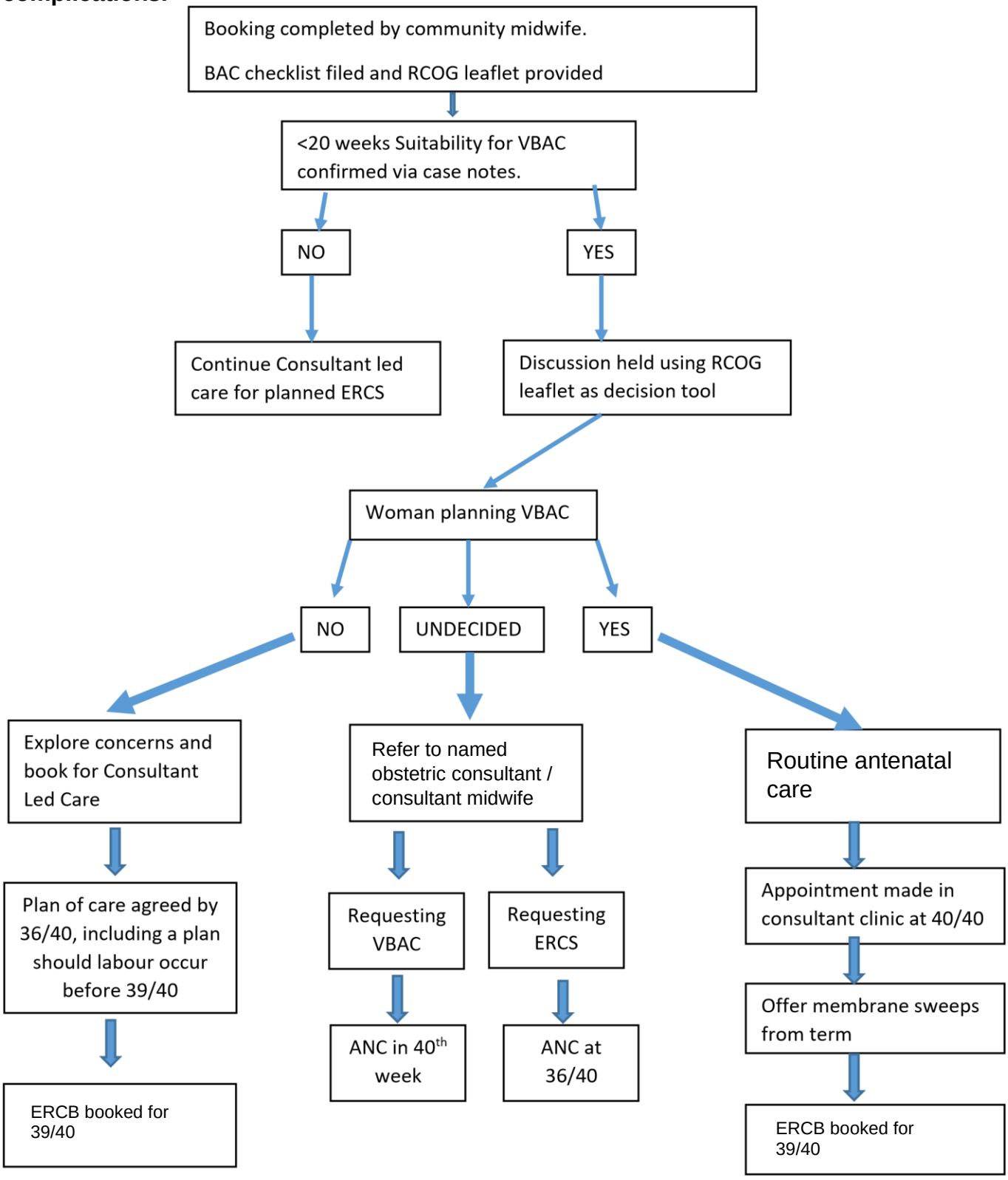
Subsequent appointment		
Plan		
Clinic appointment in the 40th week	Date: …… Gestation: …… Is VBAC still recommended Yes ☐ No ☐ If no, why? …… ……	**Discussion:** Methods used for induction of labour ☐ Increased risk of scar rupture and LSCS ☐ Recommendation for cervical assessment ☐ and stretch and sweep ☐ Cervical assessment carried out? Yes ☐ No ☐ Bishop's score……

Plan	Where spontaneous labour has not occurred by 41 weeks Woman wishes IOL ☐ ERCS ☐ Book for ERCS ☐ Date…… Pre-op clerking booked ☐ Date…… *a comprehensive plan should be developed where women are planning ongoing conservative management.	Book IOL for 40+7: Propess ☐ Prostin ☐ Traction Catheter/ Arm ☐ Oxytocin ☐ Other …… Date of IOL ……
	Signed: …… Printed:……	

- Rates of uterine rupture increase 2-to- 3 fold with IOL via Prostaglandin and oxytocin.
- Emergency LCSC increases 1.5 fold compared to spontaneous labour **RCOG (2015).**

Appendix 2 – Care Pathway

Algorithm for planning care of women with one Caesarean and no other antenatal complications.



Appendix 3 – Discussion Tool for women planning a VBAC outside of recommended care

Addressograph

Date: **EDD:**

Previous Births:

Success rate for vaginal birth is estimated to around 72-75%. The success rate is higher amongst women with a previous vaginal birth. Advice to women having a VBAC is that they should labour on the Central Delivery suite in Singleton Hospital.

Rarely (around 1 in every 200 births) the uterine scar opens during labour. Scar rupture is an obstetric emergency, immediate delivery of the baby is required to minimise the risk of severe morbidity (Including haemorrhage or hypoxia) or even death to mother and baby. Because of this risk women are recommended to be cared for where there is immediate access to Caesarean , on site blood transfusion and advanced neonatal services.

Recommended care (Based upon NICE (2014)	**Rationale**	**Understood**	**Accepted**	**Declined**
Labour care provided on obstetric unit.	Caesarean section can be performed quickly if necessary. Time is a critical element when scar rupture occurs. It is reasonable to expect a baby should be delivered within 30 minutes for a category 1 caesarean section (category 1 section = Immediate threat to life of woman or fetus) If transfer from home, AMU or FMU is required this time interval may be increased substantially. This additional time may have severe consequences for either mother or baby.	☐	☐	☐
Consider Intravenous access (A drip attachment in the back of your hand)	When labour is progressing normally IV access is not required, however if any concerns arise during your care, IV access is recommended in case IV fluids, blood products or quick delivery of the baby is required. If labouring in a midwifery led setting IV access will not be secured.	☐	☐	☐
Blood sample taken on admission	It is important to have up to date blood results for both haemoglobin and platelet count should urgent delivery of	☐	☐	☐

	the baby be required. A recent sample for blood group should also be available should an urgent blood transfusion be required. If labouring in a midwifery led setting this sample will not be taken.			
Continuous electronic monitoring of baby during labour.	Rarely (around 1/200) the uterine scar opens during labour. The first sign of this can be the occurrence of changes in the fetal heart rate (present in 66-76% of uterine rupture, RCOG,2015). Scar rupture is an obstetric emergency. Intermittent Auscultation (IA) of the fetal heart may not detect fetal heart changes that would alert staff to possible scar rupture There is no reliable evidence around the use of intermittent or no auscultation were VBAC is planned, therefore the risks or advantages are unknown. Women labouring in a midwifery led setting will only receive intermittent auscultation. Where intermittent auscultation is use it will be offered in line with NICE (2014) guideline.	☐	☐	☐
Vaginal examinations performed 4 hourly in the first stage and hourly in the 2nd stage	In line with NICE, 2014 intrapartum care guideline	☐	☐	☐
Advice to transfer to consultant unit will be made where cervical dilatation is < 6cm over six hours in first stage. Where ARM is indicated transfer to the OU will be advised	The risk of scar rupture is increased in prolonged labour.	☐	☐	☐
Transfer to consultant unit and or advice to leave the birthing pool will be recommended after 60 minutes of active pushing in the second stage (30 minutes for women with a previous vaginal birth).	The risk of scar rupture is increased in prolonged labour.	☐	☐	☐

Omeprazole 40mg administered followed by 20mg dose every 12 hours This will not be available in a midwifery led setting.	This may reduce the risk of general anaesthetic, in case a Caesarean section needs to be undertaken.	☐	☐	☐
Only water or isotonic drinks to be drunk during established labour.	In case a Caesarean section needs to be undertaken	☐	☐	☐

Any woman choosing to labour outside of the consultant unit can change her mind about her chosen care package at any time. The midwife providing intrapartum care should inform the appropriate delivery suite that the woman is in labour, a senior obstetrician and anaesthetists should also be informed. Intrapartum care should be documented fully on a continuation sheet in addition to a partogram (the All Wales clinical pathway for normal labour pathway is not a suitable documentation tool in this instance). All clinical findings, recommended care and their relevance should be discussed and documented with the woman in order that she can make informed decisions on her care.

Additional Information is available at: http://www.healthtalkonline.org/Pregnancy_children
www.**nice**.org.uk/

Signed: …….. (Pregnant woman)

Signed: …….. (Community or Consultant Midwife)