Placenta Praevia and Placenta Accreta

Classification:	Guideline
Authors Name:	Erum A Khan
Authors Job Title:	Consultant Obstetrician and Gynaecologist
Authors Division:	Women's and Children's Health
Departments/Group this Document applies to:	Maternity

Approval Group: Maternity Guidelines, Women's Health CIG	**Date of Approval:**	03/06/2019
	Last Review:	03/2019
	Review Date:	03/2022

Unique Identifier: MIDW/GL/132	**Status:** APPROVED	**Version No:** 4

Guideline to be followed by (target staff): Maternity

To be read in conjunction with the following documents:

Milton Keynes University Hospital NHS Foundation Trust. *Caesarean section*. MIDW/GL/36. Version 6, 2017.

Milton Keynes University Hospital NHS Foundation Trust. *Obstetric haemorrhage*. MIDW/GL/125. Version 3, 2018.

Milton Keynes University Hospital NHS Foundation Trust. *Policy and guidelines for consent to examination or treatment*. DOC82. Version 10, 2016.

Milton Keynes University Hospital NHS Foundation Trust. *Women who decline blood and blood products – treatment and management.* MIDW/GL/82. Version 5, 2017.

CQC Fundamental standards: Outcome 1, 2, 4, 7, 12, 13, 21

Disclaimer –

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.

The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

Index

Guideline Statement

This document provides guidance to all practitioners to correctly identify cases of potential placenta praevia and placenta accrete and to manage care for the best possible outcome for mother and baby.

Unique Identifier: MIDW/GL/132
Version: 4
Review date: 03/2022

Executive Summary

Placenta praevia and placenta accreta are associated with high maternal and neonatal morbidity and mortality.

For pregnancies greater than 16 weeks of gestation, the placenta should be reported as 'low lying' when the placental edge is less than 20 mm from the internal os, and as normal when the placental edge is 20 mm or more from the internal os on Trans Abdominal Scan or Trans Vaginal Scan.

The estimated incidence of placenta praevia at term is 1 in 200 pregnancies whereas placenta accreta ranges between 1in 300 and 1in 2000 pregnancies.

"The rates of placenta praevia and accreta have increased and will continue to do so as a result of rising rates of caesarean deliveries, increased maternal age and use of assisted reproductive technology (ART), placing greater demands on maternity-related resources." (RCOG, 2018, pp.9-10)

Definitions

According to new research, the term 'placenta praevia' is used when the placenta lies directly over the internal os.

Placenta accreta is a histopathological term. It is a spectrum disorder ranging from abnormally adherent to deeply invasive placental tissue.

Cases of placenta accreta are also often subdivided into total, partial or focal according to the amount of placental tissue involved and the different depths of accreta placentation have been found to co-exist in the same case.

Roles and Responsibilities:

- Doctors – diagnosis, management
- Sonographers- scanning as per guideline.
- Midwives – review of ultrasound results, appropriate referral for consultant care, inpatient care as appropriate to scope of practice

2.0 Implementation and dissemination of document

This guideline will be available on the Trust intranet.

3.0 Processes and procedures

3.1 Risk factors

The following are identified risk factors:

- Increasing age
- Increasing parity
- Previous Caesarean Section delivery is associated with an increased risk of placenta praevia in subsequent pregnancies. This risk rises as the number of prior caesarean sections increase
- Previous placenta praevia
- Smoking
- Artificial Reproductive Techniques
- Multiple pregnancy
- Previous dilatation and curettage

3.2 Grades of Placenta Praevia and Accreta

If the distance between the internal os and the placental edge is 20 mm or more on TVS, the placental location should be recorded as normal and managed as per routine

Depending on the depth of villous tissue invasiveness, placenta accreta is subsequently subdivided into:

1. 'creta' or 'adherenta' where the villi adhere superficially to the myometrium without interposing decidua;
2. 'increta' where the villi penetrate deeply into the uterine myometrium down to the serosa;
3. 'percreta' where the villous tissue perforates through the entire uterine wall and may invade the surrounding pelvic organs, such as the bladder.

3.3 Identification

The definitive diagnosis of a low-lying placenta is achieved with ultrasound imaging.

Clinical suspicion should be raised in any woman with vaginal bleeding, a high presenting part or an abnormal lie, irrespective of previous imaging results.

"The mid pregnancy routine fetal anomaly scan should include placental localisation thereby identifying women at risk of persisting placenta praevia or a low-lying placenta. [New 2018]" (RCOG, 2018, p.12)

3.4 Recommendations for further ultrasound follow up

"Clinicians should be aware that TVS for the diagnosis of placenta praevia or a low-lying placenta is superior to transabdominal and transperineal approaches and is safe. [New 2018]" (RCOG, 2018, p.13)

In women with a persistent low-lying placenta or placenta praevia at 32 weeks of gestation who remain asymptomatic, an additional TVS is recommended at around 36 weeks of gestation to inform discussion about mode of delivery.

Cervical length measurement may help facilitate management decisions in asymptomatic women with placenta praevia. A short cervical length on TVS before 34 weeks of gestation increases the risk of preterm emergency delivery and massive haemorrhage at caesarean section.

3.5 Antenatal Management

3.5.1 Place of care

3.5.1.1 Women with recurrent bleeding (low-lying placenta or placenta praevia):

Tailor antenatal care, including hospitalisation, to individual woman's needs and social circumstances, e.g. distance between home and hospital and availability of transportation, previous bleeding episodes, haematology laboratory results, and acceptance of receiving donor blood or blood products.

Where hospital admission has been decided, an assessment of risk factors for venous thromboembolism in pregnancy should be performed as outlined in the antenatal risk assessment proforma. This will need to balance the risk of developing a venous thromboembolism against the risk of bleeding from a placenta praevia or low-lying placenta.

It should be made clear to any woman being treated at home in the third trimester that she should attend the hospital immediately if she experiences any bleeding, including spotting, contractions or pain (including vague suprapubic period-like aches).

3.5.1.2 Asymptomatic women (low-lying placenta or placenta praevia):

Women with asymptomatic placenta praevia or a low-lying placenta in the third trimester should be counselled about the risks of preterm delivery and obstetric haemorrhage, and their care should be tailored to their individual needs.

Women with asymptomatic placenta praevia confirmed at the 32-week follow-up scan and managed at home should be encouraged to ensure they have safety precautions in place, including having someone available to help them as necessary and ready access to the hospital.

3.5.2 Use of antenatal corticosteroids:

A single course of antenatal corticosteroid therapy is recommended between 34+0 and 35+6 weeks of gestation for pregnant women with a low-lying placenta or placenta praevia and is appropriate prior to 34+0 weeks of gestation in women at higher risk of preterm birth.

The use of tocolytics in women presenting with symptomatic low-lying placenta or placenta praevia, who are in suspected preterm labour:

Tocolysis for women presenting with symptomatic placenta praevia or a low-lying placenta may be considered for 48 hours to facilitate administration of antenatal corticosteroids.

If delivery is indicated based on maternal or fetal concerns, tocolysis should not be used in an attempt to prolong gestation.

Magnesium sulphate should be offered if delivery is indicated in less than or equal to 30 weeks gestation.

3.5.3 Signs and Symptoms;

3.5.3.1 Symptoms:

The most prominent symptom is vaginal bleeding. The loss is usually painless, in contrast to an abruption, bright red (as the blood is still oxygenated) and can vary in the amount from 'spotting' to 'torrential/life threatening'. The bleeding may be recurrent and could be provoked by sexual intercourse or the onset of labour. In a small proportion of cases placental abruption coexists with placenta praevia so pain and uterine irritability may also be present. Bleeding might coexist with prelabour or preterm rupture of membranes therefore a clear history must be elicited.

3.5.3.2 Signs

- The mother may be in shock, the shock tends to be proportional to the amount of blood lost vaginally. The presenting part may be high and there may be a non-cephalic presentation. The uterus is usually soft and non-tender with evidence of relaxation in between contractions.

3.5.4 Investigations

Digital VE is contraindicated but a speculum examination is useful in a minor bleed (to exclude local causes of bleeding). A speculum is unlikely to be of use if there is heavy bleeding.
CTG will assist in diagnosing fetal distress.
If the mother is bleeding she will require IV access, FBC and either Group & Save or Cross match (if bleeding heavily).
Women with a previous caesarean section and an anterior placenta praevia should be offered a scan at the John Radcliffe Hospital fetal medicine unit (FMU) or magnetic resonance imaging (MRI) or with the visiting fetal medicine specialist from Oxford to rule out adherent placenta.

3.6 Delivery

Prior to delivery all women and their partners should have had an antenatal discussion and consenting for additional procedures and a plan documented regarding delivery, haemorrhage, possible blood transfusion, use of balloon tamponade and the potential need for major surgical interventions, such as a B-Lynch suture, uterine artery embolisation or hysterectomy. Any objections or queries must be documented and effectively addressed – please refer to the Trust guideline on *Women who decline Blood and Blood Products – Treatment and Management.*

3.6.1 Timing of delivery

"Late preterm (34+0 to 36+6 weeks of gestation) delivery should be considered for women presenting with placenta praevia or a low-lying placenta and a history of vaginal bleeding or other associated risk factors for preterm delivery. [New 2018]

Delivery timing should be tailored according to antenatal symptoms and, for women presenting with uncomplicated placenta praevia, delivery should be considered between 36+0 and 37+0 weeks of gestation. [New 2018]" (RCOG, 2018, p.18

3.6.2 Mode of delivery

In women with a third trimester asymptomatic low-lying placenta the mode of delivery should be based on the clinical background, the woman's preferences, and supplemented by ultrasound findings, including the distance between the placental edge and the fetal head position relative to the leading edge of the placenta on TVS.

Caesarean section is offered as the mode of delivery for major placenta praevia.

3.6.2.1 Preparations that should be made before surgery

Prior to delivery, all women with placenta praevia and their partners should have a discussion regarding delivery. Indications for blood transfusion and hysterectomy should be reviewed and any plans to decline blood or blood products should be discussed openly and documented.

Placenta praevia and anterior low-lying placenta carry a higher risk of massive obstetric haemorrhage and hysterectomy. Delivery should be arranged in a maternity unit with on-site blood transfusion services and access to critical care.

Women with atypical antibodies form a particularly high-risk group and the care of these women should involve discussions with the local haematologist and blood bank.

Prevention and treatment of anaemia during the antenatal period is recommended for women with placenta praevia or a low-lying placenta as for any pregnant woman.

In patients with suspected placenta accreta six elements reflective of good care should be in place, when delivery is planned by caesarean section otherwise known as the 'care bundle' which are:

1. Consultant Obstetrician planned and directly supervising delivery
2. Consultant Anaesthetist planned and directly supervising anaesthetic at delivery
3. Blood and Blood products available
4. Multidisciplinary involvement in pre-op planning
5. Discussion and consent includes possible interventions such as (hysterectomy, leaving the placenta in place and interventional radiology)
6. Local availability of a level 2 critical care bed.

(RCOG, RCM and NPSA, 2010, p.24)

3.6.3 Resources at delivery

3.6.3.1 Grade of obstetrician and anaesthetist at the caesarean delivery of a woman with placenta praevia:

As a minimum requirement for a planned caesarean section for a woman with placenta praevia, the surgical procedure should be carried out by an appropriately experienced operator.

In cases of planned caesarean section for placenta praevia or a low-lying placenta, a senior obstetrician (usually a consultant) and senior anaesthetist (usually a consultant) should be present in theatre where the surgery is occurring.

When an emergency arises, the senior obstetrician and senior anaesthetist should be alerted immediately and attend urgently.

3.6.3.2 Anaesthetic procedure most appropriate for women having a caesarean section for placenta praevia:

"Regional anaesthesia is considered safe and is associated with lower risks of haemorrhage than general anaesthesia for caesarean delivery in women with placenta praevia or a low-lying placenta. Women with anterior placenta praevia or a low-lying placenta should be advised that it may be necessary to convert to general anaesthesia if required and asked to consent to this. [New 2018]" (RCOG, 2018, p.20)

3.6.3.3 The blood products that should be available:

Close liaison with the hospital transfusion laboratory is essential for women presenting with placenta praevia or a low-lying placenta.

Rapid infusion and fluid warming devices should be immediately available.

Cell salvage is recommended for women where the anticipated blood loss is great enough to induce anaemia, in particular, in women who would decline blood products. If the woman chooses to use cell salvage, then she will need referral to either Northampton General Hospital of the John Radcliffe Hospital in Oxford.

3.7 Surgical approach to be used for women with placenta praevia or a low-lying placenta:

Consider vertical skin and/or uterine incisions when the fetus is in a transverse lie to avoid the placenta, particularly below 28 weeks of gestation.

Consider using preoperative ultrasonography to precisely determine placental location and the optimal place for uterine incision.

If the placenta is transected during the uterine incision, immediately clamp the umbilical cord after fetal delivery to avoid excessive fetal blood loss.

If pharmacological measures fail to control haemorrhage, initiate intrauterine tamponade and/or surgical haemostatic techniques sooner rather than later. Interventional radiological techniques should also be urgently employed where possible. Consider insertion of embolisation catheters prior to commencing the caesarean section and inform the theatre team in advance to perform the procedure in a room compatible for the use of the radiograph instrument.

Early recourse to hysterectomy is recommended if conservative medical and surgical interventions prove ineffective.

4 Antenatal diagnosis and outcome of women with placenta accreta spectrum

4.1 Risk Factors:

The major risk factors for placenta accreta spectrum are history of accreta in a previous pregnancy, previous caesarean delivery and other uterine surgery, including repeated endometrial curettage. This risk rises as the number of prior caesarean sections increases.

Women requesting elective caesarean delivery for non-medical indications should be informed of the risk of placenta accreta spectrum and its consequences for subsequent pregnancies

4.2 Suspicion and Diagnosis of Placenta Accreta Spectrum:

Antenatal diagnosis of placenta accreta spectrum is crucial in planning its management and has been shown to reduce maternal morbidity and mortality.

Previous caesarean delivery and the presence of an anterior low-lying placenta or placenta praevia should alert the antenatal care team of the higher risk of placenta accreta spectrum.

4.3 Ultrasound Screening and Diagnosis:

Ultrasound imaging is highly accurate when performed by a skilled operator with experience in diagnosing placenta accreta spectrum.

Refer women with any ultrasound features suggestive of placenta accreta spectrum to a specialist unit with imaging expertise to the John Radcliffe Hospital in Oxford.

Women with a history of previous caesarean section seen to have an anterior low-lying placenta or placenta praevia at the routine fetal anomaly scan should be specifically screened for placenta accreta spectrum.

4.4 Role of MRI:

Clinicians should be aware that the diagnostic value of MRI and ultrasound imaging in detecting placenta accreta spectrum is similar when performed by experts.

MRI may be used to complement ultrasound imaging to assess the depth of invasion and lateral extension of myometrial invasion, especially with posterior placentation and/or in women with ultrasound signs suggesting parametrial invasion.

5 Place of delivery of Women with Placenta Praevia Spectrum:

Women diagnosed with placenta accreta spectrum should be cared for by a multidisciplinary team in a specialist centre with expertise in diagnosing and managing invasive placentation.

Delivery for women diagnosed with placenta accreta spectrum should take place in a specialist centre with logistic support for immediate access to blood products, adult intensive care unit and NICU by a multidisciplinary team with expertise in complex pelvic surgery.

6 Delivery Timings of Women with Placenta Accreta Spectrum:

In the absence of risk factors for preterm delivery in women with placenta accreta spectrum, planned delivery at 35+0 to 36+6 weeks of gestation provides the best balance between fetal maturity and the risk of unscheduled delivery.

7 Planning delivery of women with suspected placenta accreta spectrum:

Once the diagnosis of placenta accreta spectrum is made, a contingency plan for emergency delivery should be developed in partnership with the woman, including the use of an institutional protocol for the management of maternal haemorrhage.

7.1 Points to include in Consent form:

Any woman giving consent for caesarean section should understand the risks associated with caesarean section in general, and the specific risks of placenta accreta spectrum in terms of massive obstetric haemorrhage, increased risk of lower urinary tract damage, the need for blood transfusion and the risk of hysterectomy.

Additional possible interventions in the case of massive haemorrhage should also be discussed, including cell salvage (consider referral to either Northampton General Hospital or the John Radcliffe Hospital in Oxford) and interventional radiology where available.

7.2 Staff Required:

If placenta accrete or percreta is suspected the delivery needs to take place in a tertiary centre.

The elective delivery of women with placenta accreta spectrum should be managed by a multidisciplinary team, which should include senior anaesthetists, obstetricians and gynaecologists with appropriate experience in managing the condition and other surgical specialties (urology, general or vascular surgeon) if indicated. In an emergency, the most senior clinicians available should be involved. Haematologists and interventional radiologists are informed of the plan.

The six elements considered to be reflective of good care are listed in section 3.6.2.

7.3 Most appropriate anaesthetic for delivery:

The choice of anaesthetic technique for caesarean section for women with placenta accreta spectrum should be made by the anaesthetist conducting the procedure in consultation with the woman and the obstetrician prior to surgery.

The woman should be informed that the surgical procedure can be performed safely with regional anaesthesia but should be advised that it may be necessary to convert to general anaesthesia if required and asked to consent to this.

7.4 Surgical approach to be used for women with placenta accreta spectrum:

Caesarean section hysterectomy with the placenta left in situ is preferable to attempting to separate it from the uterine wall.

When the extent of the placenta accreta is limited in depth and surface area, and the entire placental implantation area is accessible and visualised (i.e. completely anterior, fundal or posterior without deep pelvic invasion), uterus preserving surgery may be appropriate, including partial myometrial resection.

Uterus preserving surgical techniques should only be attempted by surgeons working in teams with appropriate expertise to manage such cases and after appropriate counselling regarding risks and with informed consent.

There are currently insufficient data to recommend the routine use of ureteric stents in placenta accreta spectrum. The use of stents may have a role when the urinary bladder is invaded by placental tissue.

7.5 Surgical approach to be used for women with placenta percreta:

There is limited evidence to support uterus preserving surgery in placenta percreta and women should be informed of the high risk of peripartum and secondary complications, including the need for secondary hysterectomy.

7.6 Expectant management (leaving the placenta in situ):

Elective peripartum hysterectomy may be unacceptable to women desiring uterine preservation or considered inappropriate by the surgical team. In such cases, leaving the placenta in situ should be considered.

When the placenta is left in situ, local arrangements need to be made to ensure regular review, ultrasound examination and access to emergency care should the woman experience complications, such as bleeding or infection.

MTX adjuvant therapy should not be used for expectant management as it is of unproven benefit and has significant adverse effects.

8 Use of interventional radiology:

Larger studies are necessary to determine the safety and efficacy of interventional radiology before this technique can be advised in the routine management of placenta accreta spectrum, however, we still use embolisation catheters in this unit.

Women diagnosed with placenta accreta spectrum who decline donor blood transfusion should be cared for in a unit with cell salvage and an interventional radiology service.

9 Management of women with undiagnosed or unsuspected placenta accreta spectrum at delivery

If at the time of an elective repeat caesarean section, where both mother and baby are stable, it is immediately apparent that placenta percreta is present on opening the abdomen, the caesarean section should be delayed until the appropriate staff and resources have been assembled and adequate blood products are available. This may involve closure of the maternal abdomen and urgent transfer to a specialist unit for delivery.

In case of unsuspected placenta accreta spectrum diagnosed after the birth of the baby, the placenta should be left in situ and an emergency hysterectomy performed.

10 Clinical governance:

10.1 Debriefing:

Postnatal follow up with debriefing and explanation of events

Implication on future pregnancy

Risk of recurrence.

10.2 Training:

Raise awareness about clinical risk factors of placenta accreta spectrum.
There should be appropriate training for ultrasound staff in the antenatal diagnosis of placenta accreta spectrum.

10.3 Clinical incident reporting

Any lack of compliance with the care bundle by the clinical team for a woman with either placenta praevia or accreta should be investigated.

There should be written protocols for the identification of and planning further care of women suspected to have placenta accreta spectrum.

11 Statement of evidence/references

References:

Jauniaux, E., et al. on behalf of the Royal College of Obstetricians & Gynaecologists (2018) Placenta praevia and placenta accreta: diagnosis and management. Green-top Guideline No.27a. *BJOG* **126** (1). Available from: https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.15306 (Accessed 25 March 2019)

National Institute of Health and Care Excellence (2011, updated 2012) *Caesarean section. Clinical guideline [CG132].* Available from: https://www.nice.org.uk/guidance/cg132 (Accessed 25 March 2019)

National Institute of Health and Care Excellence (2019) *Intrapartum care for women with existing medical conditions or obstetric complications and their babies. NICE guideline [NG121].* Available from: https://www.nice.org.uk/guidance/ng121 (Accessed 25 March 2019)

Royal College of Obstetricians & Gynaecologists, Royal College of Midwives and National Patient Safety Agency (2010) *Safer practice in intrapartum care project: care bundles.* Available from: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/care-bundles--safer-practice-in-intrapartum-care-project/ (Accessed 25 March 2019)

Royal College of Obstetricians & Gynaecologists (2009) *Caesarean section. Consent Advice No.7.* Available from: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/consent-advice-7/ (Accessed 25 March 2019)

Royal College of Obstetricians & Gynaecologists (2010) *Caesarean section for placenta praevia. Consent Advice No.12*. Available from: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/consent-advice-12/ (Accessed 25 March 2019)

Royal College of Obstetricians & Gynaecologists (2015) *Obtaining valid consent. Clinical Governance Advice No.6*. Available from: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/clinical-governance-advice-6/ (Accessed 25 March 2019)

External weblinks: Please note that although Milton Keynes University Hospital NHS Foundation Trust may include links to external websites, the Trust is not responsible for the accuracy or content therein.

12 Governance

12.1 Record of changes to document

Version number: 4		**Date:** 03/2019		
Section Number	**Amendment**	**Deletion**	**Addition**	**Reason**
	Reviewed and updated			Update
3.63	Reviewed and updated			**Update**

12.2 Consultation History

Stakeholders Name/Board	**Area of Expertise**	**Date Sent**	**Date Received**	**Comments**	**Endorsed Yes/No**
Consultant Obstetricians and Gynaecologists	Obstetrics	12/03/2019			
Junior Doctors O&G	Obstetrics	12/03/2019			
Midwives	Maternity	12/03/2019			
Premila Thampi	Consultant	12/03/2019	14/03/2019	Comments received	Yes
Julie Cooper	Head of Midwifery	12/03/2019	17/03/2019	Comments received	Yes
Imaging staff	Imaging	14/03/2019		Comments received	Yes
Anjana Radhakrishnan	Imaging	14/03/2019	21/03/2019	Comments received	Yes
Christine Edley	Physio	14/03/2019	22/03/2019	Comments received	Not applicable

Library		14/03/2019	26/03/2019	Comments received	Yes
Veronica Gordon	Sonographer	14/03/2019	20/03/2019	Comments received	Reviewed
Khalid Enver	Imaging	14/03/2019	22/03/2019	No comment to add	N/A

12.3 Audit and monitoring

This Guideline outlines the process for document development will be monitored on an ongoing basis. The centralisation of the process for development of documents will enable the Trust to audit more effectively. The centralisation in recording documents onto a Quality Management database will ensure the process is robust.

Audit/Monitoring Criteria	Tool	Audit Lead	Frequency of Audit	Responsible Committee/Board
a) Percentage of women requiring CS for placenta praevia b) Appropriate follow up occurring following diagnosis of a low-lying placenta at the 20 week ultrasound scan. c) Percentage of women with diagnosed placenta praevia who were not identified at their 20 week ultrasound scan	Audit and statistics	Obstetricians and midwives	Every 2 years	Maternity CIG

12.4 Equality Impact Assessment

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

Equality Impact assessments will show any future actions required to overcome any identified barriers or discriminatory practice.

Equality Impact Assessment			
Division	Women and Children's health	Department	Maternity
Person completing the EqIA	Erum Khan	Contact No.	
Others involved:		Date of assessment:	12/03/2019
Existing policy/service	Yes	New policy/service	No

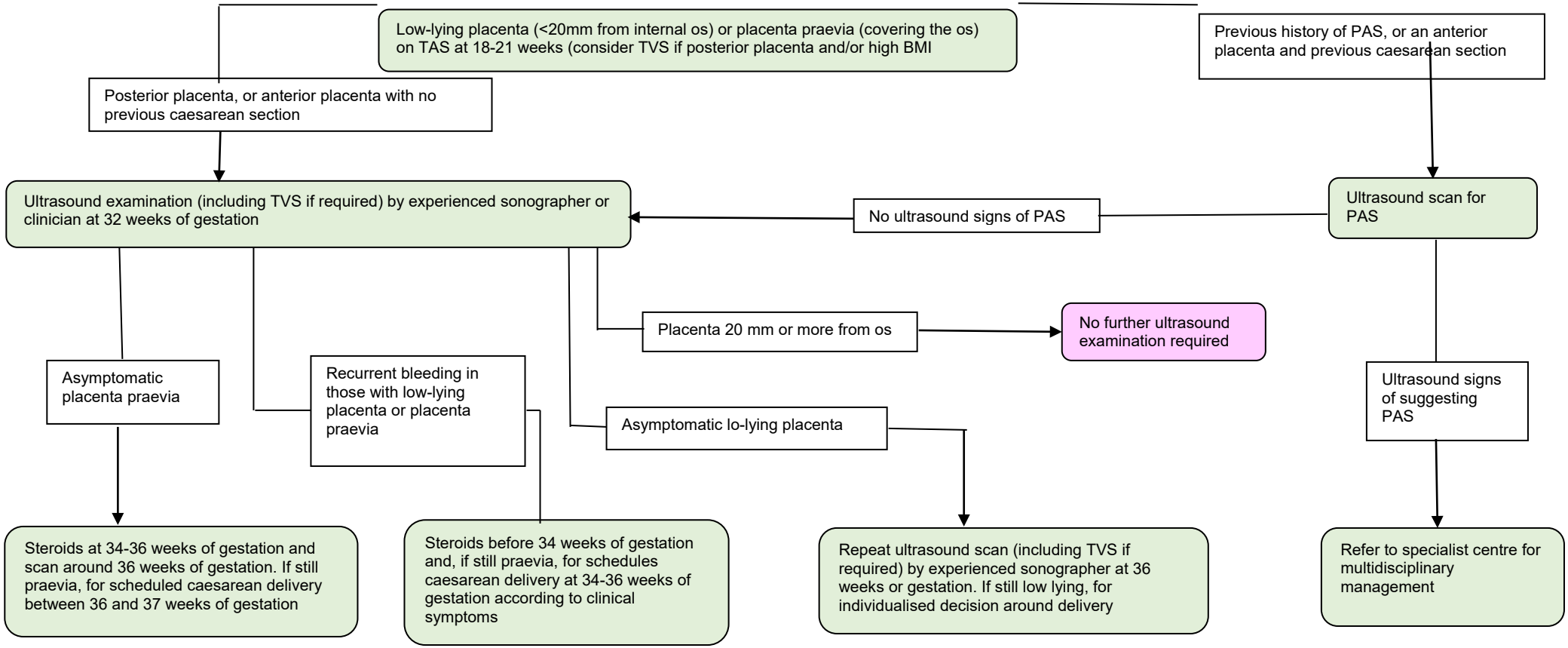
Will patients, carers, the public or staff be affected by the policy/service?	Yes
If staff, how many/which groups will be affected?	*For example: community midwives, phlebotomists, all staff*

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

What consultation method(s) have you carried out?
Consultation via email to staff in Women's health, guideline review group meeting
How are the changes/amendments to the policies/services communicated?
For example: email, meetings, intranet post, etc
What future actions need to be taken to overcome any barriers or discrimination?

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

Appendix 1: Flow diagram for ultrasound diagnosis and follow-up of placenta praevia and placenta accreta spectrum



Abbreviations: **BMI** body mass index; **PAS,** placenta accreta spectrum; **TAS,** transabdominal scan; **TVS, transvaginal scan**
(RCOG, 2018, p.4)