

Induction of Labour Guideline

Category:	Guideline
Summary:	This document provides guidance for all clinical staff caring for women during the Induction of labour process. It is applicable to all women who require induction of labour within the Oxford University Hospitals NHS Foundation Trust.
Equality impact assessed:	11 th July 2022
Valid from:	08/10/2024
Date of next review:	24/07/2025
Approval date/ via:	08/10/2024 by Document Review Group (DRG) Chair's Action
Related documents:	<ul style="list-style-type: none"> • Birth after Caesarean Section (BAC) Guideline • Intrapartum Continuous Electronic Fetal Monitoring Guideline • Pre-labour Rupture of Membranes (PROM) ≥ 37 Weeks Gestation Guideline • Preterm Pre-labour Rupture of Membranes (PPROM) Guideline • Escalation Policy for the Management of Delay in IOL
Author(s):	Consultant Obstetrician – DS lead
Clinical lead:	Consultant Obstetrician – DS lead
Further information:	
This document replaces:	Induction of Labour v4.1 valid from 19/12/2022

This document is uncontrolled once printed.

It is the responsibility of all users to this document to ensure that the correct and most current version is being used.

This document contains many hyperlinks to other related documents.

All users must check these documents are in date and have been ratified appropriately prior to use.

Document History

Version valid from	Version number	Reason for review/update
08/10/2024	4.3	<ul style="list-style-type: none"> Opel 3 and 4 indications for IOL Appendix 2 - correction
06/10/2023	4.2	<ul style="list-style-type: none"> Appendix 2 - Decision Making Tool to inform Induction of Labour updated to include guidance for when unit is declared Opel 3 (RED) and Opel 4 (BLACK) Link to the Escalation Policy for the Management of Delay in IOL added to page 19
19/12/2022	4.1	<p>Point 109 on page 17 changed from: As a minimum there should be an hourly review of fetal movements and maternal well-being, unless the woman is asleep or is mobilising off the ward. This should be documented on the Induction of Labour Chart.</p> <p>to: Women should be counselled to escalate any concerns following gel administration and be made aware that fetal movements should remain normal throughout this process.</p>
25/07/2022	4.0	<p>Comprehensive review to align with NICE guidance NG207 published in November 2021</p> <p>GDM POSSIBLE COMPLICATIONS changed from:</p> <ul style="list-style-type: none"> Macrosomia (AC >95th centile and/or EFW >95th centile at 36 weeks accelerated growth from previous scans) <p>to: *Macrosomia (EFW >95th centile at 36 weeks or accelerated growth from previous scans)</p> <p>Appendix 2 Indications and Timings of Induction (page 22) updated to reflect change above</p>
04/05/20	3.0	<p>New outpatient pathway using mechanical induction of labour.</p> <p>Updated recommendations for gestation of induction for use during Covid pandemic.</p>

21/09/18	2.6	
10/05/18	2.5	
17/05/17	2.4	
06/02/17	2.3	
21/11/16	2.2	
29/09/16	2.1	
06/06/16	2.0	

Consultation Schedule

Who? Individuals or Committees	Rationale and/or Method of Involvement
Consultant Obstetricians	Verbal and email
DS Midwife Manager	Verbal and email
Document Review Group (DRG)	Review and approval

Contents

Document History.....	2
Consultation Schedule.....	3
Contents.....	3
Who should read this document?.....	6
Key Standards/Messages	6
Background/ Scope	7
Key Updates.....	7
Aim(s)	8
Full Guideline	8
Antenatal Considerations	8

Induction of labour in specific circumstances (see appendix 2 for indications and timing of induction of labour).....	9
Induction of Labour (IOL) for Pregnancy lasting more than 41 weeks	9
Preterm and term rupture of membranes	12
Induction of labour in women with a previous caesarean section	12
Maternal request (New in v4.0)	13
Breech presentation (New in v4.0)	13
Fetal growth restriction.....	13
Suspected fetal macrosomia (without diabetes) (New in v4.0).....	13
History of precipitate labour	13
Women above the age of 40 years	13
Other indications for induction (Hypertension/Diabetes etc).....	14
Intrauterine fetal death.....	14
Methods of Induction of labour	14
Membrane Sweeping.....	15
Vaginal PGE 2.....	15
Mechanical IOL	16
Antenatal Management and Booking of Planned Induction of Labour	16
Advice where woman wishes to continue pregnancy beyond gestation that IOL is recommended	17
Admission and management of induction of labour.....	17
For vaginal prostaglandin (see appendix 3).....	18
For Mechanical Induction (see appendix 5)	18
Place of induction.....	19
Mechanical IOL	19
Prostaglandin gel	19
Artificial Rupture of Membranes (ARM)	19
Process for when the Service is unable to induce women due to clinical acuity.....	19
Uterine hyperstimulation during induction of labour	19
Unsuccessful (failed) induction of labour	20
Review	20
EPR Considerations / Booking of Induction of labour	20
Implementation plan	21
References	21
Appendix 1 -Rationale for Recommended Method of Induction	22

Appendix 2 – Criteria and timing for booking induction of labour	23
Appendix 2 – Indications and timings of Induction.....	23
Appendix 2 – Decision Making Tool to inform Induction of Labour (when Unit is declared Opel 1 (GREEN) or Opel 2 (AMBER).....	23
Decision Making Tool to inform Induction of Labour (when Unit is declared Opel 3 (RED) or Opel 4 (BLACK)	27
Appendix 3 – Technique for Insertion of Prostaglandin Gel.....	31
Appendix 4 – Induction of Labour using Prostaglandin Tablets.....	32
Nulliparous Induction	32
Multiparous Induction without a uterine scar	32
Appendix 5 – Mechanical Induction - Insertion of Foley Catheter for IOL.....	33
Appendix 6: Responsibilities	34
Appendix 7: Education and Training.....	34
Appendix 8: Definitions and Acronyms	35
Appendix 9: Monitoring Compliance	36
Appendix 10: Equality Impact Assessment.....	37

Who should read this document?

- This guideline should be read by all maternity clinical staff within the Oxford University Hospitals Foundation Trust (OUHFT) who are involved in providing care for women having (or clinically advised to have) an induction of labour (IOL).

1. Gender inclusive language in maternity and perinatal services:

- This guideline uses the terms 'woman' or 'mother' throughout. These should be taken to include people who do not identify as women but who are pregnant. Similarly, where/if the term 'parent(s)' is used, this should be taken to include anyone who has main responsibility for caring for a baby.
- Partner refers to the woman's chosen supporter. This could be the baby's father, the woman's partner, family member or friend, or anyone who the woman feels supported by and wishes to involve in her antenatal care.

Key Standards/Messages

1. **(New in v4.3) Removal of guidance regarding a 3rd prostaglandin gel on page 20:**
***A 3rd prostaglandin gel is not licensed for use and should not be offered or administered.**
2. **(New in v4.3) Opel 3 and 4 indications for IOL Appendix 2 – correction**
3. **(New in v4.2) Appendix 2 updated:** Decision Making Tool to inform Induction of Labour updated to include guidance for when unit is declared Opel 3 (RED) and Opel 4 (BLACK)
4. **(New in v4.2)** Link to the [Escalation Policy for the Management of Delay in IOL](#) added to the 'Process for when the service is unable to induce women due to acuity' section on page 19.
5. **(New in v4.1)** Women should be counselled to escalate any concerns following gel administration and be made aware that fetal movements should remain normal throughout this process.
6. **(New in v4.0)** Women's preferences for birth should be discussed from an early stage of pregnancy. Individual circumstances should be taken into consideration when discussing options.
7. Induction of labour may be offered when birth of the baby is considered to be safer (for maternal or for fetal reasons) than continuing the pregnancy, taking into account the risks of the induction process itself on the mother and the risks of prematurity on the baby.
8. Occasionally, the birth itself needs to be timed in order that the specialist resources can be made available for labour or the early neonatal period.
9. Induction of labour should only be considered when vaginal birth is felt to be an appropriate and safe mode of birth.
10. **(New in v4.0)** When induction of labour is requested due to psychological issues or anxiety, consider referral to the Birth Choices Clinic (via EPR pool) or perinatal mental health team.
11. Induction of labour is not a benign intervention and should only be offered for a clear clinical indication.

12. **(New in v4.0)** When an induction of labour is clinically indicated, women should be informed of the benefits and risks of such an intervention. She should be given the opportunity to discuss her birth options which may include declining or delaying an induction, expectant management, or a planned caesarean section.
13. Induction for maternal request or previous precipitate labour should not be routinely offered in the absence of other indications.
14. Other than for prolonged pregnancy, the decision to offer induction of labour should be agreed with a Consultant Obstetrician.

Background/ Scope

15. Induction of labour is a common intervention, occurring in up to 30% of pregnant women in the UK.
16. Labour following induction is usually longer and perceived as more painful, and women whose labours are induced are more likely to go on to require other forms of medical intervention, including assisted vaginal delivery and emergency caesarean section. Therefore, care in the planning and appropriate use of induction is required. Women should be provided with all the information required for her to make an informed choice about induction of labour.
17. **(New in v4.0)** A woman's preferences for birth should be discussed at the early stages of pregnancy and documented in her record. These may include declining or delaying a recommended induction, or the desire for a planned caesarean section. These preferences should be confirmed at the latter stages of pregnancy as well.
18. **(New in v4.0)** According to the 2020 MBRRACE-UK report on perinatal mortality, women from some minority ethnic backgrounds or who live in deprived areas have an increased risk of stillbirth and may benefit from closer monitoring and additional support. The report showed that across all births (not just those induced):
 - compared with white babies (34/10,000), the stillbirth rate is
 - more than twice as high in black babies (74/10,000)
 - around 50% higher in Asian babies (53/10,000)
 - the stillbirth rate increases according to the level of deprivation in the area the mother lives in, with almost twice as many stillbirths for women living in the most deprived areas (47/10,000) compared with the least deprived areas (26/10,000).
19. This guideline is applicable to all women who require induction of labour within the Oxford University Hospitals NHS Foundation Trust.

Key Updates

- **(New in v4.3)** Removal of guidance regarding a 3rd prostaglandin gel on page 20:
***A 3rd prostaglandin gel is not licensed for use and should not be offered or administered.**
- **(New in v4.3)** Opel 3 and 4 indications for IOL Appendix 2 – correction
- This guideline has been updated to comply with the recommendations set out in the NICE guideline - Inducing labour, published on 4th November 2021.
- **(New in v4.1)** Women should be counselled to escalate any concerns following gel administration and be made aware that fetal movements should remain normal throughout this process.

Aim(s)

- Ensure induction is offered appropriately
- Offer stretch and sweep at each antenatal appointment from 39 weeks.
- Ensure adequate resources available
- Ensure induction procedure happens expeditiously and safely

Full Guideline

Antenatal Considerations

20. **(New in v4.0)** Women's preferences for birth should be discussed from an early stage of pregnancy. Individual circumstances should be taken into consideration when discussing options. These may include expectant management, declining or delaying a recommended induction, or the desire for a planned caesarean section. These preferences should be confirmed at the latter stages of pregnancy as well. Her preferences should be clearly documented in the notes.
21. **(New in v4.0)** Women who intend to decline a recommended induction or would like to explore the option of a planned caesarean section, should be referred to the Birth Choices clinic (or Consultant Obstetrician) to make an individualised plan for birth.
22. Induction of labour may be offered in the following circumstances (this list is not exhaustive):
 - Pregnancy greater than 41 weeks
 - Pre-labour rupture of membranes at term/preterm pre-labour rupture of membranes. See [Pre-labour Rupture of Membranes \(PROM\) at ≥ 37 weeks gestation at Term Guideline/ SOP /Preterm Pre-labour Rupture of Membranes \(PPROM\) Guideline](#)
 - Maternal Age
 - Diabetes
 - Hypertension/Pre-eclampsia
 - Cholestasis
 - Previous traumatic birth
 - Antepartum Haemorrhage
 - Intrauterine Death
 - Fetal indications
 - Intra-Uterine Growth Restriction
 - Multiple pregnancy
23. **(New in v4.0)** At the 38-week antenatal visit, all women (in the absence of any pre-existing plans for birth) should be offered verbal information about the risks associated with pregnancies that last longer than 42 weeks and their options. These include:
 - membrane sweeping
 - induction of labour from 41+0 weeks onwards
 - expectant management

24. **(New in v4.0)** Explain to women that induction of labour is a medical intervention that will affect their birth options and their experience of the birth process. This could include that:
- vaginal examinations to assess the cervix are needed before and during induction, to determine the best method of induction and to monitor progress
 - their choice of place of birth will be limited, as they may be recommended interventions (for example, oxytocin infusion, continuous fetal heart rate monitoring and epidurals) that are not available for home birth or in Midwife-Led Birth Units
 - there may be limitations on the use of a birthing pool
 - there may be a need for an assisted vaginal birth (using forceps or ventouse), with the associated increased risk of obstetric anal sphincter injury (for example, third- or fourth-degree perineal tears)
 - pharmacological methods of induction can cause hyperstimulation – this is when the uterus contracts too frequently or contractions last too long, which can lead to changes in fetal heart rate and result in fetal compromise
 - an induced labour may be more painful than a spontaneous labour
 - their hospital stay may be longer than with a spontaneous labour
25. The Doctor or Midwife should take into consideration and explain the following points to women being offered induction of labour:
- the reasons for induction being offered
 - the risks and benefits of induction of labour in specific circumstances and the proposed induction methods
 - ensure women are given/directed to written information about induction and are provided with the opportunity to ask questions, and time to think about their options. Document this discussion in the handheld notes and record any specific birth plans on EPR under 'Notes – Maternity Birth Plan'.
 - the alternative options if the woman chooses not to have induction of labour, or decides at a later stage that she no longer wishes to proceed with the induction process
 - the arrangements for support, pain relief (recognising that women are likely to find induced labour more painful than spontaneous labour)
 - that induction may not be successful and what the woman's options would be should that be the case

Induction of labour in specific circumstances (see appendix 2 for indications and timing of induction of labour)

Induction of Labour (IOL) for Pregnancy lasting more than 41 weeks

26. Give women with uncomplicated pregnancies every opportunity to go into spontaneous labour and explain to them that labour usually commences spontaneously by 42+0 weeks.
27. **(New in v4.0)** The NICE guideline states that the available evidence is not robust enough to recommend a specific of gestation for induction in uncomplicated pregnancies but suggests that it should be recommended between 41+0 and 42+0 weeks taking the woman's preferences into consideration.

28. **(New in v4.0)** Women should be informed that the relative risk of caesarean section, stillbirth and admission to SCBU may increase over time with pregnancy beyond 41+0 weeks.
29. Although induction of labour may reduce these risks women should also consider the impact that an induction of labour may have on their birth experience.
30. **(New in v4.0)** OUHFT will aim to book induction of labour from 41 weeks onwards in uncomplicated pregnancies taking the woman's preferences into consideration. The service will endeavour to provide a date as close to that requested. At times of increased clinical workload there may be delays however, the date provided should be no later than 41+4 weeks, unless it is the woman's preference for a later date.
31. If a woman chooses expectant management and opts not to have induction of labour, discuss the woman's options from this point on with her and record the woman's decision in her record (see section below for women opting to continue pregnancy beyond 42 weeks).
32. Women who opt for expectant management should be given the opportunity to revisit her options at each antenatal encounter if she chooses to do so.
33. **(New in v4.0)** The information within the table below may be used to inform women of the incidence of spontaneous labour at different gestations and may help in their decision making regarding their preference for induction of labour.

Gestational age at which labour started, as a proportion of labours which started spontaneously (NICE 2021 statistics)

Gestational age (weeks)	Proportion of spontaneous labours that started at this gestational age	Cumulative proportion of spontaneous labours that started by this gestational age
31 weeks and under	2.4%	2.4%
32+0 to 36+6 weeks	5.3%	7.7%
37+0 to 37+6 weeks	5.1%	12.8%
38+0 to 38+6 weeks	12.1%	24.9%
39+0 to 39+6 weeks	25.4%	50.3%
40+0 to 40+6 weeks	32.5%	82.8%
41+0 to 41+6 weeks	16.2%	99.0%
42+0 weeks and over	0.9%	100%

Preterm and term rupture of membranes

34. See [Preterm Pre-Labour Rupture of Membranes](#) and [Pre-labour Rupture of Membranes \(PROM\) ≥ 37 Weeks](#) for guidance on recommended induction timings.

Induction of labour in women with a previous caesarean section

35. See also [Vaginal Birth After Caesarean Section \(VBAC\)](#) Guideline.
36. If birth needs to be expedited the woman should be offered an induction of labour or a caesarean section.
37. The decision to induce a woman with a previous caesarean section should be made after a discussion with a Consultant Obstetrician.
38. The Midwife/Doctor should discuss the following with the woman if she chooses induction:
- proposed method of induction
 - that induction could lead to an increased risk of emergency caesarean section
 - that the use of oxytocin would lead to an increased risk of scar dehiscence/uterine rupture (1 to 2% in induced/augmented labours)
 - selected parameters of progress that would lead to recommendation of emergency caesarean section
39. These should be documented in the woman's maternity record.
40. Induction of labour is not recommended in women with two or more caesarean sections or women who have had a previous upper segment uterine scar.
41. Prostaglandin gel/tablets are contraindicated in women with a previous caesarean section.
42. The clinician may refer to the table below from the [RCOG \(2015\) green top guideline no.45](#) when counselling women about their options.

Appendix V: VBAC success and uterine rupture risks of planned VBAC labours

		Spontaneous	Induced	Augmented
AHRQ meta-analysis ⁹	VBAC success	*74% (95% CI 72–75%)	63% (95% CI 59–67%)	68% (95% CI 64–72%)
	Uterine rupture	*0.47% (95% CI 0.28–0.68%)	1.2% (95% CI 0.7–1.9%)	1.1% (95% CI 0.9–1.5%)
NICHD study ^{18,303} (n = 17 898 VBACs)	VBAC success	80.6%	67.4%	73.9%
	Uterine rupture	0.36%	1.02%	0.87%
Australian population study ²² (n = 10 958 VBACs)	VBAC success	52.6%	51.4%	61.6%
	Uterine rupture	0.15%	0.68%	1.91%
UK Obstetric Surveillance System case-control study ²⁰	Uterine rupture	0.13%	0.36%	0.28%

*refers to overall rates when spontaneous, induced and augmented labours are combined, although the large majority of data are derived from spontaneous labour.

43. Women may choose to discontinue an induction and opt for a caesarean section at any stage of the process and this decision should be respected by clinical staff.
44. If ARM is not possible then an intracervical Foley catheter should be offered for cervical preparation.
45. Oxytocin may be used for induction of labour but should be preferably avoided once the woman is contracting and in established labour.

Maternal request (New in v4.0)

46. Induction of labour should not routinely be performed for maternal request. Women requesting this should be referred to the birth choices clinic for an individualised birth plan taking into consideration her individual circumstances.

Breech presentation (New in v4.0)

47. Refer to [Breech Presentation and Birth](#) guideline for further information.
48. Induction of labour is not recommended with singleton pregnancies in a breech position at term.
49. When expedited birth is indicated in preterm breech, an individualised plan should be made after review by a Consultant Obstetrician and induction of labour may be appropriate in certain circumstances.

Fetal growth restriction

50. Refer to [Growth Scans](#) guideline.
51. All inductions for fetal growth restriction should be requested through FMU/SGA clinic.

Suspected fetal macrosomia (without diabetes) (New in v4.0)

52. According to the NICE guideline macrosomia is defined as a baby with an estimated fetal weight (EFW) >95th at or after the 36-week scan.
53. The options for birth should be discussed with the woman which include expectant management, induction of labour or planned caesarean section.
54. Women who would like a further discussion regarding intervention due to fetal macrosomia should be referred to obstetric antenatal clinic.
55. Women should be informed that there is uncertainty about the benefits and risks of induction of labour compared to expectant management, but:
 - with induction of labour the risk of shoulder dystocia is reduced compared with expectant management
 - with induction of labour the risk of third- or fourth-degree perineal tears is increased compared with expectant management
 - there is evidence that the risk of perinatal death, brachial plexus injuries in the baby, or the need for emergency caesarean birth is the same between the 2 options
56. If the woman opts for an induction of labour then she should be arranged from 39 weeks onwards based on the preferences of the woman.

History of precipitate labour

57. Previous precipitate labour is not an indication for induction of labour in the absence of any other indications.

Women above the age of 40 years

58. In the UK the proportion of maternities in women aged 40 is almost 4% and the average age of childbirth is continuing to increase.
59. Maternal age is associated with an increased risk of obstetric complications including placental abruption, placenta praevia, malpresentation, low birth-weight, preterm and post-term delivery, stillbirth and postpartum haemorrhage.

60. Pre-existing maternal medical conditions including hypertension, obesity and diabetes increase with advancing maternal age as do pregnancy related maternal complications such as pre-eclampsia and gestational diabetes. These medical co-morbidities can all influence fetal health and are likely to compound the effect of age on the risk of pregnancy in an older mother.
61. The incidence of stillbirth at term is higher in women of advanced maternal age. At 39–40 weeks of gestation this equates to 2 in 1000 for women ≥ 40 years old compared to 1 in 1000 for women < 35 years old.
62. For nulliparous women over the age of 40 years an induction of labour can be challenging, and consideration should be given as to a planned caesarean section. A discussion should be had in antenatal clinic and a plan made based on the woman's individual preferences.
63. **(New in v4.0)** In this cohort induction should be offered at
 - 40 weeks for women >40 and ≤ 42 years old with no additional risk factors.
 - 39 weeks onwards for women ≥ 43 years old or >40 years old with risk factors.

Other indications for induction (Hypertension/Diabetes etc)

64. Please refer to relevant guidelines
65. Refer to Appendix 2 for recommended timing of induction

Intrauterine fetal death

66. Refer to [Intrauterine Fetal Death Guideline](#).

Methods of Induction of labour

67. In 2020 following the commencement of the Covid pandemic OUHFT moved to mechanical induction to facilitate outpatient induction of labour and minimise transmission of the virus on the wards.
68. **(New in v4.0)** In 2022 a comprehensive review was carried out at OUHFT (over 3000 women) comparing induction with prostaglandin gel to mechanical induction with intracervical Foley's catheter. (see Appendix 1) The data over a two-year period revealed
 - Women having mechanical induction spent on average 6 hours longer in active labour than women having Prostaglandin gel induction.
 - The emergency caesarean section rate was significantly higher with mechanical induction than with prostaglandin induction.
69. Following this review, the recommended method of induction at OUHFT is
 - Prostaglandin induction for all inpatient inductions and nulliparous women
 - Foley's catheter induction is recommended for women opting for VBAC induction
 - Multiparous women having postdates induction may be given the choice of induction with either prostaglandins or Foley's catheter.
 - **If a woman in whom a Prostaglandin induction is recommended makes an informed choice to opt for a Foley's catheter induction, then this should be facilitated.**

Membrane Sweeping

70. Women should be offered a membrane sweep if vaginal delivery is planned at all antenatal appointments from 39 weeks.
71. A membrane sweep may be carried out in the woman's home, antenatal clinic, or hospital.
72. A membrane sweep should not be offered in the presence of ruptured membranes.
73. The presence of Group B streptococcus is not a contraindication to membrane sweeping in the presence of intact membranes.
74. The Midwife or Doctor should:
 - Check the placental location on last scan
 - Provide a full explanation of the procedure
 - Inform the women that a membrane sweep may increase the chance of spontaneous labour.
 - Obtain and record verbal consent
 - Inform the woman that membrane sweeping is not associated with an increase in maternal or neonatal infection, but the procedure can result in increased levels of discomfort and bleeding.
75. Discuss with women whether they would like to have additional membrane sweeping if labour does not start spontaneously following the first sweep.

Vaginal PGE 2

76. Vaginal PGE2 is a method of induction of labour.
77. This is the recommended method of induction at OUHFT for all nulliparous women and inpatient induction in whom cervical preparation is indicated.
78. Within the OUH NHS Foundation Trust this is administered as a 2mg gel.
79. The recommended regimen is one cycle of vaginal PGE2 gel or tablets: one dose, followed by a second dose after 6 hours if labour is not established (up to a maximum of two doses. See appendix 4 for use of prostaglandin tablets). An individualised care plan may be made in growth restricted babies.
80. Inform women of the risk of hyperstimulation and that this can be reversed with tocolysis.
81. Do not use if there is a significant risk of uterine hyper-stimulation due to intra-cervical prostaglandin administration (i.e. a fully effaced cervix and palpable membranes).
82. Administer the first dose of prostaglandin 2mg gel in the posterior fornix of the vagina if the Bishop's score is <7.
83. Perform a vaginal examination 6 hours after initial dose of gel to assess the state of the cervix and whether the woman is contracting or not.
84. If at the next examination, artificial rupture of membranes (ARM) is possible, this should be performed regardless of Bishop score
85. **For nulliparous women:**
 - if ARM is not possible, administer second dose of prostaglandin 2mg gel vaginally
86. **For multiparous women:**
 - if ARM is not possible, discuss a second dose of prostaglandin 2mg gel with the duty registrar

87. For women having their 4th or more baby the decision to administer Prostin should be made by a Consultant Obstetrician.
88. The maximum dose of prostaglandin is 4mg gel in 24 hours. If this is not adequate to allow ARM see 'Failed induction' section below.
89. Prostaglandin is contraindicated in
 - Women with a previous caesarean section
 - Known hypersensitivity to prostaglandins
 - Is there was hyperstimulation with the 1st dose of prostaglandin gel.

Mechanical IOL

90. Mechanical induction is the preferred method of induction of labour for women opting for induction of labour with a previous caesarean section. It can also be offered to multiparous women having a postdates induction of labour.
91. If women in whom prostaglandin gel induction is recommended, make an informed choice to opt for mechanical induction then this should be facilitated.
92. Mechanical induction has been shown to have a reduced incidence of hyperstimulation when compared with induction with prostaglandin gel.
93. Outpatient induction may be offered to women having a postdates induction.
94. At OUHFT intracervical Foley's catheter induction is the preferred method of mechanical induction.

Antenatal Management and Booking of Planned Induction of Labour

95. At the 40-week appointment the Midwife should:
 - perform a full routine antenatal assessment (see Antenatal Care Guideline)
 - offer a membrane sweep following explanation of the procedure, and perform a sweep if consent is given, informing the woman of the findings afterwards
 - explain the woman may experience discomfort and the passing of a show
 - advise to contact a maternity unit if she experiences bleeding, spontaneous rupture of membranes, abdominal pain or contractions
 - In women in whom a birth plan has not already been agreed, discuss the options available to her and if it is her preference discuss the timing of induction for postdates.
 - Explain that the unit will make every effort to book an induction at her preferred gestation although an exact date may not be possible to facilitate.
 - arrange admission date and time for induction as per IOL criteria
 - record all discussions in the woman's health records indicating her full understanding of her plan of care.

Advice where woman wishes to continue pregnancy beyond gestation that IOL is recommended

96. It is important to have an open conversation with women who choose to continue their pregnancy beyond the gestation that IOL is recommended.
97. The main reasons for IOL are because of concerns regarding either maternal or fetal wellbeing or both and this should be explained to the woman in a non-judgmental manner.
98. She should be reviewed by an obstetrician who should discuss alternative options if the woman chooses not to have induction of labour or decides at a later stage that she no longer wishes to proceed with the induction process.
99. Women should have the opportunity to discuss their concerns and have enough information to make an informed choice which should be respected by the healthcare professionals caring for her.
100. The discussion should be clearly documented in the woman's handheld notes and on EPR if an individualised plan has been agreed.
101. Regarding prolonged pregnancy, concern is mainly the increased risk of still birth. The relative risk of stillbirth increases significantly from 41 weeks gestation. It is important for women who decline IOL to monitor fetal movement pattern and report any changes as soon as possible.
102. Women opting for expectant management beyond the recommended gestation for birth should be offered daily fetal monitoring via CTG. However, they should be made aware that there is no predictive value in this monitoring, and it only tells us how the baby is at that time. If the woman agrees to have daily CTG's, these can be arranged via Day Assessment Unit (DAU).
103. If a woman expresses in the antenatal period that she would decline IOL, refer to an Obstetric Consultant/Consultant Midwife who will develop a plan of care.

Admission and management of induction of labour

104. Admit, obtain and review full history (check and confirm placental location on 36 week scan), and perform:
 - a full antenatal examination
 - a full set of observations
 - abdominal examination
 - fetal heart assessment using Pinard stethoscope or Sonicaid
105. Discuss the induction process with the woman in order to set expectations, especially in relation to the timeline.
106. See below for appropriate place of induction
107. Further Care:
 - Give woman information regarding discomfort associated with procedure and pain relief options
 - Obtain verbal consent

- Perform external [electronic fetal monitoring](#) (EFM) using a cardiotocograph machine (CTG) until fetal wellbeing is confirmed (usually about 20 minutes)
- Assess cervix using Bishop score and record findings on the Induction of labour chart

For vaginal prostaglandin (see appendix 3)

108. Insert prostin gel/pessary into posterior vaginal fornix if Bishop's score <7.
109. Advise woman to remain lying down (left / right lateral) for at least 30 minutes following prostaglandin administration, during which time EFM should continue.
110. Provided initial monitoring is within normal parameters, discontinue CTG and revert to 4 hourly Intermittent Auscultation (IA) unless there is a clinical indication to do so earlier.
111. Reassess fetal wellbeing using cardiotocography (CTG) trace of 20 minutes once regular/painful contractions have commenced.
112. If at any time throughout the procedure the fetal heart rate is outside normal parameters or hyperstimulation evident, continue CTG and inform obstetric registrar/consultant.
113. **(New in v4.1)** Women should be counselled to escalate any concerns following gel administration and be made aware that fetal movements should remain normal throughout this process.
114. Maternal observations (temperature, pulse, B/P) should be carried out daily prior to the onset of labour. These should be recorded on the MEOWS chart. Some women will require more frequent observations – in these cases an individual management should be documented in the intrapartum record.
115. Encourage the woman to mobilise freely and consider using non-pharmacological pain relief.

For Mechanical Induction (see appendix 5)

116. If cervix is <3cm dilated, insert Foleys into cervix.
117. If unable to insert mechanical induction agent because the cervix is >3cm dilated perform a stretch and sweep examination.
118. Following insertion of mechanical device, the fetal heart rate should be auscultated via Doppler/pinard.
119. If the woman has been assessed as suitable for out-patient IOL, she has been assessed as well and there was a normal CTG, she should be discharged home to return the following day for ARM.
120. The following day, admit for ARM. If Foleys is still in situ, deflate balloon and remove to enable ARM.
121. If ARM is not possible, discuss with obstetrician re use of prostin or a trial of oxytocin and then ARM

Place of induction

Mechanical IOL

122. This should occur in the IOL bay on level 6 by a member of staff skilled in this method of IOL.

Prostaglandin gel

123. Most women will be given the prostaglandin gel in the IOL bay. However, in certain circumstances such as IUGR with abnormal CPR or severe PET, IOL should be carried out on OA. Discuss with a consultant plan to finalise this.

Artificial Rupture of Membranes (ARM)

124. Most women can have the ARM in the IOL bay as long as there is adequate staffing to allow appropriate monitoring. However, the ARM should happen on Observation Area or Delivery Suite if:

- Prostin was administered in OA
- this is a multiple pregnancy
- the woman is diabetic on a basal bolus insulin regime (see Diabetes guideline)
- the fetal head is not fixed in the pelvis (due to the risk of cord prolapse if ARM is performed when the fetal head is not engaged)

Process for when the Service is unable to induce women due to clinical acuity

125. There will be occasions when accommodating the IOL work in a timely fashion may be challenging due to volume and complexity of emergency work in the Delivery Suite.

126. **(New in v4.0) At 9 am the Safety Huddle Team, including the IOL Midwife, Bleep Holder, DS coordinator and DS Consultant Obstetrician, will review the IOL work for the day. If delays are anticipated, collaboratively the Safety Huddle Team will decide and plan any necessary rescheduling, along with an explanation and apology to the woman and her partner.**

127. **(New in v4.0) Necessary midwife escalation processes should be followed if there are delays in the induction process secondary to staffing issues. Please see the [Escalation Policy for the Management of Delay in IOL](#).**

128. A specific plan of care for each woman should be documented in the maternal health records. Any rescheduling should be made by midday at the latest. This should be only under exceptional circumstances and ideally IOL should continue as planned.

Uterine hyperstimulation during induction of labour

129. Uterine hyperstimulation, where the uterus is contracting > 5 in 10 minutes and fetal heart rate abnormalities are detected, may occur in up to 5% of inductions.

130. This is more common with Prostaglandin induction than mechanical induction of labour.
131. If uterine hyperstimulation is diagnosed
- Position the mother into left lateral position
 - Notify medical staff
 - Continue with electronic fetal monitoring
132. Consider the administration of Terbutaline 250mcg subcutaneously.
133. *Use of Terbutaline notes:*
- Contra-indications: Heart disease, cardiac arrhythmia, hyperthyroidism
 - Observations: check pulse rate and blood pressure (and blood glucose if mother is diabetic)
 - Side effects: palpitation, tremor, nausea
 - Watch for: breathlessness, chest pain.

Unsuccessful (failed) induction of labour (updated in v4.3)

134. If ARM is not possible following two doses of prostaglandin gel, the woman should be reviewed by a senior obstetrician. **A third prostaglandin gel is not licensed for use and should not be offered or prescribed.**
135. **If ARM is not impossible after two doses of prostaglandin gel, induction of labour has failed.**
136. Discuss with a Consultant Obstetrician and discuss the options with the woman including:
- caesarean section
 - abandon process and await onset of labour
137. In some cases, consideration may be given to using oxytocin infusion with intact membranes on consultant advice only.
138. A plan of care will be made based on the consultant's input and woman's decision and documented in the woman's health records.

Review

139. This guideline will be reviewed every 3 years, as set out in the Policy for the Development and Implementation of Procedural Documents.
140. This guideline may need to be revised before this date, particularly if national guidance or local arrangements change, where implementation is unsuccessful or where audits necessitate a guideline review.

EPR Considerations / Booking of Induction of labour

141. When booking an induction of labour, send referrals via Communicate using the EPR Maternity IOL Booking Pool.
142. As per the Patient Pathway SOP, use the global auto text function on EPR and ensure all information including who is requesting the induction is entered on the form to assist in triage.
143. For out of area referrals for IOL, please email ouh-tr.OUHInductions@nhs.net.
144. Read [SOP - Patient Pathway for IOL](#) for more information

Implementation plan

N o.	Recommendation for Implementation	Action to be taken	Evidence of Action	Responsible Person	Date Action to be completed by
1	Raise awareness of changes to guideline	Circulate "At a Glance" to all maternity doctors and midwives	Email evidencing circulation of "At a glance"	Guideline Author	August 2022
2	Raise awareness of changes to guideline	Presentation at Community Midwife weekly meeting	Email from Community Midwife Band 8 confirming presentation	Guideline author and Community Midwife Band 8	August 2022
3	Raise awareness of changes to guideline	Add to newly launched DS Digest publication	Inclusion of update in newly launched DS Digest publication	QT/Author of ratified guideline to notify Author of DS Digest	August 2022

References

145. [Cochrane Review. Vaginal Prostaglandin for Induction of Labour at Term. Kelly et al. 2009](#) (accessed 13/07/22)
146. MBRRACE-UK Perinatal Mortality Surveillance Report for births 2018 (2020) Available online at: https://www.npeu.ox.ac.uk/assets/downloads/mbrpace-uk/reports/perinatal-surveillance-report-2018/MBRRACE-UK_Perinatal_Surveillance_Report_2018_-_final_v3.pdf
147. Middleton et al (2018) Induction of labour for improving birth outcomes for women at or beyond term. Cochrane database of systematic reviews. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004945.pub5/full> (accessed 13/07/2022)
148. National Institute for Health and Care Excellence (NICE) (2021) Inducing Labour Clinical Guideline (NG207) Available from: <https://www.nice.org.uk/guidance/ng207> [Accessed on 13/07/22]

149. National Institute of Health Care Excellence (NICE) (Sept 2007) Intrapartum care for healthy women and babies CG190 (accessed 13/07/22) clinical guideline Intrapartum care - care of healthy women and their babies during childbirth.
150. National Institute of Health Care Excellence (NICE) Clinical Guideline NG207 published 4th November 2021 - Inducing labour. <https://www.nice.org.uk/guidance/ng207> (accessed 13/07/2022)
151. UK MBRRACE perinatal surveillance report 2020. https://www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/perinatal-surveillance-report-2019/MBRRACE-UK_Perinatal_Surveillance_Report_2019_-_Final_v2.pdf
152. Royal College of Obstetricians and Gynaecologists (RCOG) (2015) *Birth After Previous Caesarean Birth*, green top guideline no. 45, appendix V, Available online at: https://www.rcog.org.uk/media/kpkjwd5h/gtg_45.pdf, [Accessed on 13/07/22]
153. Winnerholm U-B et al (2019) IOL at 41 weeks versus expectant management and induction of labour at 42 weeks (SWEPIIS): multicentre, open label, randomised, superiority trial. *British Medical Journal*; 367 <https://doi.org/10.1136/bmj.l6131>.

Appendix 1 – Rationale for Recommended Method of Induction

The Rationale

What is the rationale behind the recommended method for induction at OUHFT?

Why did we change our IOL process?

Before the COVID pandemic, induction was started using Prostin gel. During the pandemic, we changed to outpatient induction with Foley’s catheters to reduce women’s time in hospital and offer more patient choice. However, we have noticed that delay is becoming a big problem for women being induced since introducing this change.

We have done a large audit looking at the birth outcomes for women having Prostin gel and Foley’s catheter inductions of labour at OUH over two years. This audit shows that both primiparous and multiparous women who had a Foley’s catheter induction had a **longer labour** (average 6 hours longer) and were **more likely to have an emergency Caesarean section** compared to women who had a Prostin gel induction. There was no difference in adverse neonatal outcomes between Prostin and Foley’s inductions.

Longer labours for women being induced impacts on the care of all women – the extra 6 hours of labour per woman added by using Foley’s is the equivalent of having 2-3 extra midwives per shift!

What are the new recommendations?

- Prostin gel induction is recommended as first line for all inpatients and all primiparous women
- Foley’s catheter’s are recommended for women having VBAC and IOL
- Multiparous women having postdates IOL can be offered a choice of Prostin or Foley’s catheter induction

What should we tell patients having IOL?

We should explain to women that we are recommending Prostin gel induction for most women because it reduces the length of labour and reduces the chance of Caesarean section. For multiparous women having a post-dates induction, we should recommend Prostin induction because it reduces the length of labour, but we can offer the option of outpatient Foley’s catheter induction if the woman wishes.

What about patient choice?

If a patient specifically requests Foley’s catheter induction, we can facilitate this, but we should recommend Prostin gel induction as first line because of the benefits of a shorter labour and reduced risk of Caesarean section. We must also remember that the delays during the IOL process for all women may be contributed to by the method of induction – one-to-one midwifery care is a very valuable and precious resource, we want to try and utilise it for the greatest benefit to everyone!

Appendix 2 – Decision Making Tool to inform Induction of Labour (when Unit is declared Opel 1 (GREEN) or Opel 2 (AMBER))

CLINICAL CONDITION	RECOMMENDED GESTATION OF IOL (WEEKS)*	PRIORITY LEVEL*
--------------------	---------------------------------------	-----------------

	Minimum	Maximum	
POST DATES	41+0	41+4	1 ((take maternal preference into consideration))
PRE-EXISTING DIABETES (Individual plan by Diabetic team depending on clinical picture) Type 1 or 2	37+0	38+6	1
GDM LOW RISK Diet/Metformin Stable blood glucose (most readings in target) Normal amniotic fluid volume & normal growth	40+0	40 + 6	2
GDM POSSIBLE COMPLICATIONS *Macrosomia (EFW >95th centile at 36 weeks or accelerated growth from previous scans) on case-by-case basis/consultant decision Poor blood sugar control	39+0	40+0	2
MATERNAL AGE 40- ≤ 42 years old at booking (otherwise low risk) ≥ 43 years old at booking or >40- ≤ 42 years at booking with additional risk factors.	40+0 39	40+3 39+3	2 2
IUGR/SGA (FGA Clinic) Including low CPR/Raised Dopplers	Booked through FGA clinic only		1
PRE-ECLAMPSIA Diagnosed at <37+0 Diagnosed at ≥37+0 weeks	Consultant decision Induce as soon as possible after diagnosis (usually within 48 hours)		1 1
CHRONIC/GESTATIONAL (PIH) HYPERTENSION BP well controlled and outpatient	40+0	41+0	2
Inpatient due to complications	37+0	onwards	1
RAISED PCR (≥ 30)	40+0	41+0	2
OBSTETRIC CHOLESTASIS (irrelevant of treatment): Bile acids 40-99 (AT ANY STAGE)	39+0	39+6	2
Bile acids >100 (AT ANY STAGE)	37+0	First available	1
SYSTEMIC LUPUS ERYTHMATOSIS (SLE) (no other complications)	40	41+0	3
SLE (with complications)	Booked via SS		2

PATIENTS ON FULL THERAPEUTIC ANTICOAGULATION IF MDT RECOMMENDS NOT SPONT LABOUR After discontinuing LMWH for 24 hours – to avoid repeated episodes of missing anticoagulation	40+0	41+0	1
APH (ONLY IF INPATIENT AND EMERGENCY)	Individualise		1
↓PAPP-A / ↑Ut AD but normally grown and no evidence of PET (if SGA then must be booked through FMU): Either <ul style="list-style-type: none"> • UtAD @20 weeks: combined PI> 3.0 Or <ul style="list-style-type: none"> • ↓ PAPP-A < 0.31 	40+0	41	2 (Priority 1 if both risk factors)
Macrosomia (non-diabetes) EFW >95 th centile Timing to be agreed at antenatal consultation with senior obstetrician	39+0	onwards	1 (based on agreed timing with woman)
Multiple pregnancy – DCDA twins	37	38	2
FETAL ANOMALY Only gastroschisis / neural tube defect / in-utero therapy / MCDA twins (not others)	Booked through FMU		1

PREVIOUS TRAUMATIC BIRTH / SPECIAL ARRANGEMENTS FOR PARTICULAR CLINICIAN TO ATTEND BIRTH	Booked through Birth Choices clinic Ideally not earlier than 39 weeks	Liaise with relevant clinicians if needs to be deferred
Previous Intrauterine fetal demise	Usually at 39 weeks but can be 38-39 weeks if 2 consultant obstetricians agree	3
MENTAL ILLNESS	Booked ONLY as part of Perinatal Mental Health plan following MDT	1

THE FOLLOWING ARE NOT AN INDICATION FOR IOL

IVF
PGP
Epilepsy
Polyhydramnios
Reduced fetal movements (unless another indication)
ITP (unless arranged by SS Team)
Anxiety / other mental illness unless part of perinatal mental health plan
Haemophilia
APH not admitted

***RECOMMENDED GESTATIONAL AGES AND PRIORITY LEVELS**

Priority Level 1: Recommended to book IOL at **minimum** gestation. If this day is full, then there is flexibility to look at the following days up to the maximum gestation if the service is under pressure. Once booked priority 1 cases should not be moved.

Priority Level 2: Recommended to book IOL close to or at **maximum** gestation (not to go beyond maximum). If this day is full, then there is flexibility to look at the preceding days and bring the IOL forwards if required.

Priority Level 3: Could be deferred if there are more urgent cases – Not to be a priority above Level 1 or 2.

PLEASE NOTE: Screening of IOL requests will occur on a daily basis and requesters will be asked to contact the woman if the request does not meet the department agreed criteria on indication or timing

Decision Making Tool to inform Induction of Labour (when Unit is declared Opel 3 (RED) or Opel 4 (BLACK))

CLINICAL CONDITION	RECOMMENDED GESTATION OF IOL (WEEKS) Earliest and latest given (accepting acuity)	PRIORITY LEVEL
POST DATES	41+5	1
PRE-EXISTING DIABETES Type 1 or 2	37+0 to 38+6	1
GDM: Diet/Metformin <ul style="list-style-type: none"> Stable blood glucose (most readings in target) GDM Possible complications	40+0-41+0 39+0- Diabetic clinic only	2
MATERNAL AGE <ul style="list-style-type: none"> 40-44 years old at booking multiples otherwise low risk 40-44 years old and primips or other risk ≥ 45 years old at booking 	39+0-41+0 39+0-40+0 39+0-40+0	2 2 2
IUGR/SGA Including low CPR/Raised Dopplers	Booked through FGA clinic only	1
Inpatients with Pre-eclampsia	Diagnosed at <37+0 Consultant decision	1
	Diagnosed at ≥37+0 weeks - induce as soon possible after diagnosis (usually within 48 hours)	1
NEW HYPERTENSION (non-proteinuric and normal bloods) Not requiring admission	40+0-41+0	2
Long term uncomplicated hypertension	41+0	2
RAISED PCR (≥ 30 on 2 occasions, not UTI) with no PET/ hypertension	40+0-41+0	2

<p>OBSTETRIC CHOLESTASIS (irrelevant of treatment):</p> <p>Bile acids 39 or less</p> <p>Bile acids over 40 - 99</p> <p>Bile acids over >100</p>	<p>Individualise but usually not an indication for induction in itself</p> <p>39+0 – 39+6</p> <p>Individualise (usually 37+ weeks)</p>	<p>2</p> <p>1</p>
<p>PATIENTS ON FULL THERAPEUTIC ANTICOAGULATION IF MDT RECOMMENDS NOT SPONTANEOUS LABOUR After discontinuing LMWH for 24 hours – to avoid repeated episodes of missing anticoagulation.</p>	<p>39</p>	<p>1</p>
<p>APH (ONLY IF INPATIENT AND EMERGENCY)</p>	<p>Individualise</p>	<p>1</p>
<p>LGA Nulliparous/ prev CS</p> <p>Multiparous</p>	<p>No IOL</p> <p>40 - 41</p>	<p></p> <p>3</p>
<p>↓PAPP-A / ↑Ut AD (v4.3 - Correction)</p> <p>UtAD @20 weeks: combined PI> 3.0 &/OR ↓ PAPP-A < 0.31</p> <p>UtAD @20 weeks: combined PI>= 2.5 and </=3.0</p>	<p>40+0 to 41</p> <p>41+0</p>	<p>2 (Priority 1 if both risk factors are present)</p> <p>3</p>
<p>RFMs Not usually an indication for IOL – Can be considered if RFM on more than one occasion ≤ 14 days apart after 37 weeks (with normal monitoring) – consultant decision</p>	<p>39 (at the earliest)</p>	<p>3</p>
<p>Polyhydramnios AFI >30(FMU unit only)</p>	<p>FMU DECISION</p>	<p></p>
<p>Fetal abnormality (FMU unit only)</p>	<p>39+0</p>	<p>3</p>
<p></p>	<p></p>	<p></p>

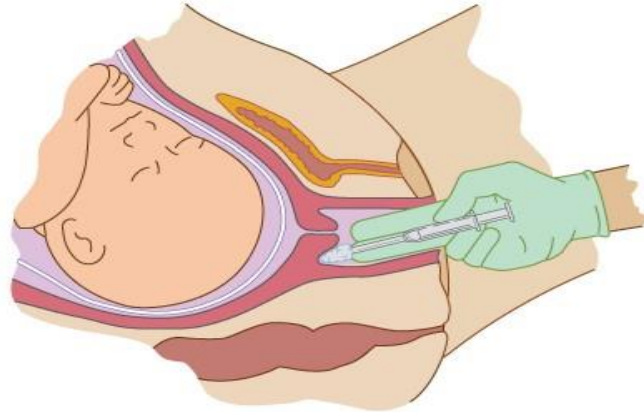
<p>Preterm Prelabour Rupture of Membranes (PPROM):</p> <p>If GBS positive</p> <p>If PPRM at <34+0 weeks</p> <p>If other complications eg PET, IUGR, significant cholestasis</p> <p>If no additional risk factors</p> <p>Women with clinical chorioamnionitis should be delivered regardless of the gestation</p>	<p>Advise IOL from 34+0</p> <p>Consider IOL from 34+0</p> <p>Consider IOL from 34+0</p> <p>Advise IOL from 37+0</p>	<p>2</p> <p>3</p> <p>3</p> <p>3</p>
<p>PREVIOUS TRAUMATIC BIRTH / SPECIAL ARRANGEMENTS FOR PARTICULAR CLINICIAN TO ATTEND BIRTH</p>	<p>Booked through Mode of Birth or Trauma clinic</p>	<p>Liaise with relevant clinicians if needs to be deferred</p>
<p>MENTAL ILLNESS</p>	<p>Booked ONLY as part of Perinatal Mental Health plan following MDT</p>	<p>1</p>
<p>NOT AN INDICATION FOR IOL <41+0</p>		
<p>IVF PGP Epilepsy Polyhydramnios (<30) Reduced fetal movements (unless another indication) unless abnormal ITP Anxiety / other mental illness unless part of perinatal mental health plan Haemophilia APH not admitted VBAC Unstable lie</p>		
<p>PRIORITY LEVELS</p>		
<p>1. Requires IOL at specific gestation – Not to be moved (SGA, Severe PET, Postdates) 2. Not to go beyond a predefined gestation</p>		

3. Could be deferred – Not to be a priority above Level 1 or 2

MANAGEMENT OF DELAY FOLLOWING PROSTIN

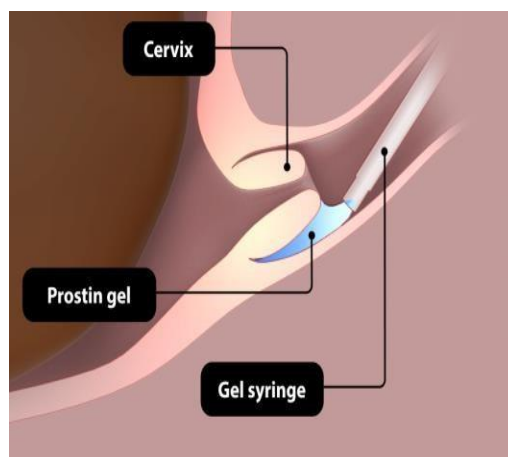
Once the 1st and/or second Prostin gel has been administered, if low risk, not in labour and has a normal CTG six hours following the gel, consideration can be given for outpatient management.

Appendix 3 – Technique for Insertion of Prostaglandin Gel



Prostaglandin gel

The gel should be inserted into the posterior fornix avoiding administration into the cervix. Post administration the pregnant person should remain left lateral for at least 30 minutes with continuous fetal monitoring. Please refer to the induction of labour proforma for plan of continued care post PGE2 administration.



The Practice Development Midwifery Team will be supporting midwives who would like help with inserting PGE 2.

[For further information please refer to the Induction of Labour Guideline
http://ouh.oxnet.nhs.uk/Maternity/Maternity%20Guideline%20Documents/Induction%20of%20Labour/Induction%20of%20labour%20COVID%20Full%20guideline%20v3.0.pdf](http://ouh.oxnet.nhs.uk/Maternity/Maternity%20Guideline%20Documents/Induction%20of%20Labour/Induction%20of%20labour%20COVID%20Full%20guideline%20v3.0.pdf)

Appendix 4 – Induction of Labour using Prostaglandin Tablets

If prostaglandin gel is not available then prostaglandin tablets can be used instead.

These tablets contain the same drug (prostaglandin E2) as the more usual prostaglandin gel, but the bio-availability (the amount that gets released into the woman) is different. For this reason, the standard dose is different.

Prostaglandin vaginal tablet 3mg is equivalent to prostaglandin gel 2mg.

Trials show that there is no significant difference in the maternal outcomes where 2 to 3mgs of prostaglandin are used. The caesarean section rate and outcomes for the baby are similar. However, there is a non-significant increase in the need for oxytocin augmentation in women given tablets, so gel should still be used as a first choice option if it is available.

Nulliparous Induction

Time	Does of prostaglandin
0 Hours	If Bishop score \leq 5, give prostaglandin vaginal tablet 3mg
6 Hours	If Bishop score \leq 5, give prostaglandin vaginal tablet 3mg
24 Hours	Perform ARM, commence oxytocin infusion within 2 hours of ARM

Use the same regime for women being induced for pre-labour SROM

Multiparous Induction without a uterine scar

Time	Does of prostaglandin
0 Hours	If Bishop score \leq 5, give prostaglandin vaginal tablet 3mg
6 Hours	Perform ARM, start oxytocin infusion within 2 hours of ARM. Be ready to reduce dose of oxytocin or stop the infusion when labour establishes

Use the same regime for women being induced for pre-labour SROM

Appendix 5 – Mechanical Induction - Insertion of Foley Catheter for IOL

Instruments required

- Sterile gloves and aqueous gel
- Foley catheter (16 Fr in size- this can hold 30 mls of sterile water)
- 50ml syringe
- Bowl with 30ml of water
- Mepore or other similar tape
- Cusco's speculum (with a lock), sponge holding forceps, torch/light source (not a mobile phone) may be required

Preparation

- The woman will be admitted as usual to the Induction of labour bay
- Usual pre-induction of labour assessment by the Midwife including: CTG until Dawes Redman/DR C Bravado criteria are met
- Verbal informed consent is obtained for the procedure and documented
- The woman is placed initially in a semi-recumbent position, however if the procedure is unsuccessful in this position, the woman can adopt a lithotomy-like position
- consider use of Entonox for women who find the procedure too uncomfortable
- A trained Midwife or Obstetrician can perform this procedure
- Sterile Cusco's speculum can be used to visualise the cervix if unable to insert digitally

Procedure

- A vaginal examination is performed to assess the length of the cervix
- The Foley catheter is held between fingers and inserted into the cervix – aim for balloon to be inflated in extra amniotic space.
- The Foley catheter is inserted into the cervix and the balloon is slowly inflated –if the balloon is felt digitally to be outside cervix then deflate balloon and insert catheter further before trying to inflate balloon again
- If speculum and sponge holding forceps required, avoid holding the sponge holder over the balloon end of the catheter
- Inflate with 30mls of water
- When the balloon is inflated, pull the catheter gently downwards so that the balloon is applying pressure to the internal cervical os and tape the catheter to the woman's inner thigh
- There is no need for a routine CTG after the procedure, auscultate the FH using IA following the VE

Post-insertion of balloon management

- Women who meet the criteria for outpatient IOL, will be discharged home to return the following day to proceed with their IOL unless they go into spontaneous labour in the interim. If they are in patients, they will stay on level 6 until they go into labour or they are ready for the next stage of the IOL pathway
- If spontaneous rupture of membranes has occurred and the balloon is still in situ then remove balloon. Following SROM treat as usual induction undergoing SROM and assess for oxytocin requirement.
- If the balloon is expelled, then continue with artificial rupture of membranes (ARM)

- For inpatients, the next stage in the process will take place 18-24hrs after balloon insertion. For outpatient IOL, women will return to IOL bay the following day for reassessment and for ARM if suitable
- If the balloon is still in situ, remove and assess the cervix for ARM. If cervix is not favourable for an ARM after 24 hours- consider trial of oxytocin, prostin or a caesarean section.

Important Points

- If the balloon is expelled the cervix is usually dilated to greater than 3cms and ARM should be possible. Decision for timing of ARM should be based on clinical safety grounds-maternal/fetal and labour ward status
- If there is spontaneous rupture of membranes and the balloon is in situ –remove the balloon and reassess the woman to consider oxytocin (there is a risk of infection with PROM if the balloon remains in situ)
- If due to clinical acuity it is anticipated that there will be a delay in ARM then the balloon catheter may be kept in situ for a maximum of 48 hours. In such cases a full antenatal check should occur at 24 hours to ensure that there are no concerns regarding maternal or fetal well being.

Appendix 6: Responsibilities

1. The Obstetric Consultant Lead for Delivery Suite & Delivery Suite lead team have delegated authority for ensuring the service is run as per the guideline and monitor its effectiveness.
2. The IOL Team have delegated authority that staff are aware of the Patient Pathway for IOL and liaise with wider teams as required.
3. All Managers in the Maternity Directorate are responsible for ensuring staff are aware of the new Patient Pathway for IOL
4. Individual Staff are responsible for referring women who require IOL.

Appendix 7: Education and Training

1. There is no mandatory training is associated with this guideline. Ad hoc training sessions based on an individual's training needs will be defined if a midwife is allocated to the induction bay.
2. The Practice Development team will support any education required with regards to the induction process.

Appendix 8: Definitions and Acronyms

ARM (artificial rupture of membranes)	This is the intentional rupture of the amniotic sac by a healthcare provider.
Bishop Score	Bishop score is a pre-labour scoring system to assist in predicting whether induction of labour will be required. The total score is achieved by assessing the following five components on vaginal examination. Cervical dilation Cervical effacement Cervical consistency Cervical position Fetal station
CTG (Cardiotocography)	A technique for monitoring the fetal heart and contractions during pregnancy and labour
FMU	Fetal Medicine Unit
GDM	Gestational Diabetes Mellitus
Induction of labour (IOL)	To artificially initiate uterine contractions. This leads to progressive dilatation, effacement of cervix and birth of the baby. Includes women with intact membranes and those with spontaneous rupture of membranes but not in labour.
SGA	Small for Gestational Age
SS (Silver star team)	The obstetric medicine team at OUHFT
VBAC	Vaginal birth after Caesarean

Appendix 9: Monitoring Compliance

Compliance with the document will be monitored in the following ways.

Compliance Standard	Monitoring method	By whom and when	Reporting to
Documented evidence of discussion with the woman regarding her preferences for birth	Review of 25 sets of notes/EPR records	DS lead team.	MCGC
Audit in line with the NICE Quality Standard (QS60) 6 months after launch of guideline	Review of 25 sets of notes/EPR records	DS Team Lead – January 2023	MCGC

Appendix 10: Equality Impact Assessment

1. Information about the guideline, service or function

What is being assessed?	
New Guideline/Procedure <input type="checkbox"/>	New Service/Function <input type="checkbox"/>
Existing Guideline/Procedure <input checked="" type="checkbox"/>	Existing Service/Function <input type="checkbox"/>
Staff member completing assessment: Marie Barnard	
Name of Guideline: Induction of Labour Guideline	
Details about the guideline/service/function: This document provides guidance for all clinical staff caring for women during the Induction of labour process. It is applicable to all women who require induction of labour within the Oxford University Hospitals NHS Foundation Trust.	
Review Date:	Date assessment completed: 11/07/2022
Signature of staff member completing assessment: Marie Barnard	Signature of staff member approving assessment:

2. Screening Stage

Who benefits from this guideline, service or function? Who is the target audience? (tick all that apply)		
Patients <input checked="" type="checkbox"/>	Family/Carers <input type="checkbox"/>	Not applicable <input type="checkbox"/>
Staff <input checked="" type="checkbox"/>	Other (specify):	
Does the guideline, service or function involve direct engagement with the target audience?		
Yes <input checked="" type="checkbox"/>	Continue with full equality impact assessment	
No <input type="checkbox"/>	Full equality impact assessment not required	

3. Research Stage

Notes:

If there is no impact for a particular group or characteristic, mention this in the Reasoning column and refer to evidence where applicable.

¹Race categories follow those used in the National Census by the Office for National Statistics. Consideration should be given to the specific communities within broad categories such as Bangladeshi people.

²Please select age groups which may be impacted by the guideline, service or function and complete as appropriate.

³Religion or Belief covers a wide range of groupings, the most common of which are Muslims, Buddhists, Jews, Christians, Sikhs and Hindus; it also covers people who do not have a faith. Consider these individually and collectively when determining impacts.

Characteristic		Positive Impact	Negative Impact	Neutral Impact	Not Enough Information	Reasoning
Sex and Gender Reassignment	Men (incl. trans men)			x		All genders of pregnant people will have equal access to Induction of labour care.
	Women (incl. trans women)			x		
	Non-binary people			x		
Race ¹	Asian or Asian British			x		All pregnant people will benefit from this guideline. Consideration should be taken if not able to read written English – including for white British people. Pictorial explanations may need to be used. Where English is not spoken or not first language, then language line should be used for consultations, especially when giving information of medication uses and doses.
	Black or Black British			x		
	Mixed Race			x		
	White British			x		
	White Other			x		
	Other:			x		

Disability	Disabled people			x		If the woman has any learning difficulties an advocate should be in attendance. If they have a hearing loss– a British Sign Language Interpreter should be offered which can be done via language line.
	Carers			x		
Age²				x		This guideline is only applicable to adult pregnant people. Please consult the Children’s BNF or gain advice from a paediatrician before if the pregnant person is less than 18 years old.
Sexual Orientation				x		This guideline does not discriminate with regards to sexual orientation, as all people will have equal access to the advice and treatments described above.
Religion or Belief³				x		This guideline does not discriminate with regards to belief or religion, as all people will have equal access to the advice and treatments described above.
Pregnancy and Maternity		x				The advice in this guideline is for pregnant people therefore will have a positive impact on this group.
Marriage or Civil Partnership				x		This guideline does not discriminate with regards to marriage or civil partnership, as all people will have

						equal access to the guidance and care described above.
Other Groups /Characteristics	For example: homeless people, sex workers, rural isolation.			x		This guideline does not discriminate with regards to social situations, as all people will have equal access to the guidance and care described above.

List the sources of information used in the table below	
<p>OUH trust Equality impact assessment procedure guideline – available via trust intranet</p> <p>Annual Equality and Diversity Report, Workforce Race Equality Standard Data, or the Equality Delivery System 2 report</p>	
Using the table below, list any protected groups you will target during the consultation process, and give a summary of those consultations.	
Group	Summary of consultation
List any other individuals/groups that have been or will be consulted on this guideline, service or function.	
<p>This guideline will be reviewed prior to publication by relevant Midwives, Obstetricians and Obstetric Physicians. A pharmaceutical review will be sought if appropriate to the guideline.</p>	

4. Summary Stage

Outcome Measures

List the key benefits that are intended to be achieved through implementation of this guideline, service or function and state whether or not you are assured that these will be equitably and fairly achieved for all protected groups. If not, state actions that will be taken to ensure this.

The benefits of this guideline will be to improve the care of women having/or advised to have an induction of labour. This guideline will help to ensure that women are risk assessed appropriately and involved in the decision making around induction of labour (IOL). Their choices should be clearly explained, and the health care professional should ensure all options discussed are understood by the woman and her birthing partner. All plans for IOL care will be made in partnership with the woman. Access to health care provision should be with the most appropriate member(s) of the MDT in accordance with national guidance. Consideration should be taken in those pregnant women who may not be able to understand or read written English – including for white British women. Pictorial explanations may need to be used. Where English is not spoken or understood, then language line should be used for consultations, especially when giving information of medication uses and doses. If the pregnant woman has any learning difficulties an advocate should be in attendance. If they are D/Deaf or d/Deaf or have a hearing impairment– a British Sign Language Interpreter should be offered and can be accessed via language line.

Positive Impact

List any positive impacts that this guideline, service or function may have on protected groups as well as any actions to be taken that would increase positive impact.

This guideline has been written specifically to support the induction of labour care provision for pregnant women, therefore this is a positive impact for this group.

Unjustifiable Adverse Effects

List any identified unjustifiable adverse effects on protected groups along with actions that will be taken to rectify or mitigate them.

No adverse effects predicted on any group

Justifiable Adverse Effects

List any identified unjustifiable adverse effects on protected groups along with justifications and any actions that will be taken to mitigate them.

No adverse effects predicted on any group

Equality Impact Assessment Action Plan

Complete this action plan template with actions identified during the Research and Summary Stages

Identified Risk	Recommended Actions	Lead	Resource Implications	Review Date	Completion Date
Pregnant women with learning disabilities having an understanding the information	Consider if the use of an advocate is required				
Difficulty accessing follow up and appointments for pregnant women who are homeless or have limited means of transport for appointments	Consider whether telephone appointments could be arranged. Consider whether hospital transport is appropriate. Consider whether a more local hospital e.g., the Horton may be an appropriate place for antenatal care				
