

# NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

## Centre for Clinical Practice

### *Recommendation for Guidance Executive*

#### **Review of Clinical Guideline (CG70) – Induction of labour**

#### **Background information**

Guideline issue date: 2008

3 year review: 2011

National Collaborating Centre: Women's and Children's Health

#### **Review recommendation**

- The guideline should not be updated at this time.

#### **Factors influencing the decision**

##### **Literature search**

1. A high-level search of randomised control trials (RCTs) identified new evidence related to the following clinical areas in the guideline:
  - Induction of labour in specific circumstances
  - Timing of induction of labour
  - Complications of induction of labour.

The high-level RCT search identified 20 studies relevant to the above clinical areas. This was sufficient to allow an assessment for a proposed review decision. The new evidence identified was inconclusive or unlikely to be sufficient to change or invalidate current guideline recommendations.

2. From initial intelligence gathering, qualitative feedback from other NICE departments, the views expressed by the Guideline Development Group, as well as the high-level RCT search, three clinical questions were developed for focused searches in the following clinical areas:
  - Methods of induction of labour
  - Setting of induction of labour.

Through both high-level RCT search and the focused searches, 88 studies were identified relevant to these clinical areas within the guideline. However, the new evidence identified was unlikely to change or invalidate current guideline recommendations. The majority of this new evidence was in the following areas:

- The use of misoprostol in circumstances other than intrauterine fetal death which is not in line with current UK practice
  - Methods not currently recommended (and broadly consistent with these recommendations).
3. No evidence was identified which directly answered the research recommendations presented in the original guideline.
  4. Several ongoing clinical trials related to the recommendations (publication dates unknown) were identified focusing on the use of vaginal PGE2 compared to other methods of induction (with balloon catheter, misoprostol, or oxytocin).

### **Guideline Development Group and National Collaborating Centre perspective**

5. A questionnaire was distributed to GDG members and the National Collaborating Centre to consult them on the need for an update of the guideline. Five responses were received with respondents highlighting:
  - The current debate in choosing between different methods of administration of vaginal PGE2 (as pessary [Propess] or gel/tablets

[Prostin]). The new evidence was not likely to change the current recommendations which already recommended the use of vaginal PGE<sub>2</sub> with either gel, a tablet or a pessary.

- General uncertainty regarding induction of labour for preterm prelabour rupture of membranes before 34 weeks (current recommendations say that induction should not be carried out before 34 weeks unless there are additional obstetric indications such as infection or fetal compromise). No new evidence was identified in the review to further address this circumstance.
  - Concerns that outpatient induction has been considered solely as the current drive for cost savings in the NHS. The current recommendation has already highlighted that outpatient induction should only be carried out if safety and support procedures are in place, and that the implementation should be audited. No new evidence was identified in the review that would invalidate or change current recommendations.
6. Ongoing research was cited by GDG members including a UK-based open-label feasibility study looking at the feasibility of a specific monitoring device after outpatient induction with vaginal PGE<sub>2</sub> pessary.
7. Two respondents felt that there was variation in current practice in some areas, but uncertain about whether there is sufficient new evidence to warrant an update of the guideline at this time.

### **Implementation and post publication feedback**

8. Post-publication feedback varied and there were no overall themes. There were a number of requests for clarification of the evidence behind recommendations such as repeated inductions after failed attempts and use of membrane sweeping. In addition, some individual queries included:
- Guidance on caring for bereaved parents who experienced intrauterine death.
  - Questions for clarification on dosing.

9. An analysis by the NICE implementation team indicated that the recommendations about providing information were thought to be very important but some voiced concerns about how much time would be allocated to this locally. There were some uncertainties about the current baseline practice of membrane sweeping, and that membrane sweeps were likely to add to the workload of services. Further advice has suggested that over the last few years since publication, membrane sweeping has become more widely used. There were also some concerns about the recommendations on the use of prostaglandins (thought by some to be substantially different than current practice and based on inconclusive evidence).

### **Relationship to other NICE guidance**

10. NICE guidance related to CG70 can be viewed in [Appendix 1](#).

### **Summary of Stakeholder Feedback**

#### **Review proposal put to consultees:**

The guideline should not be updated at this time.

The guideline will be reviewed again according to current processes.

11. In total 10 stakeholders commented on the review proposal recommendation during the 2 week consultation period. Comments can be viewed in [Appendix 2](#).
12. Four stakeholders agreed with the review proposal recommendation that this guideline should not be updated at this time. Five stakeholders disagreed with the review proposal recommendation. One stakeholder felt they did not have substantial comments to make.
13. Stakeholders that disagreed with the review proposal commented that the following areas should be considered in an update of the guideline:

- The use of balloon catheters as a method of induction. However, only 3 non-UK studies were identified in the review and hence the evidence is still insufficient to change current recommendations.
- Specific recommendations for the management of failed inductions. One stakeholder suggested that caesarean should be offered in the first instance as emergency caesarean sections are high risk. However, no new evidence was identified in the review that would be likely to further address the management of failed inductions. Current recommendations state that after a failed induction, the situation should be re-evaluated and the decision on whether to give a caesarean section or offer further induction should be made in accordance with the woman's wishes. In the absence of evidence in this area, it is considered that current recommendations are comprehensive in a way that it incorporates both clinical judgement and the wishes of patients. Further, the current guideline recommends research into '...different management policies for failed induction of labour with vaginal PGE<sub>2</sub>'.
- Emphasis on communicating the risks of medical induction of labour, particularly on amniotic fluid embolism. Clinical advice was sought on the issue and it has suggested that this is a very rare condition. Moreover, current guideline has already recommended that the risks and benefits in different situations and of the proposed methods of induction should be communicated to patients.
- Setting of induction of labour (for example, induction at home) – there was no new evidence likely to change the current recommendations. Current recommendations are made on the use of induction in an outpatient unit (not at home) and states that it should only be carried out if safety and support procedures are in place, and that its implementation should be audited. No new evidence was identified in the review that would invalidate or change current recommendations.

14. During consultation, new areas to consider in an update of the guideline were highlighted including:

- Induction of labour for women with group B Streptococcus - clinical advice has stated that this is a rare condition and it is being considered in the upcoming update to the Intrapartum care guideline.

### **Anti-discrimination and equalities considerations**

15. No evidence was identified to indicate that the guideline scope does not comply with anti-discrimination and equalities legislation. The original scope includes women undergoing induction of labour for prolonged pregnancy, preterm rupture of membranes, prelabour rupture of membranes, presence of fetal growth restriction, previous caesarean section, history of precipitate labour, maternal request, breech presentation, intrauterine fetal death, or suspected macrosomia.

### **Relationship to quality standards**

16. This guideline relates to a quality standard on intrapartum care.

### **Conclusion**

17. The review process identified that while there were areas of uncertainty in clinical practice, there was not sufficient evidence to invalidate or change the current recommendations. Additionally, no additional areas were identified which were not covered in the original guideline scope.

18. The guideline should not be considered for an update at this time.

Fergus Macbeth – Centre Director  
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Centre for Clinical Practice  
04.10.11

## Appendix 1

The following NICE guidance is related to CG70:

<b>Guidance</b>	<b>Review date</b>
CG54: Intrapartum care: management and delivery of care to women in labour (2008)	This is currently being updated expected publication January 2013
CG13: Caesarean section (2004)	2009; this is currently being updated
<b>Related NICE guidance not included in CG70</b>	
CG62: Antenatal care: routine care for the healthy pregnant woman (2008)	April 2011
CG45: Antenatal and postnatal mental health (2007)	July 2011
CG63: Diabetes in pregnancy (2008)	May 2011
CG107: Hypertension in pregnancy: The management of hypertensive disorders during pregnancy (2010)	August 2013
CG110: Pregnancy and complex social factors (2010)	September 2013

## Appendix 2

### NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

#### Induction of labour Guideline Review Consultation Comments Table

30 August - 12 September 2011

Stakeholder	Agree Disagree with propos al to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
RCOG – Royal College of Obstetricians and Gynaecologist s	Agree				Thank you for your comment.
RCPCH - Royal College of Paediatrics and Child Health	Yes	No new evidence was available to update the current guideline.			Thank you for your comment.
Association of Radical Midwives	Agree	Guideline should encourage IOL for prolonged pregnancy be more flexible for women who wish to await events given	ARM	Agree	Thank you for your comments. The recommendations in the



Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
		small absolute risk and be recommended at 42 weeks.			current guideline are not restrictive, giving women the opportunity to go into spontaneous labour or to chose induction if they wish after 41 or 42 weeks gestation.
Association of Radical Midwives		There is need for more investigation into the increased risk of infection when using prostaglandins to induce after pre labour SRM as it is infection that elective induction aims to prevent.			Thank you for your comment. Current guideline does recommend further research into ‘...the relative risks and benefits of delivery versus expectant management in women whose membranes have ruptured spontaneously between 34 and 37 weeks’.
Association of Radical Midwives		We would question the validity of using studies carried out in other countries and settings unless it can be fairly clear that practice is similar in all respects which may affect outcome.			Thank you for your comment. We agree with this comment and have highlighted these concerns in the consultation document.

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
Cook Medical	Disagree.	<p>A 250 patient study was not included in the evidence on double balloon catheters as a method for cervical ripening in the previous guideline. That study was not deliberately excluded either (from either the guideline or the Cochrane systematic review – according to list of excluded studies). The number of women who participated in this study may be large enough for the outcomes to affect the guideline recommendations on double balloon catheters. Results: average increase of 4.6 in the bishop score; C-section rate of 16% (39/250).</p> <p>“Conclusion: 1.The double balloon device induces significant ripening and dilation of the unfavourable cervix.2. Induction of labour was successfully achieved following removal of the Atad Ripener Device. 3. Our caesarean section rate was low compared with rates reported for women with an unfavourable cervix induced by other methods.”</p>			Thank you for your comment. This review for update only considers studies published since the publication of the guideline in 2004. Also, the Atad (1997) study is a case series with no control or comparative treatment and therefore was excluded during the development of the original guideline.

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		<p>Reference: Atad J, Hallak M, Ben-David Y, Auslender R, Abramovici H. Ripening and dilation of the unfavorable cervix for induction of labor by a double balloon device: experience with 250 cases. Br J Obstet Gynaecol. 1997;104: 29-32.</p>			
Cook Medical		<p>Moreover, and although NICE's proposal refers to a study by Solt et al., the abstract was not included. This controlled single blind study provides evidence on an additional 180 women who had either a single or a double balloon catheter induction.</p> <p>The results suggest a difference in outcomes between single and double balloon catheters in nulliparous women, with double balloon catheters being associated with a lower C-section rate (20%) as well as a more favorable effect on cervical ripening and decreased time to delivery.</p>			<p>Thank you for your comment. Abstracts of full-text publications are considered in this review for update process. The abstract by Solt et al has only been published as a poster abstract, not a full-text publication.</p>

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
		The abstract is provided in attachment so that this evidence can be considered in the decision.			
Cook Medical		<p>The American College of Obstetricians and Gynaecologists' guidelines published in 2009 acknowledge that using balloon catheters is an effective method for ripening the cervix and that they are associated with a reduced risk of tachysystole compared to prostaglandins.</p> <p>Reference: Induction of labor. ACOG Practice bulletin no. 107. American College of Obstetricians and Gynecologists. Obstet Gynecol 2009; 114: 386-97</p> <p>There are patients in the NHS in whom the use of drugs for induction of labour may be inappropriate or even contra-indicated and who need an alternative. Additionally, NICE's recommendation on</p>			Thank you for your comment. The GDG agreed that there was limited evidence to recommend balloon catheter for induction of labour during the development of the guideline in 2008. In this particular review, 3 new RCTs were identified on the safety and effectiveness of balloon catheter. However, all 3 new trials are not UK-based. Hence, current evidence on the balloon catheter is still insufficient, particularly trials based in the UK, to change the

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		balloon catheters should be specific to those devices (rather than lumped together with other mechanical methods, which are different in principle and in outcome).			current recommendations.
Cook Medical		Although the evidence on balloon catheters is limited, and that is an obstacle in testing the hypothesis that balloon catheter induction reduces C-section rates compared to drug methods, the evidence does suggest this possibility (particularly for double balloon catheters) and this should not be ignored by a recommendation that bans the use of balloon catheters in the NHS. In the current financial climate – the additional cost of a C-section delivery compared to an assisted delivery cannot be ignored (according to the 2011-12 PbR tariff schedule, this difference in cost can be as large as £1,421).			Thank you for your comment. Please see above responses regarding evidence on balloon catheters. In the absence of robust UK-based RCTs and health economic evaluations, it is considered that there is still insufficient evidence to change the current recommendations.
Department of Health		Department of Health has no substantive comments to make regarding this			Thank you for your comment.

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
		consultation			
RCN	Agree	We agree with proposals not to update this guideline at this time.			Thank you for your comment.
RCN		Table 1 Clinical area 4: Clinical question relates to differential between pain of induced and spontaneous labour. Summary relates to acupuncture.			Thank you for your comment. It is acknowledged that while the study on acupuncture is relevant to pain relief during labour, but agree that it is not relevant to the clinical question. Thank you for bringing this to our attention.
RCN		Table 1 Clinical Area 5: Clinical question relates to Managing complications of induction. Summary relates to failure of induction.			Thank you for your comment. Failed induction was considered a complication of induction of labour in the current guideline.
Birth Trauma Association	No	We strongly disagree. We are getting many cases of multiple attempts at induction (membrane sweeps/chemical/surgical) and these seem to be following a pattern. The	GDG guidance needed on women who do not respond to first attempt at		Thank you for your comment. No evidence was identified during the development of the guideline in 2008 on how

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		<p>woman has a prolonged and traumatic labour followed by an emergency caesarean. The NICE guideline has evaluated the risks of emergency versus planned and it is clear that emergency carries a hugely greater risk. In our experience, backed by evidence from CEMACH, the caesareans carrying the highest risk are the ones carried out at the highest level of emergency. Thus a scheduled caesarean in labour might prove to provide better outcomes following failure at first attempt at induction. At very least a research recommendation to look at this issue.</p>	<p>induction. (unfavourable cervix)</p>		<p>to manage failed induction. No additional new evidence was identified either in this particular review. The current guideline recommends that after a failed induction, the situation should be re-evaluated and the decision on whether to give a caesarean section or offer further induction should be made in accordance with the woman's wishes. In the absence of evidence in this area, it is considered that current recommendations are comprehensive in a way that it incorporated both clinical judgement and wishes of patients. Further, the current guideline does recommend</p>

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					research into ‘...different management policies for failed induction of labour with vaginal PGE <sub>2</sub> ’.
Birth Trauma Association		<p>We strongly disagree with the conclusion that women with prolonged pregnancy and macrosomia should not be offered early delivery by caesarean.</p> <p>Large late babies cause significant harm to women and seem to result in poor outcomes for many babies. This is avoidable injury. The US study below is suggesting c/s at 39 weeks. We are suggesting that the NICE look at this issue for post term. It is also well known that many obstetricians would not choose to deliver a very large baby vaginally.</p> <p>Again, if there can be no proposal at present, this issue needs to be an urgent research recommendation.</p> <p>Elective cesarean section to prevent anal</p>	We would like to see consideration of offering women with suspected macrosomia the opportunity for elective caesarean if their baby is post term.		<p>Thank you for your comments. The current guideline only looks at whether or not women in this situation are suitable for induction.</p> <p>Recommendations about the use of a caesarean section for these women are beyond the scope of this guideline on induction of labour. Recent consultation on the Caesarean section guideline update highlighted that this is something that will be taken into account when the Caesarean section guideline will next be</p>



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		<p>incontinence and brachial plexus injuries associated with macrosomia—a decision analysis</p> <p><b>Patrick J. Culligan<sup>1</sup></b>✉, <b>John A. Myers<sup>2</sup></b>,  <b>Roger P. Goldberg<sup>3</sup></b>, <b>Linda Blackwell<sup>1</sup></b>,  <b>Stephan F. Gohmann<sup>4</sup></b> and <b>Troy D. Abell<sup>5</sup></b></p> <p>( Department of Obstetrics, Gynecology  1 and Women’s Health, Division of  ) Urogynecology and Reconstructive Pelvic  Surgery, University of Louisville Health  Sciences Center, 315 East Broadway M-  18, Louisville, KY 40202, USA</p> <p>( School of Public Health and Health  2 Informatics, Biostatistics—Decision  ) Science Program, University of Louisville  Health Sciences Center, Louisville, KY,  USA</p> <p>( Evanston Continence Center,  3 Northwestern University Medical School,  ) Evanston, IL, USA</p> <p>( Department of Economics, University of  4 Louisville College of Business and Public  ) Administration, Louisville, KY, USA</p> <p>(5) Abell Research Consulting, Ouray, CO,</p>			<p>considered for update. Culligan (2004) was not about induction of labour so would not have been picked up in the literature search.</p>

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		<p>USA</p> <p><b>Received:</b> 15 April 2004 <b>Accepted:</b> 16 June 2004 <b>Published online:</b> 29 July 2004</p> <p><b>Abstract</b> Our aim was to determine the cost-effectiveness of a policy of elective C-section for macrosomic infants to prevent maternal anal incontinence, urinary incontinence, and newborn brachial plexus injuries. We used a decision analytic model to compare the standard of care with a policy whereby all primigravid patients in the United States would undergo an ultrasound at 39 weeks gestation, followed by an elective C-section for any fetus estimated at <math>\geq</math> 4500 g. The following clinical consequences were considered crucial to the analysis: brachial plexus injury to the newborn; maternal anal and urinary incontinence; emergency hysterectomy; hemorrhage requiring blood transfusion; and maternal mortality. Our outcome</p>			

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		<p>measures included (1) number of brachial plexus injuries or cases of incontinence averted, (2) incremental monetary cost per 100,000 deliveries, (3) expected quality of life of the mother and her child, and (4) “quality-adjusted life years” (QALY) associated with the two policies. For every 100,000 deliveries, the policy of elective C-section resulted in 16.6 fewer permanent brachial plexus injuries, 185.7 fewer cases of anal incontinence, and cost savings of \$3,211,000. Therefore, this policy would prevent one case of anal incontinence for every 539 elective C-sections performed. The expected quality of life associated with the elective C-section policy was also greater (quality of life score 0.923 vs 0.917 on a scale from 0.0 to 1.0 and 53.6 QALY vs 53.2). A policy whereby primigravid patients in the United States have a 39 week ultrasound-estimated fetal weight followed by C-section for any fetuses <math>\geq</math> 4500 g appears</p>			

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		<p>cost effective. However, the monetary costs in our analysis were sensitive to the <i>probability</i> estimates of urinary incontinence following C-section and vaginal delivery and the <i>cost</i> estimates for urinary incontinence, vaginal delivery, and C-section.</p> <p><a href="#">Obstet Gynecol.</a> 2006 Aug;108(2):286-94.</p> <p>Maternal morbidity associated with cesarean delivery without labor compared with induction of labor at term.</p> <p><a href="#">Allen VM</a>, <a href="#">O'Connell CM</a>, <a href="#">Baskett TF</a>. Department of Obstetrics and Gynaecology, and Perinatal Epidemiology Research Unit, Dalhousie University, Halifax, Nova Scotia, Canada. victoria.allen@dal.ca OBJECTIVE: To estimate the</p>			

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		<p>maternal morbidity associated with cesarean deliveries performed at term without labor compared with morbidity associated with induction of labor at term. METHODS: A 15-year population-based cohort study (1988-2002) using the Nova Scotia Atlee Perinatal Database compared maternal outcomes in nulliparous women delivering by cesarean delivery without labor and nulliparous women at term undergoing induction of labor for planned vaginal delivery with singleton, cephalic presentation. RESULTS: A total of 5,779 pregnancies satisfied inclusion and exclusion criteria, 879 of which were cesarean deliveries without labor. There were no maternal deaths. There was no difference in wound infection, puerperal febrile morbidity, blood transfusion or intraoperative trauma. After controlling for potential confounders, women undergoing cesarean delivery without labor were less likely to have complications of</p>			

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		<p>early postpartum hemorrhage (relative risk 0.61, 95% confidence interval 0.42-0.88, number needed to treat 32) and composite maternal morbidity (relative risk 0.71, 95% confidence interval 0.52-0.95, number needed to treat 34) compared with women undergoing induction of labor. Subgroup analyses of maternal outcomes after induction of labor in women by method of delivery were also performed and demonstrated additional risks of traumatic morbidity after induction of labor. The highest morbidity was found in the assisted vaginal delivery and cesarean delivery in labor groups. CONCLUSION: Early postpartum hemorrhage and composite maternal morbidity were decreased in cesarean delivery without labor compared with induction of labor. Hemorrhagic and traumatic morbidities with labor induction are increased after assisted vaginal delivery and cesarean delivery in labor compared with cesarean</p>			

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		delivery without labor. PMID: 16880297 [PubMed - indexed for MEDLINE]			
Birth Trauma Association		Amniotic fluid embolism. We quote the Kramer study: “Medical induction of labour seems to increase the risk of amniotic-fluid embolism. Although the absolute excess risk is low, women and physicians should be aware of this risk when making decisions about elective labour induction.” This is a serious adverse outcome and is not being communicated to women.	Amniotic fluid embolism – clarification of advice to women and surveillance		Thank you for your comment. Clinical advice has suggested that this is a very rare complication and a theoretical risk in IOL where the amniotic membranes are intact.
Birth Trauma Association		Research recommendation comparing the offering of elective caesarean versus induction to women proposing small families in certain circumstances. (Most women will not want this but there is some evidence that this may be preferred by women with some risk factors and result in better outcomes– previous traumatic birth, abnormal presentation etc)	Research recommendatio n for offering c/s post term according to parity and planned family size and obstetric indication		Thank you for your comment. Of the circumstances listed by the consultee, the guideline only addressed induction for prolonged pregnancy and maternal request for induction. The evidence for these circumstances included only a comparison of induction of

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
		<p>Maternal morbidity associated with cesarean delivery without labor compared with induction of labor at term.</p> <p><a href="#">Allen VM</a>, <a href="#">O'Connell CM</a>, <a href="#">Baskett TF</a>. Department of Obstetrics and Gynaecology, and Perinatal Epidemiology Research Unit, Dalhousie University, Halifax, Nova Scotia, Canada. victoria.allen@dal.ca</p> <p>OBJECTIVE: To estimate the maternal morbidity associated with cesarean deliveries performed at term without labor compared with morbidity associated with induction of labor at term. METHODS: A 15-year population-based cohort study (1988-2002) using the Nova Scotia Atlee Perinatal Database compared maternal outcomes in nulliparous women delivering by cesarean delivery without labor and nulliparous women at term undergoing induction of labor for planned vaginal delivery with singleton, cephalic presentation.</p>			<p>labour with expectant management, not with elective caesarean and induction was only recommended as an option for prolonged pregnancy.</p> <p>The recently updated Caesarean section guideline addresses the issue of caesarean section for breech presentation or after a maternal request for caesarean section when there is no apparent clinical reason.</p> <p>The Caesarean section guideline recommends that healthcare professionals should address the women's individual circumstances, concerns, priorities and plans for future pregnancies in</p>



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		<p>RESULTS: A total of 5,779 pregnancies satisfied inclusion and exclusion criteria, 879 of which were cesarean deliveries without labor. There were no maternal deaths. There was no difference in wound infection, puerperal febrile morbidity, blood transfusion or intraoperative trauma. After controlling for potential confounders, women undergoing cesarean delivery without labor were less likely to have complications of early postpartum hemorrhage (relative risk 0.61, 95% confidence interval 0.42-0.88, number needed to treat 32) and composite maternal morbidity (relative risk 0.71, 95% confidence interval 0.52-0.95, number needed to treat 34) compared with women undergoing induction of labor. Subgroup analyses of maternal outcomes after induction of labor in women by method of delivery were also performed and demonstrated additional risks of traumatic morbidity after induction of labor. The highest</p>			<p>addition to acknowledging the evidence in the evidence tables.</p> <p>Allen (2006) was not included in the current guideline as the guideline focused on specific indications for induction. This paper presented all indications for induction together with no subgroup analysis.</p>

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		<p>morbidity was found in the assisted vaginal delivery and cesarean delivery in labor groups. CONCLUSION: Early postpartum hemorrhage and composite maternal morbidity were decreased in cesarean delivery without labor compared with induction of labor. Hemorrhagic and traumatic morbidities with labor induction are increased after assisted vaginal delivery and cesarean delivery in labor compared with cesarean delivery without labor. PMID: 16880297 [PubMed - indexed for MEDLINE]</p>			
Birth Trauma Association		<p>There is a need to link antepartum care of women with prolonged pregnancy with still birth. The risks of post maturity are not being conveyed to women and this is increasing the still birth rate. Women with post term babies are not always being seen regularly enough or by staff of sufficient expertise to monitor problems.</p>	<p>Still birth surveillance of post mature babies and quality of care they receive is not being monitored. There needs to be a research recommendatio</p>		<p>Thank you for your comment. This is beyond the scope of a guideline on induction of labour and would fall within the scope of the Intrapartum care guideline.</p>

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			n around this to reduce stillbirths.		
Obstetric Team, including trainees from overseas, Glan Clwyd Hospital.	Disagree	We feel that further guidance is needed to clarify the role of oxytocin in induction of labour. The current guidance seems bias in favour of prostaglandins and is very anti- oxytocin, which is cheaper and used in many obstetric settings successfully outside the UK.			Thank you for your comment. The evidence considered in the original guideline showed that intravenous oxytocin was less effective at achieving vaginal birth (with more caesarean births) and resulted in a lower Bishop score than vaginal PGE <sub>2</sub> . This review has not found evidence to contradict this. The Intrapartum care guideline gives recommendations on the use of oxytocin in labour augmentation.
Obstetric Team, including trainees from		The process seems to suggesting that you are reviewing abstracts only. We feel that reviewing abstracts only is a potential weakness, especially when a comment is			Thank you for your comment. This is the current process which is being evaluated at the

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overseas, Glan Clwyd Hospital.		being made that there is some new evidence, but not enough to change current recommendations.			moment. The evaluation of this process will be out for public consultation in January as part of the Guidelines Manual update. Please feel free to make comments then.
Obstetric Team, including trainees from overseas, Glan Clwyd Hospital.		The evidence surrounding physical methods such as cervical balloons should be reviewed more closely, because 'failed' induction is a significant problem in some obstetric units.			Thank you for your comments. It is not clear which evidence is being referred to in this comment. Please see above responses regarding evidence on balloon catheters and failed inductions. In the absence of robust UK- based RCTs and health economic evaluations, it is considered that there is still insufficient evidence to change the current recommendations with respect to both balloon

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
					catheters and failed inductions.
Obstetric Team, including trainees from overseas, Glan Clwyd Hospital.			The safety and efficacy of induction of labour at home needs clarifying as this appears to be creeping in in an effort to save money in some units.		Thank you for your comment. There were no studies identified in the current guideline or in this particular review relating to induction at home. Further, there were no new studies identified about outpatient induction which would be likely to change the current recommendations (which recommend outpatient induction only when safety and support procedures are in place).
Group B Strep Support	Disagree	The issue of what should happen for women known to carry group B Strep in the current pregnancy when IOL is being considered should be addressed. It should be made clear that simply carrying GBS is not a reason to induce labour			Thank you for your comment. Clinical advice sought has stated that the incidence of group B Streptococcus is a rare condition. It is being considered in the

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					upcoming update for Intrapartum care where it was thought by the clinical adviser to be of more relevance.
Group B Strep Support		<p>At GBSS, we're regularly asked by pregnant women whether induction is recommended when intravenous antibiotics are indicated against EOGBS infection but where the Mum is – usually because her labour is expected to be very fast or because she lives a long way from the maternity hospital she's planning to deliver at – unlikely to receive 2+ of 4+ hours of these before delivery.</p> <p>This issue should be addressed in the IoL document.</p>			Thank you for your comment. Clinical advice sought has stated that the incidence of group B Streptococcus is a rare condition. It is being considered in the upcoming update for Intrapartum care where it was thought by the clinical adviser to be of more relevance.
Group B Strep Support		It should be mentioned that there is uncertainty about whether membrane stripping is appropriate in women known to carry group B Streptococcus (GBS).			Thank you for your comment. Clinical advice sought has stated that the incidence of group B Streptococcus is a rare condition. It is being

Stakeholder	Agree Disagree with proposal to not update?	Comments Please insert each new comment in a new row.	Comments on areas excluded from original scope	Comments on equality issues	Responses
					considered in the upcoming update for Intrapartum care where it was thought by the clinical adviser to be of more relevance.
The Royal College of Midwives	Disagree	The RCM consider this subject merits a more in depth literature review, and consequent update as this is such a significant intervention, practitioners need to be very up to date with all the evidence.			Thank you for your comments. However, we are not clear which subject or particular intervention is referred to that requires a more in depth literature review.