

Twin and triplet pregnancy

Consultation on draft guideline - Stakeholder comments table 22/03/19 to 09/05/19

Stakeholder	Document	Page No	Line No	Comments	Developer's response
Birmingham City University, Elizabeth Bryan Multiple Births Centre	Guideline	General	General	Nil comments	Thank you for your comment.
British Dietetic Association (BDA)	Guideline	General	General	<p>Q1 - Which areas will have the biggest impact on practice and be challenging to implement? Please say for whom and why.</p> <p>Early Recovery Programs (ERP) will have the biggest impact on practice as only a few ERP centres for C-sections exists.</p> <p>Nutritional screening will be the easiest to implement as currently healthcare staff are lacking a standard screening tool. If a tool is integrated into standard screenings it would give a more focussed approach which reduces duplicate areas and save time.</p>	Thank you for your comment. The committee agrees that caesarean sections are more common in multiple pregnancy compared to singletons. However, the Early Recovery Programme is a model that fits more closely into the remit of postnatal care. The same applies to nutritional screening. These were not topics covered by the scope of this guideline. The postnatal care up to 8 weeks after birth NICE guideline is in the process of being updated and twins and triplets are not excluded from this. However, this update is still in development. You can follow the progress of the postnatal care up to 8 weeks after birth guideline update at the provided hyperlink. The committee was therefore unable to comment on this.
British Dietetic Association (BDA)	Guideline	General	General	<p>Q2 - Would implementation of any of the draft recommendations have significant cost implications?</p> <p>Nutritional screening will require initial funding, but costs are recovered by preventing nutrition related poor outcomes in mothers and infants.</p> <p>Early Recovery Programs (ERP) will require initial investment but costs are recovered from reducing adverse events, lower length of stay and better infant outcomes due to increase in breastfeeding rates</p>	Thank you for your comment. The Early Recovery Programme is a model that fits more closely into the remit of postnatal care. The same applies to nutritional screening. These were not topics covered by the scope of this guideline. The postnatal care up to 8 weeks after birth NICE guideline is in the process of being updated and twins and triplets are not excluded from this. However, this update is still in development. You can follow the progress of the postnatal care up to 8 weeks after birth guideline update at the provided hyperlink.

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British Dietetic Association (BDA)	Guideline	General	General	<p>Q3 - What would help users overcome any challenges? (For example, existing practical resources or national initiatives, or examples of good practice.)</p> <p>There are existing practical resources/ national initiatives to guide good practice like King's-EROS working party and systemic review of ERP in C-sections from Sheffield hospital. (see references) Due to the strong nutritional component of ERP, dietitians should form part of the core leadership team to help plan, procure and implement this component successfully.</p>	<p>Thank you for your comment. The committee agrees that such a 'good practice' guide can be a useful resource. However, the Early Recovery Programme is a model that fits more closely into the remit of postnatal care and it was not part of the scope of this update. The postnatal care up to 8 weeks after birth NICE guideline is in the process of being updated and twins and triplets are not excluded from this. However, this update is still in development. You can follow the progress of the postnatal care up to 8 weeks after birth guideline update at the provided hyperlink.</p>
British Dietetic Association (BDA)	Guideline	8	General	<p>1.2: General Care</p> <p>There is evidence that multiple pregnancies are at higher risk for nutritional deficiencies and carry a higher incidence of nutrition-related problems.¹⁻³ The impact of dietary factors and pregnancy outcomes are well documented, advocating for nutrition adequacy⁴ and optimal maternal weight-gain⁵⁻⁸ to prevent nutritional related adverse outcomes.^{1,9-20}</p> <p>Yet nutritional screening in this population is lacking in the UK.^{1,21,22} Furthermore, this risk can be accentuated with the rise of popularisation of restrictive diets such as veganism.²³ The BDA is concerned that the absence of nutrition screening and follow-up nutrition pathway may result in poorer outcomes, lack of resources and increased healthcare</p>	<p>Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.</p>

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				<p>costs that could be cost-effectively prevented though screening and intervention during the antenatal period.</p> <p>BDA would like to recommend the use of Langstroth et al 2011, screening tool for primary care staff and in perinatal electronic medical record to highlight this risk for primary care intervention and to enable population monitoring.¹ This will enable data capturing of nutritional factors to better inform interventions such as Better Births²⁴ and Child Health 2030²⁵.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Langstroth, C., Wright, C. & Parkington, T. Implementation and evaluation of a nutritional screening tool. <i>Br. J. Midwifery</i> 19, 15–21 (2011). 2. Dunlevy, F. Nutritional Assessment During Pregnancy. <i>Top. Clin. Nutr.</i> 30, 71 (2015). 3. National Collaborating Centre for Women's and Children's Health (Great Britain) & National Institute for Health and Clinical Excellence (Great Britain). <i>Antenatal care: routine care for the healthy pregnant woman</i>. (RCOG Press, 2008). 4. Kominiarek, M. A. & Rajan, P. Nutrition Recommendations in Pregnancy and Lactation. <i>Med. Clin. North Am.</i> 100, 1199–1215 (2016). 5. Institute of Medicine (US) and National Research Council (US) Committee to Reexamine IOM Pregnancy Weight Guidelines. <i>Weight Gain During</i> 	

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				<p><i>Pregnancy: Reexamining the Guidelines.</i> (National Academies Press (US), 2009).</p> <p>6. Weight Gain During Pregnancy - ACOG. <i>Weight Gain During Pregnancy Number 548, January 2013(Reaffirmed 2018)</i> Available at: https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Weight-Gain-During-Pregnancy?IsMobileSet=false. (Accessed: 29th April 2019)</p> <p>7. Weight management before, during and after pregnancy Guidance and guidelines NICE. Available at: https://www.nice.org.uk/guidance/ph27/chapter/2-public-health-need-and-practice. (Accessed: 4th July 2018)</p> <p>8. Multiple pregnancy: antenatal care for twin and triplet pregnancies Guidance and guidelines NICE. Available at: https://www.nice.org.uk/guidance/cg129. (Accessed: 4th July 2018)</p> <p>9. Godfrey, K. M., Barker, D. J., Robinson, S. & Osmond, C. Maternal birthweight and diet in pregnancy in relation to the infant's thinness at birth. <i>Br. J. Obstet. Gynaecol.</i> 104, 663–667 (1997).</p> <p>10. Mathews, F., Yudkin, P. & Neil, A. Influence of maternal nutrition on outcome of pregnancy: prospective cohort study. <i>BMJ</i> 319, 339–343 (1999).</p> <p>11. Mathews, F., Youngman, L. & Neil, A. Maternal circulating nutrient concentrations in</p>	

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				<p>pregnancy: implications for birth and placental weights of term infants. <i>Am. J. Clin. Nutr.</i> 79, 103–110 (2004).</p> <p>12. Susser, M. Maternal weight gain, infant birth weight, and diet: causal sequences. <i>Am. J. Clin. Nutr.</i> 53, 1384–1396 (1991).</p> <p>13. Neufeld, L. M., Haas, J. D., Grajeda, R. & Martorell, R. Changes in maternal weight from the first to second trimester of pregnancy are associated with fetal growth and infant length at birth. <i>Am. J. Clin. Nutr.</i> 79, 646–652 (2004).</p> <p>14. Lumley, J., Watson, L., Watson, M. & Bower, C. Periconceptional supplementation with folate and/or multivitamins for preventing neural tube defects. <i>Cochrane Database Syst. Rev.</i> CD001056 (2001). doi:10.1002/14651858.CD001056</p> <p>15. Hofmeyr, G. J., Lawrie, T. A., Atallah, Á. N. & Torloni, M. R. Calcium supplementation during pregnancy for preventing hypertensive disorders and related problems. <i>Cochrane Database Syst. Rev.</i> 10, CD001059 (2018).</p> <p>16. De-Regil, L. M., Fernández-Gaxiola, A. C., Dowswell, T. & Peña-Rosas, J. P. Effects and safety of periconceptional folate supplementation for preventing birth defects. <i>Cochrane Database Syst. Rev.</i> CD007950 (2010). doi:10.1002/14651858.CD007950.pub2</p> <p>17. De-Regil, L. M., Palacios, C., Lombardo, L. K. & Peña-Rosas, J. P. Vitamin D supplementation for women during pregnancy. <i>Cochrane Database Syst.</i></p>	

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				<p>Rev. CD008873 (2016). doi:10.1002/14651858.CD008873.pub3</p> <p>18. Nutrition During Pregnancy - ACOG. Available at: https://www.acog.org/Patients/FAQs/Nutrition-During-Pregnancy. (Accessed: 26th June 2018)</p> <p>19. Multiple Pregnancy - ACOG. Available at: https://www.acog.org/Patients/FAQs/Multiple-Pregnancy?IsMobileSet=false#gain. (Accessed: 29th April 2019)</p> <p>20. Keats, E. C., Haider, B. A., Tam, E. & Bhutta, Z. A. Multiple-micronutrient supplementation for women during pregnancy. <i>Cochrane Database Syst. Rev.</i> 3, CD004905 (2019).</p> <p>21. Rogers, I. & Emmett, P. Diet during pregnancy in a population of pregnant women in South West England. ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. <i>Eur. J. Clin. Nutr.</i> 52, 246–250 (1998).</p> <p>22. Mouratidou, T., Ford, F., Proutzou, F. & Fraser, R. Dietary assessment of a population of pregnant women in Sheffield, UK. <i>Br. J. Nutr.</i> 96, 929–935 (2006).</p> <p>23. Statistics. <i>The Vegan Society</i> Available at: https://www.vegansociety.com/news/media/statistics. (Accessed: 29th April 2019)</p> <p>24. NHS England » Better Births: Improving outcomes of maternity services in England – A Five Year Forward View for maternity care. Available at: https://www.england.nhs.uk/publication/better-births-</p>	

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				<p>improving-outcomes-of-maternity-services-in-england-a-five-year-forward-view-for-maternity-care/.</p> <p>(Accessed: 29th April 2019)</p> <p>25. Boerma, T. <i>et al.</i> Countdown to 2030: tracking progress towards universal coverage for reproductive, maternal, newborn, and child health. <i>The Lancet</i> 391, 1538–1548 (2018).</p>	
British Dietetic Association (BDA)	Guideline	19 - 23	General	<p>1.10: Mode of birth</p> <p>There is evidence that multiple pregnancy carry's a higher incidence of planned C-sections. This population can benefit from entering an Early Recovery Programs (ERP) that improve C-section outcomes and reduces costs of surgery. ERP's offer safe, high-quality patient pathways and should become golden standard for all women undergoing C-sections. The Enhanced Recovery pathway¹ offered benefit to both patients² and the NHS through cost savings from: reduced nursing workload³, reduced complications^{1,4} and decreased the length of stay⁴.</p> <p>Maternal benefits included: improved mothers birthing experience, more family centred, less stressful, better bonding, better breastfeeding success rates and improved maternal confidence to care for infant.²</p> <p>Benefits to the infants included promotion of skin-to-skin, increased rates of establishing breastmilk supply and quicker to establishment breastfeeding resulting in quicker discharge.²</p>	<p>Thank you for your comment. The committee agrees that caesarean sections are more common in multiple pregnancy compared to singletons. However, the Early Recovery Programme is a model that fits more closely into the remit of postnatal care and it was not part of the scope of this update. The postnatal care up to 8 weeks after birth NICE guideline is in the process of being updated and twins and triplets are not excluded from this. However, this update is still in development. You can follow the progress of the postnatal care up to 8 weeks after birth guideline update at the provided hyperlink.</p>

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				<p>Due to the higher risk for preterm birth in multiple pregnancies, C-sections with ERP can support needed post-natal interventions for lactation and infant care. These programs should as a minimum be available in maternity units associated with a level III neonatal unit. Due to the strong nutritional component of ERP, dietitians should form part of the core leadership team to lead further expansion of ERP.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Enhanced Recovery in Gynaecology (Scientific Impact Paper No. 36). <i>Royal College of Obstetricians & Gynaecologists</i> Available at: https://www.rcog.org.uk/en/guidelines-research-services/guidelines/sip36/. (Accessed: 27th September 2018) 2. Laronche, A., Popescu, L. & Benhamou, D. An enhanced recovery programme after caesarean delivery increases maternal satisfaction and improves maternal-neonatal bonding: A case control study. <i>Eur. J. Obstet. Gynecol. Reprod. Biol.</i> 210, 212–216 (2017). 3. Hübner, M. <i>et al.</i> The impact of an enhanced recovery pathway on nursing workload: A retrospective cohort study. <i>Int. J. Surg.</i> 24, 45–50 (2015). 4. Ljungqvist, O., Scott, M. & Fearon, K. C. Enhanced Recovery After Surgery: A Review. <i>JAMA Surg.</i> 152, 292–298 (2017). 	

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British Maternal & Fetal Medicine Society (BMFMS)	Guideline	11	16	<p>Screening for Chromosomal Abnormalities</p> <p>We agree with the rationale behind committee recommendations to signpost to UK National Screening Committee. The link (from 2016) alludes only to introduction of NIPT. A further updated resource used by most units offering screening is NHS Fetal Anomaly Screening Programme Down's syndrome, Edwards' syndrome and Patau's syndrome screening Handbook for Laboratories Valid from August 2018.</p> <p>Page 20 of this document states "Please refer to NICE for guidance on screening for Down's syndrome, Edwards' syndrome and Patau's syndrome in higher multiple pregnancies (triplets and more)". It would be worthwhile liaising and clarifying with UKNSC and FASP to avoid any confusing messages around this very important aspect of screening.</p>	<p>Thank you for your comment.</p> <p>We have liaised with UKNSC and FASP as suggested. Based on these discussions and in collaboration with the committee the guideline was revised to cross refer to the NHS fetal anomaly screening programme (FASP) for women with twin pregnancy but recommendations for women with triplet pregnancy were reinstated from the previous guideline and amended where necessary. A new recommendation was added to account for differences in the screening between trichorionic triplet pregnancy and dichorionic / monochorionic triplet pregnancy (see recommendations 1.4.3 to 1.4.8)</p>
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	12	14	<p>1.4.8 - this risk is further increased if they have had a spontaneous preterm birth in a previous pregnancy</p> <p>This statement should also include "any other risk for preterm labour" (eg – cervical procedures like loop cone biopsy or previous fully dilated caesarean sections)</p>	<p>Thank you for your comment. The wording in the guideline has been changed as follows: "this risk is further increased if they have other risk factors, such as a spontaneous preterm birth in a previous pregnancy".</p> <p>The Zhang 2019 paper was identified in the searches but was not included as evidence as this only refers to singleton pregnancies.</p>

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				Mode of delivery and preterm birth in subsequent births: A systematic review and meta-analysis Zhang Y, Zhou J, Ma Y, Liu L, Xia Q, et al. (2019) Mode of delivery and preterm birth in subsequent births: A systematic review and meta-analysis. PLOS ONE 14(3): e0213784.	
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	12	16	<p>1.4.9 Do not use fetal fibronectin testing alone to predict the risk of spontaneous preterm birth in twin and triplet pregnancy</p> <p>We note the rationale behind the committee recommendation to not use cervical length (with or without fibronectin) in women with multiples in threatened preterm labour (Pg 59). However, amongst the accepted investigation modalities for prediction of preterm labour, quantitative fetal fibronectin is equally valuable in twin pregnancies as in singletons. A higher risk prediction may aid suitable in utero transfers or expedite follow-up and may be an indication (in symptomatic women) for targeted steroids.</p>	Thank you for your comment: The committee retained the existing 2011 recommendation that fetal fibronectin testing should not be used on its own to predict the risk of spontaneous preterm birth because there is still no convincing evidence suggesting it is an accurate screening test. In addition, it is uncertain whether there is an effective intervention. However, the committee was also aware that new evidence would be emerging about the use of vaginal progesterone in subgroups of women that could change their conclusions about its effectiveness. This uncertainty led to the committee's decision to retain the existing recommendation that fetal fibronectin should not be used to predict the risk of spontaneous preterm birth.
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	17 17	1 5	<p>1.4.31 abnormal ductus venosus doppler.</p> <p>The recommendations are made around abnormal umbilical artery Doppler as screening for FETS and sFGR. We also agree with the committee's rationale around association of TAPS with abnormal fetal Doppler (including Ductus Venosus). However, it would be worthwhile to clarify the indications for ductus venosus Doppler. It is assumed that this would be</p>	Thank you for your comment. We have deleted 'abnormal ductus venosus doppler' from this recommendation. The committee agreed that this would remove this confusion.

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				performed at the tertiary fetal medicine unit, but the statement “and seek management advice immediately from a tertiary level fetal medicine specialist” implies that Ductus Venosus Doppler should / would be done in a referring unit.	
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	17	3	<p>1.4.31 “perform ultrasound MCA-PSV measurements to help detect advanced stage TAPS and seek management advice immediately from a tertiary level fetal medicine specialist”</p> <p>Please clarify the diagnostic criteria for TAPS – ie: a combination MCA PSV above 1.5MoM / 95th centile and MCA PSV below 5th centile OR increasing discordance in MCA Doppler (where screening for TAPS is being done in the high risk group as per 1.4.31?)</p>	Thank you for your comment. The committee discussed and decided not to specify diagnostic criteria because they wanted to emphasise the importance of referral to a tertiary level fetal medicine centre where decisions can be made about assessment and management on a case by case basis. These reasons have been added to the related ‘rationale and impact’ section of the guideline.
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	17	9	<p>1.5.2 Do not offer the following interventions (alone or in combination) routinely 9 to prevent spontaneous preterm birth in women with a twin or triplet 10 pregnancy...</p> <p>We agree that interventions should not be routinely offered to prevent spontaneous preterm birth in women with multiples. However, in women with multiples at high risk of spontaneous preterm birth (including those with additional risk factor for preterm birth), interventions may still be valuable (in light of current equivocal evidence) and we feel that multiple</p>	Thank you for your comment. As explained in the rationale and impact section in the guideline the committee retained the existing 2011 recommendation that arabin pessary, bed rest, cervical cerclage and oral tocolytics should not be used routinely to prevent spontaneous preterm birth. This was because the evidence of 2 systematic reviews (1 for the previous and 1 for the current version of the guideline) did not provide sufficient evidence for their effectiveness. As a consequence we were unable to provide a different

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				pregnancy should not be a contraindication in offering interventions in a high-risk subset in this group.	recommendations for subgroups of women with multiple high risks
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	17	18	<p>1.5.3 Inform women with a twin or triplet pregnancy of their increased risk of preterm birth (see recommendation 1.4.8) and about the benefits of targeted corticosteroids. [2011]</p> <p>Given that there is significant ambiguity in the practice of administration of steroids in women with multiples at high risk of preterm labour, we feel that this statement should be substantiated with clinical situations that would warrant “targeted steroids”</p> <p><i>We note that this is a section not reviewed since 2011 guideline, but this is an important area that we feel would benefit from clarification.</i></p>	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	18	1	<p>1.6 Maternal Complications</p> <p>We feel that the additional risk of maternal complications – including risk of gestational diabetes (GDM), obstetric cholestasis, venous thromboembolism (VTE), and maternal anaemia should also be covered here.</p> <p>In addition, it should be stressed that multiple pregnancy is a counted as a risk factor in the antenatal risk assessment for VTE as this may drive commencing low molecular weight heparin in those with a high VTE score (Table 1. Risk factors for</p>	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.

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				venous thromboembolism in pregnancy and the puerperium RCOG Green Top Guideline 37a) <i>We note that this is a section not reviewed since 2011 guideline, but this is an important area that we feel would benefit from clarification.</i>	
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	21	6	1.9.10“at 36 weeks for women with an uncomplicated monochorionic diamniotic twin pregnancy” In light of new evidence of harm with antenatal corticosteroids, and a subsequent drive and recommendation to avoid antenatal corticosteroids beyond 34+6 weeks gestation, we feel this should be also applicable for uncomplicated twin and triplet pregnancies delivering beyond 34+6 weeks gestation.	Thank you for your comment. The wording of the recommendation has been changed to: "Offer planned birth as follows, after a course of antenatal steroids has been considered (see the section on maternal corticosteroids of the NICE guideline on preterm labour and birth)".
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	25	21	1.11.13 “perform a bedside ultrasound scan to find and confirm both fetal heart rates” In light of various medicolegal cases around competence of intrapartum scanning, in particular, around multiples, we feel the statement should clarify that this should be done by someone competent in scanning (and / or has an understanding of differentiating presentation and lie in multiple pregnancy)	Thank you for your comment. The committee agreed and a bullet point was added to wording in recommendation 1.11.13 as follows: “involve a senior obstetrician and senior midwife”.
British Maternal & Fetal Medicine Society (BMFMS)	Guideline	27	10	1.11.21 After the birth of both babies, consider double clamping the cord to allow 10 umbilical cord blood gases to be sample	Thank you for your comment. Recommendation 1.11.21 refers to cord clamping in the context of sampling postnatal blood gases. The type of clamping and how this is carried out was not part of this

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				Please clarify about the recommendation for delayed cord clamping in twins.	particular review topic's protocol. The committee was therefore unable to comment.
Multiple Births Foundation	Guideline	General	General	We have reviewed the documents and have no further comment at this stage	Thank you for your comment.
Royal College of Midwives	Guideline	General	General	The 2019 revision is very welcomed and particularly in regard to the substantial level of detail regarding increased monitoring for those pregnancies at increased risk. However, standards regarding provision of information including antenatal and postnatal classes are not included. The need for mental health assessment is briefly alluded to; it would be useful if this was further extended as there is substantial evidence regarding poorer mental health outcomes.	Thank you for your comment. The committee agrees that woman-centred care is very important and information provision is a big part in this guideline update (see for example section 1.8 on 'planning birth' and the related rationale and impact section). The guideline also cross-references the antenatal care for uncomplicated pregnancies NICE guideline to address general information and support. Postnatal care was not in the scope of the update and therefore no direct information has been included in the guideline. NICE is currently updating the 'antenatal care for uncomplicated pregnancies' and ' postnatal care up to 8 weeks after birth ' guidelines and women with twin and triplet pregnancies are not excluded from those. The postnatal care up to 8 weeks after birth guideline update covers topics related to postnatal maternal support needs, including mental health. However, the updates are in development. You can follow the progress of the antenatal care for uncomplicated pregnancies and postnatal care up to 8 weeks after birth guideline updates using the provided hyperlinks.
Royal College of Midwives	Guideline	General	General	RCM is concerned about directive language used in this guideline, particularly in recommendations using "Offer/Do not offer" in regards to intervention such as	Thank you for your comment. The committee agreed that information provision and discussions with women are a critical part of planning birth as

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				<p>epidurals and active management of the third stage despite limited evidence informing the recommendations (e.g 1.12.2 - 1.13.4.). As it is given that a discussion needs to take place and women should be informed of all options available to them as it is not explicit from the current version of the guideline. Therefore a less coercive way of phrasing the recommendations as in previous guidelines will be welcomed by RCM. In NICE CG190 "Explain" is used instead of 'offer/do not offer', encouraging an exchange of evidence based information and discussion on options to take place so that women are able to make informed decisions regarding their care.</p> <p>https://www.nice.org.uk/guidance/qs105</p>	<p>highlighted in section 1.8 'Planning birth: information and support'. The importance of woman-centred care is described in the related 'rationale and impact' section. In the section of recommendations referred to in your comment, the wording 'offer/do not offer' was used to refer to the strength of the guidance when the harms outweigh the benefits (at the beginning of the guideline there is a link to a document which describes how NICE is using words to indicate the strength of recommendations - 'Making decisions using NICE guidelines') and states that people also have the right to be involved in discussions and make informed decisions about their care. This is reinforced by a similar statement at the beginning of this guideline'. Even though the evidence was weak the committee decided to make some strong recommendations to ensure the safety of the mother and baby during intrapartum care. The reasoning for this (for instance a reduced risk of emergency caesarean section for the second twin associated with having an epidural in place) is described in the related 'rationale and impact' sections. The committee therefore decided to keep these sections as they are.</p>
Royal College of Midwives	Guideline	9	1 - 2	<p>1.3.2. This paragraph is shaded in grey therefore you may not accept this comment. It would be useful to include details of recommended/required knowledge and experience of clinicians relevant to twin and triplet pregnancies. This would help identify required resources to ensure adequate HCPs are trained and available.</p>	<p>Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.</p>

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Royal College of Midwives	Guideline	9	9 - 10	<p>1.3.4. This paragraph is shaded in grey therefore you may not accept this comment. Further clarity on continuity of care would be useful. Named midwife, ideally a specialist midwife within a midwifery team, and link obstetrician should be included as per Better Births provision. https://www.rcm.org.uk/media/2946/midwifery-continuity-of-carer-mcoc.pdf https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf</p>	Thank you for your comment. This relates to a topic which was not in scope of this update. This means that no evidence review was carried out to address this. We therefore are unable to comment on this.
Royal College of Midwives	Guideline	24	16 - 17	1.11.7 It would it be worth stating that triple channel CTG is not recommended.	Thank you for your comment. The recommendation refers to fetal monitoring during labour in twin pregnancy, therefore no recommendations for triplet pregnancies have been made. Mentioning triple channel CTG would therefore not be relevant.
Royal College of Midwives	Recommendations for research	32	2 - 3	<p>1. Information and support. This paragraph is shaded in grey therefore you may not accept this comment.</p> <p>Regarding the need for further research into whether information and support improves outcome. There is some evidence of improved emotional wellbeing and preparedness for parenting when care is provided by specialist twins and multiples midwife. A published RCT found it reduced depression and unpreparedness by 50%. Although it would be useful to have further high quality, powered studies to further</p>	Thank you for your comment. This relates to a research recommendation from the previous version of the guideline. This means that this research recommendation is still active and that research in this area is still important and welcome.

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				confirm this finding, it would be worth including this evidence as it will encourage organisations to develop the specialist midwifery role. (Carrick-Sen, Robson 2014 BJOG). https://obgyn.onlinelibrary.wiley.com/doi/pdf/10.1111/1471-0528.12728	
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	General	General	This guideline is very specific and informative. It would be very helpful to add a section in intrapartum care about use of ultrasound by experienced obstetrician, acceptable manoeuvres for 2nd twin delivery and of course comment on presence of senior and experienced Obstetrician at delivery.	Thank you for your comment. The committee recognised that the specialist care described in section 1.3 would be an antenatal multidisciplinary team and this would not be a team that would provide intrapartum care. They therefore added subtitles of 'antenatal care' and 'intrapartum care' to this section as well as 'antenatal' to recommendation 1.3.1 to clarify that this would be the team supporting women antenatally. They also added a new recommendation (1.3.6) that explains who would be supporting the woman when she is giving birth: 'Intrapartum care for women with a twin or triplet pregnancy should be provided by a multidisciplinary team of obstetricians and midwives who have experience and knowledge of managing twin and triplet pregnancies in the intrapartum period.' These healthcare professionals would have the necessary ultrasound experience as well as experience in acceptable manoeuvres for the birth of the second twin that is required. The reason for this is described in the related rationale and impact section in the guideline as well as in each committee

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					discussion section of evidence reviews related to intrapartum care.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	General	General	Well written and comprehensive guidance. I have no additional comments.	Thank you.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	General	General	There are not significant changes in this document and I have no comments to add. Seems very sensible.	Thank you for your comment.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	General	General	I have compared the draft NICE guidance with the RCOG Green-top Guideline on the Management of Monochorionic Twin Pregnancy. (GTG No 51, November 2016). It is my impression that the proposed recommendations in this NICE update are consistent with the Green-top except those relating to referral to 'relevant expertise' when there is discordant growth. The explanation given on page 26, lines 18-29 explain why NICE has made slightly different recommendations and is entirely reasonable.	Thank you for your comment.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	6	18 - 20	Consider adding '...recognising that it may not be possible to ensure consistency throughout pregnancy with monochorionic monoamniotic pregnancies.'	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	7	10 - 12	Is there any evidence that this training needs to be 'regular'? Suggest omit this word.	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.

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Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	11	16 - 19	The link to 'recommendations on cfDNA screening' doesn't seem to work at present.	Thank you for your comment. We have now referred to the NHS Fetal Anomaly Screening Programme for twins and have updated the link accordingly.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	12	20	Page 12 and throughout, Line 20 and throughout Suggest change 'intrauterine growth restriction' to 'fetal growth restriction'. This is the term used in other NICE guidance (eg induction of labour)	Thank you for your comment. We have amended the wording accordingly.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	13	22 - 25	Doppler, not doppler - and elsewhere (after the Austrian physicist Christian Doppler)	Thank you for your comment. According to the NICE style guide 'doppler' is classified as a word that derives from a proper name but that has passed into common use (e.g. similar to 'hoover'). It is therefore no longer capitalised.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	14	1 - 4	Suggest 'clinician with appropriate skills to assess IUGR in multiple pregnancy' rather than 'tertiary referral centre'	Thank you for your comment. The definition of tertiary referral has been amended in the Glossary as follows: "A regional or supra-regional fetal medicine centre that has the multidisciplinary team and infrastructure to provide the right fetal intervention or therapy (i.e. fetoscopic laser ablation for feto-fetal transfusion syndrome [FFTS]; termination of pregnancy issuing techniques such as fetoscopic cord occlusion or radiofrequency ablation)."
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	14	18 - 21	Are we sure that DVP is superior to subjective liquor volume assessment?	Thank you for your comment. The committee acknowledges that there are different ways of measuring amniotic fluid level but they decided based on their knowledge that the most frequent and internationally used measurement is deepest vertical pocket (DVP). They noted that this is the measurement referred to in Membership of the Royal College of Obstetricians and Gynaecologists

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					(MRCOG) core curriculum, RCOG Green Top Guidelines, and international published literature on the management of monochorionic twins, definition of feto-fetal transfusion syndrome, definition of oligohydramnios, definition and management of fetal growth restriction. They therefore decided that DVP would be the appropriate assessment to use.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	15	1 - 6	Again, suggest 'clinician with appropriate skills' rather than 'tertiary referral centre' e.g. is it laser therapy likely if the bladder is present, or delivery at 35 weeks for TTS might be more appropriate than referral and the possible delays inherent in that referral, irrespective of Quintero staging	Thank you for your comment. The committee agreed that these should be 'clinicians with appropriate skills'. However, they decided that these clinicians would be part of a tertiary centre. They revised the name and definition of this in the glossary to clarify that the 'tertiary level fetal medicine centre' would be a place with the healthcare professionals who would have these skills (see the section 'terms used in this guideline') as follows: 'A specialist regional (or supra-regional) fetal medicine centre that has a multidisciplinary team with the expertise and infrastructure to assess and manage complicated twin and triplet pregnancies. This includes providing complex fetal interventions or therapies, for example, fetoscopic laser ablation for feto-fetal transfusion syndrome; and selective termination of pregnancy using techniques such as fetoscopic cord occlusion or radiofrequency ablation.' The committee decided that only clinicians in such centres would have the skills to make these decision but would also be able to recognise the urgency in these situations. They therefore decided that the balance of the risks of

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					delay would be outweighed by the expertise available in these centres.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	16 18	9 - 12 13	Again, not sure what a tertiary centre has to offer here above 'clinician with appropriate skills and experience'	Thank you for your comment. The committee agreed that these should be 'clinicians with appropriate skills'. However, they decided that these clinicians would be part of a tertiary centre. They revised the name and definition of this in the glossary to clarify that the 'tertiary level fetal medicine centre' would be a place with the healthcare professionals who would have these skills (see the section 'terms used in this guideline') as follows: 'A specialist regional (or supra-regional) fetal medicine centre that has a multidisciplinary team with the expertise and infrastructure to assess and manage complicated twin and triplet pregnancies. This includes providing complex fetal interventions or therapies, for example, fetoscopic laser ablation for feto-fetal transfusion syndrome; and selective termination of pregnancy using techniques such as fetoscopic cord occlusion or radiofrequency ablation.' The committee decided that only clinicians in such centres would have the skills to make these decision but would also be able to recognise the urgency in these situations. They therefore decided that the balance of the risks of delay would be outweighed by the expertise available in these centres.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	20	4 - 23	Surely delivery at 32/34/36/37 weeks does carry a small risk of serious neonatal adverse outcomes, but that this has to be balanced against a risk of stillbirth,	Thank you for your comment. The recommendation states that these weeks do 'not appear to be associated with an increased risk' rather than "no risk". The reason for this is described in the related

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				hence the choice of these gestations for delivery. Indeed this is acknowledged on page 42 line 17.	rationale and impact section in the guideline as follows: "There is a trade-off between clinical benefits and harms when women have not given birth spontaneously by a given gestational age. These include the risks of neonatal mortality and morbidity associated with planned birth versus the risks of stillbirth from continued pregnancy. The committee agreed that both timing and mode of birth should be discussed with women in the context of these potential risks." The committee therefore agreed that this risk was already addressed and acknowledged.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	22	4 - 13	A blanket number here is slightly misleading. Much here depends on previous obstetric history e.g. a prim is in a rather different position from a para 3 with 3 vaginal deliveries.	Thank you for your comment. The committee agree that the birth plan should be discussed with the women/couple and individualised for each woman (see the guideline: 1.8 and related rationale and impact section). It is also stated in recommendation 1.11.1 that vaginal birth would only be a safe choice when a number of conditions (including obstetric contraindications for caesarean section) are met. This was taken directly from the evidence (per Barrett 2012). The committee decided that the content of such discussions would therefore include the 'obstetric history' to find out whether there are such possible contraindications.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	23	1 - 2	Consider, for the third bullet point, adding 'unless vaginal delivery is imminent'	Thank you for your comment. To address this point we have revised the final bullet point of recommendation 1.10.6: <ul style="list-style-type: none"> • if she is in established preterm labour, and gestational age suggests there is a reasonable chance of survival of the babies (unless the first twin

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					is close to vaginal birth and a senior obstetrician advises continuing to vaginal birth). [2019]
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	24	7 - 8	Consider changing to ‘.to confirm which twin is which, the presentation of each twin, and the location of their respective fetal hearts’	Thank you for your comment. We have amended the wording as suggested.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	27	19 - 24	I would have thought that an epidural would increase the chance of assisted vaginal delivery (assuming that ‘assisted’ means instrumental) and that that’s not necessarily a good thing.	Thank you for your comment. The committee decided that the reasons for recommending epidural analgesia are well set out in the guideline (recommendations within 1.12 and related "rationale and impact" section in the guideline). It is also stated in section 1.8 that the birth should be planned in advance and information and support given (including about the options for analgesia). The committee agreed that it would be important that this should be discussed with the woman/couple and individualised based upon the wishes of the woman and obstetric history. The committee agreed that such discussions would include benefits and harms of assisted vaginal birth.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	27	19 - 24	I am not aware of any papers comparing epidural top up times to spinal insertion times.	Thank you for your comment. There are no recent comparative studies directly comparing how long it takes to top-up an epidural for the provision of de-novo spinal anaesthesia for operative birth but there are many non-comparative studies examining the intervals between decision and birth with these top-up techniques. The committee agreed that it is widely recognised in obstetric anaesthesia that an effective epidural in place in a woman who is in established labour, confers a degree of safety because it can be converted rapidly from analgesia to anaesthesia if

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					operative birth is required. We have added this explanation to the committee discussion section of the evidence review: C3 analgesia.
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	30	22	Scotland doesn't have commissioning. Not sure what happens in Wales and NI.	Thank you for your comment. The committee removed the reference to 'commissioning' and revised the definition of tertiary level fetal medicine centre in the glossary to clarify this as follows: 'A specialist regional (or supra-regional) fetal medicine centre that has a multidisciplinary team with the expertise and infrastructure to assess and manage complicated twin and triplet pregnancies. This includes providing complex fetal interventions or therapies, for example, fetoscopic laser ablation for feto-fetal transfusion syndrome; and selective termination of pregnancy using techniques such as fetoscopic cord occlusion or radiofrequency ablation.'
Royal College of Obstetricians and Gynaecologists (RCOG)	Guideline	31	17	Is AC measurement to assess growth discrepancy non-inferior to EFW? I would be quicker to do.	Thank you for your comment. The committee acknowledge that there are many ways of calculating estimated fetal weight (EFW) and assessment of biometry using ultrasound scan may be difficult in twins and triplets making assessment of biparietal diameter, head circumference, abdominal circumference and femur length not possible. Where possible EFW should be estimated using 2 parameters as stated in the guideline. For these reasons the committee decided not to prioritise a comparison of abdominal circumference with estimated EFW as a research recommendation.

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Royal College of Paediatrics and Child Health	Guideline	General	General	The reviewer was happy with this draft guideline and had no specific comments to make	Thank you for your comment.
Society and College of Radiographers	Guideline	General	General	Overall, significant ultrasound resources are required when all the NICE recommended scans are taken into account. Professionals undertaking these scans should only do so if they have had appropriate training in multiple pregnancy ultrasound examinations and have been assessed as competent in the various techniques involved such as fetal biometry, umbilical artery Doppler and amniotic fluid depth assessment.	<p>Thank you for your comment.</p> <p>Some additional ultrasound scans were recommended because of new recommendations on screening and monitoring although these do not necessarily represent a change from current practice. The potential resource impact from additional scans is discussed in the relevant rationale and impact sections of the guideline (see the rationale and impact sections related to topics in 1.4 of the guideline).</p> <p>The guideline contains a section entitled 'specialist care' which was not updated (section 1.3). In recommendation 1.3.1 (bullet point 1) it states 'a core team of named specialist obstetricians, specialist midwives and sonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies' should be part of a nominated multidisciplinary team providing care for women with twin or triplet pregnancy. The committee therefore thought that such a sonographer would have the relevant competency to do this and no change was required.</p>
Society and College of Radiographers	Guideline	6 10	5 1-4; 12; 21; and 30	11+0 to 13+6 weeks is used as the gestational age for the CRL measurement range.	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out

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				The Fetal Anomaly Screening Programme suggest that 45 – 84mm is linked to a gestational age of 11+2 to 14+1 weeks.	to address this and we are therefore unable to comment.
Society and College of Radiographers	Guideline	8	22 - 24	The Society and College of Radiographers are concerned that scanning multiple pregnancies is physically and mentally demanding. There is a high rate of work related musculoskeletal disorders amongst sonographers. Consideration will be needed to ensure there is a large enough team of sonographers and/or long enough appointment times to ensure appropriate breaks are provided.	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.
Society and College of Radiographers	Guideline	9	1 - 2	It would be useful to have some clarification: Is the enhanced team different to the 'core team' mentioned in section 1.3.1? If they are, could the same terminology be used for consistency? If not, what definition is there for the 'enhanced' team?	Thank you for your comment. The core team (bullet 1 of recommendation 1.3.1) refers to the minimum professions that should always be involved. The enhanced team (bullet 2 of recommendation 1.3.1) refers to professions that the team should have access to when the need arises. These 'additional' professions together with the 'core team' members would constitute the 'enhanced team'. Furthermore, we are unable to make changes to these recommendations because this relates to a topic which was outside the scope of this guideline update.
Society and College of Radiographers	Guideline	12	4	For triplet pregnancies it would be helpful to sonographers to suggest at least 60 minutes for the anomaly scan, as a singleton pregnancy is allowed 30 minutes. Scanning three fetuses is challenging in itself, but also a full detailed scan is needed of each	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.

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				one, as they are high risk pregnancies. Anything less than 60 minutes could compromise the examination quality, but also increase the pressure on sonographers leading to possibilities of work related injury.	
Society and College of Radiographers	Guideline	12	6	For triplet pregnancies more than 30 minutes should be recommended, as 20 minutes or recommended for a singleton pregnancy. An additional 10 minutes will add risks (see comment no. 4)	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.
Society and College of Radiographers	Guideline	12 13 14 15 16 etc	20; 23 4 4 & box; 9 14; 16; 12 & box; 20	Fetal growth restriction is the term used by the RCOG now, instead of intrauterine growth restriction.	Thank you for your comment. We have amended the wording accordingly.
Society and College of Radiographers	Guideline	13 14 15 etc	9 25 21	If the deepest vertical pocket measurement is being recommended should it be 'amniotic fluid levels' rather than amniotic fluid 'volume'?	Thank you for your comment. We have amended 'amniotic fluid volume' to 'amniotic fluid levels' as suggested.
Society and College of Radiographers	Guideline	13 15 etc	12 - 14 22	If monitoring is not to exceed 14 days, does there need to be something to specify that growth biometry measurements should not be performed less than 14 days apart. Measurement inaccuracies are common if biometry is undertaken in periods of less than 14 days.	Thank you for your comment. The timing specified "should not exceed 14 days" is the preferred terminology by NICE to set an appropriate standard for an interval of 2 weeks. Serial fetal biometry should not be carried out more frequently than 14 days but other parameters such as amniotic fluid level (measured by DVP) and umbilical artery Doppler velocimetry may be required more frequently. The

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					current wording provides the practitioner with some flexibility in this respect.
Society and College of Radiographers	Guideline	13 14 16 17 etc	24 25 7 1	Doppler is a name, so should have a capital D.	Thank you for your comment. According to the NICE style guide 'doppler' is classified as a word that derives from a proper name but that has passed into common use (e.g. similar to 'hoover'). It is therefore no longer capitalised.
TAMBA, the Twins and Multiple Births Association	Guideline	General	General	We feel that there needs to be a bigger emphasis on creating a multi-disciplinary team/twins' clinic to achieve the desired model. In particular having a specialist midwife can ensure that appropriate care is provided and can improve the continuity of carer for multiple-birth families.	<p>Thank you for your comment. Organisation of services is a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.</p> <p>However, the committee recognised that the specialist care described in section 1.3 would be an antenatal multidisciplinary team and this would not be a team that would provide intrapartum care. They therefore added subtitles of 'antenatal care' and 'intrapartum care' to this section as well as 'antenatal' to recommendation 1.3.1 to clarify that this would be the team supporting women antenatally. They also added a new recommendation (1.3.6) that explains who would be supporting the woman when she is giving birth: 'Intrapartum care for women with a twin or triplet pregnancy should be provided by a multidisciplinary team of obstetricians and midwives who have experience and knowledge of managing twin and triplet pregnancies in the intrapartum period.'</p>

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TAMBA, the Twins and Multiple Births Association	Guideline	General	General	Overall, we feel this is a really valuable update to the existing guidance and the particular areas of care added to this update (particularly intrapartum care) are much-needed and fit with the best practice that is expected from all units. Although there are a few amendments that would mean more scanning time is needed for some cases, overall this is balanced out by the cost saving and this should be highlighted when promoting uptake of this new guidance.	Thank you for your comment. The implications for scanning are discussed in the rationale and impact sections of the guideline and do note that additional costs of ultrasound could be offset by the early detection and prompt management of complications.
TAMBA, the Twins and Multiple Births Association	Guideline	12, 19-23	General	We were pleased to see that women's choice is emphasised in the planning and mode of delivery. To facilitate this, it is vital that all women are given adequate and accurate information in order to be fully informed about the risks of the different options available to them and their individual situation, we are pleased to see that this has been considered in the guideline but consistent implementation of this is crucial. When women make choices about mode of birth without all the information the results can be devastating for both mother and babies.	Thank you for your comment. Woman-centred care was an over-arching component of the committee's deliberations.
University Hospitals Southampton NHS Trust	Guideline	8	14	1.2.4 We generally adopt a low threshold for giving oral iron to these women. Would NICE consider serum ferritin at 20 weeks to help early identification?	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.
University Hospitals Southampton NHS Trust	Guideline	8	20	1.3.1 Not sure routine referral would be a good use of resources and we would prefer to risk assess and refer	Thank you for your comment. This relates to a topic which was outside the scope of this guideline update. This means that no evidence review was carried out to address this and we are therefore unable to comment.

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Twin and triplet pregnancy

Consultation on draft guideline - Stakeholder comments table 22/03/19 to 09/05/19

Stakeholder	Document	Page No	Line No	Comments	Developer's response
University Hospitals Southampton NHS Trust	Guideline	14	1	1.4.17 Some concerns in only using growth discrepancy as criterion for referral, would prefer if growth <10 th or 5 th centile in one twin be referred to Fetal Medicine	Thank you for your comment. The committee agreed that the 10 th centile for gestational age as a criterion was important. They decided to add this as a criterion but thought that fetal growth discordance was important, too, because this would indicate selective fetal growth restriction. They therefore combined the two so that a fetal growth restriction as a discrepancy of 20% and/or any other baby below the 10 th centile for gestational age should be a reason for concern and a difference in fetal growth of 25% and another baby below 10 th centile for gestational age as a reason for referral.
University Hospitals Southampton NHS Trust	Guideline	16	5	1.4.28 is no point doing weekly scans in dichorionic twins in the second trimester, when there are no therapeutic options (delivery not possible). This might be reasonable in MC twins if selective reduction or placental division contemplated.	Thank you for your comment. Recommendation 1.4.28 (page 16) refers only to monochorionic twins. Page 13 refers to dichorionic twins and documents that monitoring for fetal growth in dichorionic twins commences at 24 weeks' gestation (starting after the second trimester).
University Hospitals Southampton NHS Trust	Guideline	19	20 - 23	1.9.1 1.9.2 These figures might be easier to understand as 6:10 and 7:10	Thank you for your comment. The committee decided that 60:100 and 75:100 would be understood. They also thought that 75:10 would not easily translate into 7:10 because it would require rounding up or down and would then no longer correspond to the number that the committee wanted to quote. It was therefore decided to keep the wording as it is.
University Hospitals Southampton NHS Trust	Guideline	20	4	1.9.4 The evidence that continuing beyond 37 ⁺⁶ weeks is really poor	Thank you for your comment. The identified evidence from the updated systematic review (as well as the review for the previous version of the guideline) is consistent with evidence reported in other published systematic review and meta-analyses. Available

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					evidence suggests that the threshold for timing of birth in monochorionic diamniotic twin pregnancies as up to 36 weeks' gestation and in dichorionic diamniotic twin pregnancies as up to 38 weeks' gestation. The evidence indicates that the risk of stillbirth is higher after this threshold is reached which is not a risk that the committee discounted even if the evidence is poor. This is described in the related rationale and impact section and further detail is provided in the discussion section of the related evidence review.
University Hospitals Southampton NHS Trust	Guideline	20	16	<p>1.9.6 The evidence for this recommendation is very poor. Most losses associated with cord entanglement occur earlier Agree with delivery by 34 weeks, however feel the statement 'continuing the pregnancy beyond 33+6 weeks increases the risk of fetal death' rather strong given that there are limited numbers continuing beyond 34 weeks.</p> <p>For all these recommendations about early delivery there is increasing evidence of more subtle problems in children with earlier delivery that may not be apparent until school age, so there needs to be caution about routine recommendations for early delivery</p>	Thank you for your comment. The recommendation regarding timing of birth for monochorionic monoamniotic twin pregnancies reflects the limited available evidence. Monochorionic monoamniotic twin pregnancies are extremely high risk. The paper from Van Miegham et al. (2014), referred to in the related evidence review, sets out the risk of stillbirth vs. neonatal serious adverse events and estimates stillbirth to be double the rate of fetal death at 33.9 weeks' gestation. Therefore even though there is not much evidence, the committee considered that this stillbirth rate is not a risk worth taking. This was already briefly described in the 'rationale and impact' section in the guideline with a longer discussion of the evidence in the 'committee's discussion of the evidence' section of the related evidence review (see evidence review D: timing of birth).

**None of the stakeholders who comments on this clinical guideline have declared any links to the tobacco industry.*

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