SPSO Scottish Public Services Ombudsman

The Scottish Public Services Ombudsman Act 2002

Investigation Report

UNDER SECTION 15(1)(a)

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Scottish Parliament Region: Mid Scotland and Fife

Case ref: 201602616, Fife NHS Board
Sector: Health
Subject: Hospitals / Clinical treatment / Diagnosis

Summary
Mr and Mrs C complained about the management of Mrs C's pregnancy, leading up to the stillbirth of their baby. Mrs C experienced increased blood pressure during pregnancy, as well as slightly raised urine protein levels. These can be signs of pre-eclampsia (a condition that can affect pregnant women, particularly during the second half of pregnancy, which can lead to serious complications for both mother and baby).

About 38 weeks into Mrs C's pregnancy, a plan was made for induction in a week's time. In the meantime, Mrs C was admitted overnight for monitoring of her high blood pressure, and she also attended a follow-up appointment where a cardiotocography (CTG) was carried out. The CTG showed some problems of loss of contact and deceleration of heartbeat, but staff thought this was due to Mrs C's movements, and she was discharged. Sadly, when Mrs C returned two days later for the induction, her baby was found to have died (he was stillborn the next day). Mr and Mrs C gave consent for a post-mortem examination, which showed Mrs C's placenta had not been functioning properly, which was consistent with pre-eclampsia.

Following discussion with the consultant in charge, Mr and Mrs C complained to the board. While the board had begun carrying out a routine review of Mrs C's care (which they do for all stillbirths), they also carried out a further clinical review of the care (the REI review) in response to the complaint. This review found that there was no clear diagnosis made between gestational hypertension (high blood pressure) and pre-eclampsia for Mrs C. It found that the local guidance about when to measure urine protein levels (a test for diagnosing pre-eclampsia) differed from the National Institute of Health and Care Excellence (NICE) guidelines about this. The REI review also found there was a lack of continuity of care, and the way that records were kept made it difficult to identify trends in blood pressure recording and blood results in this case.

Following the REI review, the board put in place an action plan for improvement, including amending their guidelines to be consistent with

NICE guidelines. However, the results of the REI review were not shared with Mr and Mrs C. While the board intended to share the results, they felt it would be easiest to do this in a meeting. A complaint response had already been drafted before the REI review was finished (indicating that the management of Mrs C's pregnancy was reasonable), and the board simply added a line stating that a review had been carried out and inviting Mr and Mrs C to contact them for a meeting. The rest of the letter was not updated to include the outcomes from the REI review.

After taking independent clinical advice from a midwife and two obstetrics and gynaecology consultants, we upheld Mr and Mrs C's complaint about the management of her pregnancy. We found the board failed to conduct further tests to clarify Mrs C's diagnosis (between high blood pressure and pre-eclampsia), contrary to NICE guidance. We also found the board had failed to recognise abnormalities on two CTG recordings. We did not uphold Mr and Mrs C's complaints about the continuity of care, their involvement in the REI review or the bereavement support made available to them, although we gave the board some feedback on these points.

Redress and Recommendations

The Ombudsman's recommendations are set out below:

What we are asking the Board to do for Mr and Mrs C:

Complaint number	**What we found**	**What the organisation should do**	**Evidence SPSO needs to check that this has happened and the deadline**
(a)	The Board failed to conduct further tests to clarify Mrs C's diagnosis; and failed to recognise abnormalities on two CTG recordings	Provide Mr and Mrs C with a written apology that meets the SPSO guidelines on making an apology available at https://www.spso.org.uk/leaflets-and-guidance	Copy of apology letter By: 16 August 2017

We are asking the Board to improve the way they do things:

Complaint number	What we found	What should change	Evidence SPSO needs to check that this has happened and deadline
(a)	The Board failed to recognise abnormalities on two CTG recordings	Staff should competent and confident in interpreting CTGs, taking into account the clinical background of the case	Evidence that the Board has reviewed midwifery and obstetrics staff competence in conducting CTG, delivered appropriate training and development, and has a plan to ensure this is kept up to date By: 11 October 2017
(a)	The Board's complaint investigation did not identify all the failings in Mrs C's care	Clinical staff involved in Mrs C's care and in the complaint investigation should reflect on and learn from the findings of this report	Evidence that my findings have been shared, with appropriate support, with staff involved in Mrs C's care and in the REI review By: 16 August 2017

Complaint number	What we found	What should change	Evidence SPSO needs to check that this has happened and deadline
(a)	The Board's complaint response did not include the information and findings from their REI review	Where a clinical review is undertaken as part of a complaint investigation, the complaint response should include the findings of the review	Documentary evidence that the Board has processes in place to ensure someone involved in the review writes or reviews any complaint response By: 11 October 2017

Evidence of action already taken

The Board told us they had already taken action to fix the problem. We will ask them for evidence that this has happened:

Complaint number	What we found	What the organisation say they have done	Evidence SPSO needs to check that this has happened and deadline
(c)	The Board found the layout of maternity records could be improved to ensure key information is easily accessible to all clinical staff	Improve the layout of records, including by: • using the MEWS chart for out-patient care in women with high risk; and • developing a blood results summary sheet	Evidence that the changes in record layout have been implemented By: 11 October 2017

Feedback

Complaints handling: It was good practice by the Head of Midwifery/Nursing to escalate this complaint for a multi-disciplinary REI review (due to her concerns about the draft complaint response). However, the results of the REI review were not reflected in the final complaint response, and were never provided to the family (other than an offer to meet and discuss the results, which was not followed up when the family did not get in contact). If the Board had shared the REI review results and made appropriate apologies, this complaint might have been resolved earlier.

Response to SPSO investigation: The Board responded promptly to our enquiries.

Points to note: The professional advisers raised several points for the Board's consideration:

- In relation to continuity of care, Adviser 2 suggested the Board could consider how often women undergoing surveillance for high blood pressure are booked to see their own consultant (for example, in an antenatal clinic), so that decisions could be made with more continuity.
- In relation to the REI review, Adviser 3 suggested the Board may wish to review their guidance on clinical reviews prompted by complaint investigations, to ensure that families who wish to be involved in a review have this opportunity.
- In relation to support following a stillbirth, Adviser 1 said it is good practice for maternity units to have at least one member of staff who has specialist knowledge and training in bereavement care, and recommended that the Board should seriously consider and agree the business proposal for a bereavement midwife.

Who we are

The Scottish Public Services Ombudsman (SPSO) investigates complaints about organisations providing public services in Scotland. We are the final stage for handling complaints about the National Health Service, councils, housing associations, prisons, the Scottish Government and its agencies and departments, the Scottish Parliamentary Corporate Body, water and sewerage providers, colleges and universities and most Scottish public authorities. We normally consider complaints only after they have been through the complaints procedure of the organisation concerned. Our service is independent, impartial and free. We aim not only to provide justice for the individual, but also to share

the learning from our work in order to improve the delivery of public services in Scotland.

The role of the SPSO is set out in the Scottish Public Services Ombudsman Act 2002, and this report is published in terms of section 15(1) of the Act. The Act says that, generally, reports of investigations should not name or identify individuals, so in the report the complainants are referred to as Mr and Mrs C. The terms used to describe other people in the report are explained as they arise and in Annex 1.

Introduction

1. Mr and Mrs C complained to my office about the management of Mrs C's pregnancy, leading up to the stillbirth of their baby. The complaints from Mr and Mrs C I have investigated are that:

(a) Fife NHS Board (the Board) failed to provide appropriate obstetric care to Mrs C in light of her presenting symptoms (*upheld*);

(b) midwives failed to provide adequate care by failing to take Mrs C's blood pressure overnight during her hospital admission (*not upheld*);

(c) the Board failed to provide an adequate level of continuity of care to Mrs C (*not upheld*);

(d) the Board failed to conduct a timely investigation into what happened and Mr and Mrs C were not given the opportunity to input into the investigation (*not upheld*); and

(e) the Board acted unreasonably by failing to provide Mr and Mrs C with adequate information regarding NHS bereavement services for parents (*not upheld*).

Investigation

2. My complaints reviewer considered all of the information provided by Mr and Mrs C and the Board, and sought independent clinical advice from a midwife (Adviser 1) and two consultants in obstetrics and gynaecology (Adviser 2 and Adviser 3).

3. My complaints reviewer took into account the outcomes Mr and Mrs C said they were looking for from their complaint, which were:

- a full and frank apology from the Board;
- for the Board to act differently in future;
- for the Board to consider how they react to such cases (and not wait for a complaint before triggering a formal investigation); and
- for the Board to provide better support to parents in these circumstances.

4. In this case, I have decided to issue a public report on Mr and Mrs C's complaint because of the significant injustice they suffered, and the systemic failings I found.

5. This report includes the information that is required for me to explain the reasons for my decision on this case. Please note, although I have not included every detail of the information considered, I and my complaints reviewer have

reviewed all of the information provided during the course of the investigation. Mr and Mrs C and the Board were given an opportunity to comment on a draft of this report.

Background

6. Mrs C experienced high blood pressure (hypertension) during her pregnancy, as well as raised proteinuria (levels of protein in the urine). She also raised concerns about fetal movements. At a review at 37+6 weeks (37 weeks and six days), a plan was made for induction in a week's time.

7. A few days later, Mrs C was admitted overnight for monitoring of her blood pressure. A cardiotocography recording (CTG) was carried out in the morning ('the first CTG'). The first CTG was recorded as 'reassuring' (normal), and Mrs C was discharged that morning. She attended for repeat monitoring the next day (at 38+4 weeks), and another CTG was carried out ('the second CTG'). The second CTG showed some problems with loss of contact and deceleration of heartbeat, but staff thought this was due to Mrs C's movements (rather than any problems with the baby). The CTG was assessed as reassuring, and Mrs C was discharged, to return two days later for the planned induction. Sadly, when Mrs C returned for induction, the baby was found to have died. Mr and Mrs C's baby was stillborn the next day.

8. Mr and Mrs C gave consent for a post-mortem, which showed Mrs C's placenta had not been functioning properly, which was consistent with pre-eclampsia.

Discussion with Doctor 1

9. Mr and Mrs C were concerned that Mrs C had had undiagnosed pre-eclampsia, and they queried why their baby's birth was not induced earlier (according to National Institute for Health and Care Excellence (NICE) guidelines). Mr and Mrs C met with the consultant in charge (Doctor 1) to discuss the events, and Doctor 1 summarised this discussion in a letter.

10. Doctor 1 acknowledged that, with the benefit of hindsight, some of the care could have been different (such as offering a further scan, or bringing forward the induction date when Mrs C's blood pressure worsened).

11. Doctor 1 also acknowledged that the second CTG recording showed sections of apparent decelerations (slowing down of the baby's heartbeat).

Although Doctor 1 noted that this was explained as a recording of the maternal pulse, they said there 'was one section where the recording apparently shows a gradual reduction in heart rate'. Doctor 1 said that, 'despite these areas of concern', they believed the care Mrs C received was normal, and while it was possible to look back and criticise things, they did not 'see any particular point where one decision was demonstrably wrong.'

12. Following this discussion, Mr and Mrs C complained to the Board about the management of the pregnancy.

The Board's review (REI)

13. As part of the Board's investigation they carried out a clinical review of the care and treatment Mrs C received, using the Rapid Events Investigation (REI) tool ('the REI review'). The purpose of the REI review was to consider whether earlier delivery should have been arranged, in view of the clinical findings at the time (the REI review acknowledged that an earlier delivery would likely have changed the outcome in this case).

14. The REI review found there was no clear diagnosis made between gestational hypertension and pre-eclampsia for Mrs C. The REI review noted that the difference between these conditions can be difficult to define, and diagnoses of pre-eclampsia can be unreliable. However, the REI review found that Mrs C's proteinuria was never measured, so a diagnosis of pre-eclampsia could not be ruled out. The REI review noted that the local guidance about when to measure proteinuria differed from the NICE guidelines. The REI review recommended the Board's guidelines should be reviewed against the NICE guidelines and amended if appropriate. The REI review found that, given Mrs C's diagnosis was thought to be gestational hypertension (rather than pre-eclampsia), management of her care was reasonable.

15. The REI review also made an incidental finding that it was difficult to identify trends in blood pressure recording and blood results in this case, due to the way the records were kept.

16. The REI review recommended several actions to improve care in future:

- review of the differences between the Board's guidelines and NICE guidelines on the diagnosis of pre-eclampsia (to consider whether to update the local guidance);

- changes in the layout of the records to ensure key information is easily accessible (use of the Modified Early Warning Score (MEWS) chart for out-patient care in women with risk factors and development of a blood results summary sheet); and
- monitoring future research on possible tests to aid the diagnosis of pre-eclampsia.

The Board's complaint response

17. The Board sent a written response to Mr and Mrs C's complaint. The letter did not summarise or attach the findings of the REI review, although the Board informed Mr and Mrs C that an REI review had been carried out and invited them to meet with staff to discuss the results. The letter included comments from Doctor 1 and another doctor (Doctor 2), who had both been involved in Mr and Mrs C's care. While Doctor 2 apologised in the letter for some aspects of Mrs C's care, both Doctor 2 and Doctor 1 considered the induction date and management of Mrs C's pregnancy were reasonable. Mr and Mrs C were not satisfied with the Board's response, and felt there were inconsistencies between the complaint response and what Doctor 1 had previously told them. Mr and Mrs C brought their complaint to the SPSO.

(a) The Board failed to provide appropriate obstetric care to Mrs C in light of her presenting symptoms

Concerns raised by Mr and Mrs C

18. Mr and Mrs C raised a number of concerns about Mrs C's care during this time, including that the Board failed to diagnose Mrs C's pre-eclampsia and arrange an earlier induction (contrary to national guidance); failed to carry out a growth scan during the final weeks of Mrs C's pregnancy, or investigate Mrs C's concerns about fetal movement; and failed to take any action in response to the abnormalities on the second CTG. Mr and Mrs C also considered staff responded inconsistently to Mrs C's recordings of high blood pressure, and failed to act on Mrs C's blood pressure (which continued to increase, despite medication).

The Board's response

19. In the Board's complaint response, Doctor 2 said Mrs C initially presented with gestational hypertension, and not pre-eclampsia. Although Doctor 2 acknowledged that pre-eclampsia may have developed, they said this was mild, and did not appear to have worsened throughout Mrs C's assessments. Doctor 2 apologised that Mrs C felt her ongoing diagnosis was not clearly

communicated, and also that an ultrasound scan was not arranged following the second CTG (when Mrs C reported reduced fetal movements). Doctor 2 explained that the baby's wellbeing was instead assessed by CTG at this time, as ultrasound scanning was not available over the weekend.

20. In relation to the induction date, Doctor 2 explained that national guidance was incorporated into local guidelines and practice, but that each mother's care needed to be individualised according to the clinical circumstances. Doctor 2 considered the planned induction date was reasonable. Doctor 1 also reiterated his assessment that Mr and Mrs C's pregnancy care was normal.

21. In response to SPSO's enquiries, the Board provided a copy of the REI review and the complaints correspondence. They said they had amended their guidelines on management of hypertension, and provided a copy of the previous and current guidelines. The Board said they were also reviewing their Growth Scan Protocol, and they acknowledged that Mr and Mrs C should have been strongly advised to attend for a repeat CTG following the second CTG.

22. My complaints reviewer asked the Board for more information on the reasons for not performing an ultrasound scan following the second CTG. While the Board said ultrasound scanning was not available on the weekend, Mr and Mrs C said Mrs C had previously been scanned using a mobile scanner on the ward, and queried why this was not available. The Board clarified that routine scanning is not available at weekends for specific tests such as growth assessment. They said that, depending on the medical team who are on call, they may use appropriate scanning skills for limited assessment, such as determination of fetal heart location.

Relevant guidance

23. NICE have published guidance relevant to this case: NICE Clinical Guideline 107 (2010): Hypertension in pregnancy, diagnosis and management ('the NICE Guideline').

24. The Board also provided copies of their local guidance relevant to the case:

- NHS Fife Clinical Guidance Document: Management of Pregnancy Induced Hypertension, March 2011 ('the 2011 Guidelines', which were in force at the time of these events); and

- NHS Fife Clinical Guidance Document: Hypertension, Pre-eclampsia and Eclampsia, December 2016 ('the 2016 Guidelines', which have now replaced the 2011 Guidelines).

Medical advice - Diagnosis of pre-eclampsia

25. Adviser 2 explained that, according to the NICE Guideline, the diagnosis of pre-eclampsia depends on a combination of high blood pressure and 'significant' proteinuria. Adviser 2 said Mrs C met the first criterion of high blood pressure (which is defined as greater than 140/90).

26. In relation to the second criterion (significant proteinuria), Adviser 2 explained that proteinuria is measured in two ways: initially by a dipstick (where the amount of protein can be described as 'trace' (lowest); '+'; '++'; or '+++' (highest). Further testing can then be carried out in a laboratory (using a test for the ratio of urinary protein to creatinine, or a test for 24 hour urinary protein) to measure the actual amount of protein. Adviser 2 referred to the NICE Guideline, which recommends these further tests should be carried out if an initial dipstick test shows + protein or more (to determine whether there is 'significant proteinuria', consistent with a diagnosis of pre-eclampsia).

27. Adviser 2 said that, in Mrs C's case, the dipstick tests carried out showed she had + protein at 36 weeks; 36+2 weeks; 36+5 weeks; and 36+6 weeks, and ++ protein at 37+6 weeks. However, the recommended laboratory tests were never carried out to determine if she had significant proteinuria. Adviser 2 said that, because the recommended tests were never carried out, it is not possible to state with certainty whether Mrs C had pre-eclampsia. Adviser 2 was critical that Mrs C did not have the tests recommended by national guidance. Adviser 2 explained that the distinction between gestational hypertension and pre-eclampsia is important, because pre-eclampsia carries more risk to the mother and baby and the management is different.

Medical advice - Timing of induction

28. My complaints reviewer asked Adviser 2 whether the decision at 37+6 weeks for induction in a week's time was reasonable. Adviser 2 observed that this decision was influenced by a vaginal examination, which found that Mrs C's cervix was 'unfavourable' for induction of labour at that time (meaning that it had not yet started to soften, come forward, thin and open in preparation for labour). Adviser 2 explained that, if the cervix is unfavourable, induction of labour is more likely to be prolonged or to fail (resulting in the patient needing a

caesarean section). However, Adviser 2 said that if the risks of continuing pregnancy are greater than the risks of induction of labour, then the condition of the cervix is irrelevant and induction should proceed anyway.

29. Adviser 2 noted that the NICE Guideline recommends birth within 24 to 48 hours for women who have pre-eclampsia with mild or moderate hypertension after 37+0 weeks. However, for women with gestational hypertension whose blood pressure is lower than 160/110 after 37 weeks (with or without treatment to manage this), the NICE Guideline recommends that the timing of the birth should be agreed between the woman and the senior obstetrician.

30. In Mrs C's case, Adviser 2 said it was not clear whether Mrs C had pre-eclampsia or gestational hypertension (because her proteinuria had not been tested). Adviser 2 said that, if Mrs C had gestational hypertension, it would have been reasonable (and in line with the NICE Guideline) to agree an induction date in a week's time, because her blood pressure was controlled by labetalol (medication for high blood pressure) and her cervix was unfavourable to induction at the time. However, if Mrs C had pre-eclampsia, the NICE Guideline recommended that she should have been offered induction of labour within 24 to 48 hours, irrespective of the condition of her cervix.

31. My complaints reviewer also asked whether the induction date should have been brought forward when Mrs C's blood pressure worsened. Adviser 2 noted that Mrs C's blood pressure increased at 37+2 weeks (when she was admitted to hospital), but said this was still within the range defined by NICE as mild or moderate hypertension. Therefore, Adviser 2 said the criteria above would still apply: Mrs C should have been tested for significant proteinuria (to determine if she had pre-eclampsia), and induction arranged within 24 to 48 hours if this was positive; or if it was negative, induction of labour in a week's time would be reasonable.

Medical advice - Timing of scans

32. My complaints reviewer asked Adviser 2 to comment on Mrs C's concern that no scans were carried out in the last weeks of her pregnancy. Adviser 2 referred to the NICE Guideline, which states that, for women with gestational hypertension, ultrasound need not be carried out after 34 weeks if the previous results have been normal. For women with pre-eclampsia, the NICE Guideline recommends that ultrasounds should not be carried out at intervals of less than

two weeks. Adviser 2 also referred to guidance from the Royal College of Obstetricians and Gynaecologists (RCOG): Green Top Guideline 31: The Investigation and Management of the Small for Gestational Age Foetus, 2014 (the RCOG Guideline). The RCOG Guideline states that the abdominal circumference (the baby's waist measurement) or estimated fetal weight should be used to diagnose where a foetus is small for its gestational age, and also emphasises the importance of growth velocity (the rate of the baby's growth) in diagnosing this. The RCOG Guideline recommends that ultrasounds for monitoring fetal growth velocity should be at intervals of three weeks apart, and where a foetus is found to be small for gestational age, delivery should be offered at 37 weeks.

33. Adviser 2 noted that Mrs C had scans at 27+1 weeks (showing an abdominal circumference of 222.1 millimetres) and at 36+1 weeks (showing an abdominal circumference of 298 millimetres). Adviser 2 said neither of these measurements indicated that Mr and Mrs C's baby was small for its gestational age. Adviser 2 said the scans did show a slowing of the growth velocity, and this could have prompted a further ultrasound after three weeks (according to the RCOG guideline about this). However, this would have been after the planned induction of labour. Therefore, Adviser 2 considered it was reasonable, and in line with national guidance, that there were no further scans performed in this period.

34. My complaints reviewer asked Adviser 2 to comment on the Board's explanation that they had not performed a scan following the second CTG as the equipment was not available on the weekend. Adviser 2 said that most maternity services do not offer ultrasound services for assessing fetal growth at the weekend, so the Board's response was reasonable. Adviser 2 explained that, if a fetal growth scan is thought to be necessary over the weekend, it can reasonably be scheduled for the following Monday.

Medical advice - Interpretation of the CTGs

35. My complaints reviewer asked Adviser 2 to comment on the Board's explanation of the second CTG. Adviser 2 explained that the interpretation of a CTG involves consideration of the clinical circumstances of the patient, as well as the four features shown on the CTG recording (baseline, variability, accelerations and decelerations). Adviser 2 noted that the interpretation of a CTG is subjective, and there can be some variation between interpretations made by different clinicians.

36. Adviser 2 said that, according to their interpretation, the first and second CTGs were abnormal for antenatal CTGs. In relation to the first CTG, Adviser 2 said there was a deceleration shown at 09:08, and an absence of clear accelerations. In relation to the second CTG, Adviser 2 said this showed decelerations at 12:20; 12:31; 12:56 and 13:12. Adviser 2 noted that the midwife had annotated the first two of these as maternal pulse (and acknowledged that the midwife was actually present at the time to observe the CTG). However, Adviser 2 observed that the midwife had recorded the pulse at the beginning of the CTG (only two to three minutes before the first deceleration) as 88 beats per minute (bpm), whereas the recording marked as 'maternal pulse' was 70 to 75 bpm.

37. Adviser 2 also observed that there is continuity in the recording from the CTG, whereas usually with loss of contact and recording of the maternal pulse there is a break in the recording. Adviser 2 noted that this also occurred at 12:20 and at 12:56, although at 13:12 there is less continuity in the recording (and Adviser 2 considered the deceleration at this point may well have been due to loss of contact).

38. Adviser 2 explained that, in a high risk pregnancy such as Mrs C's, affected by high blood pressure and with reduced fetal growth velocity, an abnormal CTG at 38+4 weeks of pregnancy should have resulted in delivery of the baby. However, since the CTGs were interpreted as normal at the time, no further action was taken.

39. As the CTGs were initially interpreted by midwives (rather than obstetricians), my complaints reviewer asked Adviser 1 whether it was reasonable for the midwives to interpret these two CTGs as 'reassuring' (normal). In relation to the first CTG, Adviser 1 agreed that there was a deceleration at 09:08, followed by a period of reduced variability. Adviser 1 considered the CTG was normal from about 09:24, and said it was likely the midwife was reassured by this part of the CTG (resulting in the overall assessment of 'normal'). Adviser 1 considered the midwife's actions in relation to this CTG were reasonable, given that Mrs C was reviewed by a doctor prior to discharge and the notes showed they was feeling a lot of fetal movements at this time.

40. In relation to the second CTG, Adviser 1 noted that the midwife kept the CTG in place for a slightly longer time, as they identified there was some loss of contact (thought to be due to Mrs C moving). Adviser 1 said it would have been good practice to repeat this CTG after about an hour (due to the loss of contact). However, Adviser 1 noted that the midwife did refer the CTG to the consultant, which was appropriate (and the consultant then assessed the CTG to be normal).

41. As Adviser 2 was no longer available, my complaints reviewer requested further advice from another obstetrics and gynaecology adviser (Adviser 3). My complaints reviewer asked whether it was reasonable for obstetrics staff to accept these two CTGs as reassuring (as assessed by the midwives), or whether the abnormalities outlined by Adviser 2 should have been identified by the medical staff.

42. In relation to the first CTG, Adviser 3 said that, although there was a consultant ward round following this, there was no mention of medical staff actually reviewing the CTG prior to discharging Mrs C (so it is possible that the midwife was the only person to review this). Adviser 3 agreed with Adviser 2 that this CTG had a deceleration at 09:08, following a period of no accelerations, and was, therefore, abnormal. Adviser 3 considered this meant there was a missed opportunity to repeat the CTG or consider earlier induction at this time. Adviser 3 considered the consultant should have reviewed the CTG and identified it as abnormal at this stage.

43. In relation to the second CTG, Adviser 3 agreed with Adviser 2's interpretation that this CTG was abnormal for an antenatal CTG, in view of Mrs C's clinical background. Adviser 3 noted that, in this case, the consultant reviewed the CTG and reported it as normal. Adviser 3 considered the consultant should have identified possible concerns with the CTG at this stage.

44. Overall, Adviser 3 considered the failure to identify these CTGs as abnormal was unreasonable.

Medical advice - Concerns about fetal movement

45. My complaints reviewer noted that Mr and Mrs C disagreed with the Board about when concerns about fetal movements were raised: Mrs C said she had consistently raised concerns about this, whereas the Board said Mrs C first raised concerns at the review at 38+4 weeks. Adviser 2 said there was nothing

in the clinical records regarding concerns about fetal movements prior to the appointment at 38+4 weeks. Adviser 2 acknowledged that this did not mean concerns were not raised, but simply that nothing was recorded in the records. Adviser 2 observed that the records did include some comments about fetal movements prior to this time, indicating that fetal movements were felt on several occasions.

Medical advice - Response to high blood pressure

46. My complaints reviewer asked Adviser 2 to comment on Mr and Mrs C's concern that staff responded inconsistently to Mrs C's high blood pressure (at times taking this seriously and at times not). In particular, Mr and Mrs C said Mrs C was discharged from hospital at 38+2 weeks with blood pressure 141/99 (whereas she had previously been admitted to hospital with a similar reading of 145/100).

47. Adviser 2 referred to the NICE Guideline, which recommends that women with gestational hypertension and a blood pressure of between 140/90 and 149/99 do not need admission to hospital, whereas women with the same blood pressure with pre-eclampsia do need admission. Adviser 2 said that, if Mrs C's diagnosis had been clarified, this would have made it clear whether or not admission was appropriate.

Medical advice - Overall comments

48. Adviser 2 noted that, when considering stillbirth, it is almost always the case that the outcome could have been different if the baby had been delivered earlier. Adviser 2 acknowledged that clinical decisions are made without the benefit of hindsight, and it is important to consider whether staff could reasonably have anticipated that the baby was at risk of stillbirth. In this case, Adviser 2 considered there was a missed opportunity to clarify whether Mrs C had gestational hypertension or pre-eclampsia (by quantifying her proteinuria), which would have been important for her management. Adviser 2 considered there was also a missed opportunity at 38+4 weeks to deliver Mr and Mrs C's baby earlier when CTGs showed decelerations (and in view of Mrs C's risk factors of high blood pressure, slowing of fetal growth and reported reduced fetal movements).

49. Adviser 2 noted that the Board have now updated their guideline for assessing proteinuria, in line with the NICE Guideline.

Medical advice - Midwifery care

50. My complaints reviewer asked Adviser 1 whether the midwives involved in Mr and Mrs C's care appropriately monitored Mr and Mrs C's signs and symptoms, including escalating concerns to medical staff where necessary. Adviser 1 noted that concerns were escalated for medical review on several occasions throughout the last two months of Mrs C's pregnancy, including concerns about raised blood pressure and proteinuria. Adviser 1 considered the clinical notes showed the midwives undertook appropriate observations, followed the documented medical plans, and appropriately escalated concerns for medical review on all occasions. However, Adviser 1 recommended that the Board may wish to consider a review of their CTG training, to ensure that all members of staff have attended multi-disciplinary CTG training within the last 12 months.

(a) Decision

51. I have set out above the clinical advice received about Mrs C's obstetric care, and I accept this advice. I am critical that the Board failed to conduct further tests of Mrs C's proteinuria, to clarify her diagnosis (between hypertension and pre-eclampsia). I note that the Board's local guidance about this was not in line with national guidance (the NICE Guideline), and I consider this contributed to the decision not to conduct further tests.

52. I am also critical that staff assessed two CTGs as 'reassuring', when the advice I have received is that these CTGs contained anomalies that should have prompted concerns about Mr and Mrs C's baby's wellbeing (and an earlier induction).

53. In view of these failings, I uphold this complaint.

54. Both the advisers and the Board agree that an earlier delivery date could have changed the tragic outcome in this case. Mr and Mrs C have described how devastated they were at the loss of their baby, particularly as they have been trying to start a family for some time. Mr and Mrs C said this was 'only made worse' by the fact that they feel their baby's death was completely avoidable. I cannot begin to imagine how difficult this experience must have been for Mr and Mrs C and their continued grief at the loss of their baby and I hope that my decision will help to bring Mr and Mrs C some small measure of closure.

55. While the Board have now updated their guidance in line with the NICE Guideline, I have also recommended that the Board apologise to Mr and Mrs C for the failings we found; that they ensure staff have adequate CTG training; and that they feed back my findings to the staff involved in this case. All of my recommendations for action by Fife NHS Board are at the end of this report.

Comments on the Board's complaint response

56. I am deeply concerned that, while the Board identified some of these failings in their own review, they were not shared openly with Mr and Mrs C. The Board's complaint response did not summarise or attach the REI review findings, and the letter itself indicated that the care provided was appropriate (without acknowledging the concerns identified through their REI review process).

57. It appears from the Board's complaint file that this was due to poor handling of the complaint response, rather than any intent to withhold the REI review findings. The internal correspondence shows the REI review was prompted part-way through the complaint investigation, when the Head of Midwifery/Nursing reviewed the draft response to Mr and Mrs C's complaint and requested a multi-disciplinary REI review because they had some concerns about the case.

58. The correspondence shows that the Board initially intended to share the results of the REI review with their complaint response. However, once the REI review was completed the Board decided instead to invite Mr and Mrs C to discuss the REI review with them, as staff felt the findings should be shared in a context where support was available to respond to Mr and Mrs C's questions. This approach might have been reasonable, had it been properly handled.

59. By this stage the complaint response had already been drafted by the patient relations team, using input from the staff involved in Mrs C's care. While some further revisions were made, it does not appear that any staff member cross-checked the findings of the REI review with the complaint response for consistency; rather, the invitation to discuss the REI review was simply inserted into the letter alongside the existing content. Furthermore, the Board did not follow up on their offer to share the contents of the REI review when Mr and Mrs C did not accept their invitation. Thus the only response they gave to Mr and Mrs C's complaint did not reflect the REI review they had conducted.

60. I am critical of the Board in having processes which allowed a complaint response to be issued without ensuring this was consistent with their own REI review findings, and that they did not share the REI review findings with Mr and Mrs C (although this had always been their intention). I have recommended that the Board amend their processes to avoid this situation in future.

(b) Midwives failed to provide adequate care by failing to take Mrs C's blood pressure overnight during her hospital admission

Concerns raised by Mr and Mrs C

61. Mr and Mrs C said Mrs C was admitted to hospital at 38+2 weeks so that her blood pressure could be monitored, but no blood pressure readings were taken between about midnight and 08:45 the next morning.

The Board's response

62. In response to Mr and Mrs C's complaint, the Board said it was documented in Mrs C's records that her blood pressure was checked at 20:20 and at 00:10, and these readings were reassuring. They said it was, therefore, not necessary to wake Mrs C at 04:00 to re-check her blood pressure (instead allowing her to obtain a full night's rest).

63. In response to SPSO's enquiries, the Board said the In-patient Maternity Manager had planned sessions to re-educate staff on the importance of following agreed management plans, and would also carry out a reflective session with the midwife involved in this case.

Medical advice

64. Adviser 1 noted that Mrs C was admitted for monitoring of her blood pressure, and the registrar instructed the midwives to notify medical staff if her blood pressure rose about 150/90. Mrs C's blood pressure was checked at 16:50, and was found to be 146/90. The midwife then, appropriately, planned to check it again in 30 minutes, when it was found to be 146/99. As this was above the threshold set by the registrar, the midwife informed the registrar (who was then in theatre) and commenced a CTG in the meantime. At 20:15 the midwife checked the blood pressure again (158/98), and was instructed by medical staff to give 10 grams of nifedipine (a medication to treat high blood pressure). The registrar reviewed Mrs C at 20:35 and made a plan to give her nifedipine twice daily.

65. Her blood pressure was then re-checked by the midwife at 22:30 (135/92) and at 00:10 (139/86), with the results well within the limits for escalation to the medical team. While the blood pressure was due to be checked at 04:00, staff documented that Mrs C was sleeping. Given that her blood pressure had settled from the nifedipine, Adviser 1 considered it was reasonable for staff to leave Mrs C sleeping, rather than waking her to take a further reading. Adviser 1 noted that Mrs C's blood pressure was checked again at 08:45 and found to be 138/89; again, well below the threshold for referral to the medical team.

66. Adviser 1 noted the actions proposed by the Board to ensure management plans are followed in future (to carry out a reflective session with the midwife involved, and to re-educate staff on the importance of following agreed management plans). Adviser 1 considered this was an appropriate response to Mr and Mrs C's complaint.

(b) Decision

67. I appreciate Mr and Mrs C's concern that Mrs C was admitted hospital for regular checking of her blood pressure, yet one of the regular checks was not carried out. However, the advice I have received is that the decision not to carry out this check was reasonable in all the circumstances, considering that Mrs C was sleeping, and that medication had been given to reduce her blood pressure, which appeared to be working. I accept this advice, and I do not uphold this complaint.

(c) The Board failed to provide an adequate level of continuity of care to Mrs C

Concerns raised by Mr and Mrs C

68. Mr and Mrs C said there was very little continuity of care, with several consultants, midwives and registrars involved and seemingly no-one taking overall charge of Mrs C's care.

The Board's response

69. The Board's response to Mr and Mrs C's complaint did not comment on the continuity of care. However, the REI review agreed that there was a lack of continuity of care from the onset of Mrs C's hypertension to the time of delivery. The REI review noted that, from 33 weeks, there were 16 episodes of care involving four different departments (community care, the antenatal clinic, the Maternity Assessment Unit and the maternity ward). The REI review noted that

the nature of providing a 24 hour service across several departments makes it very difficult to provide continuity, and while a consultant usually has overall responsibility, it cannot be guaranteed that the same consultant will be available on each occasion due to clinical commitments, on-call rotas and time off.

Medical advice

70. Adviser 2 considered the Board's comments in relation to continuity of care were reasonable, and reflected medical working patterns in the NHS. Adviser 2 agreed with the Board that the consultant has overall responsibility, but cannot always be personally present.

71. Adviser 2 noted that the Board had made a number of recommendations about improving the layout of records, and considered these were appropriate for ensuring that, even where continuity of care (by the same doctor) was not possible, each new person reviewing a patient would have access to all relevant information. Adviser 2 suggested that the Board could also consider how often women undergoing surveillance for high blood pressure are booked to see their own consultant (for example, in an antenatal clinic), so that decisions could be made with more continuity.

(c) Decision

72. The Board have acknowledged that there was a lack of continuity in the clinicians involved in Mrs C's care. However, they considered this was due to the practical considerations of providing a 24 hour service across several departments. The advice I have received supports the Board's explanation of this.

73. I acknowledge that continuity of care could have been better in this case, and I appreciate Mr and Mrs C's concerns about this. However, I do not consider the standard of service provided was unreasonable in this regard. Therefore, I do not uphold this complaint.

74. The Board have identified ways of improving the layout of their records to mitigate the lack of continuity in clinicians making decisions about the care of patients in Mrs C's position. I have asked them to provide evidence that these improvements have been put in place, and I hope this will give Mr and Mrs C some reassurance that the Board has reflected on their concerns and will draw on this to improve the care for future patients. All of my recommendations and feedback for the Board are set out at the end of this report.

(d) The Board failed to conduct a timely investigation into what happened, and Mr and Mrs C were not given the opportunity to input into the investigation

Concerns raised by Mr and Mrs C

75. Mr and Mrs C were concerned that no investigation seemed to have taken place into their baby's death prior to being prompted by their complaint. Mr and Mrs C considered it unreasonable that an investigation was not automatically triggered in circumstances where their baby's death was avoidable (and the post-mortem examination showed their baby was otherwise healthy). Mr and Mrs C were also disappointed that their voice was not heard in the investigation that took place.

The Board's response

76. My complaints reviewer asked the Board for more information on the REI review carried out, and when this was prompted. The Board explained that all stillbirths are reviewed shortly after delivery, with details recorded on their audit system. They are then reviewed again at a perinatal meeting (which can be up to 12 weeks after delivery, to allow for any post-mortem or other investigation results to be available). The Board said that a routine review of this case was carried out; however, when Mr and Mrs C submitted their complaint, the information obtained from the review was transferred into the REI format, to ensure all the points raised in the complaint were captured.

77. I asked the Board for copies of the reviews, as the clinical records they had given us only contained the REI review. The Board provided a copy of one review carried out in this case (a supervisory review undertaken by a midwife, which did not comment on the medical management). The Board could not provide any further evidence of the routine reviews, as they said this was embedded in the REI document when it was created (following Mr and Mrs C's complaint), leaving them unable to evidence the timeline around this. The Board provided evidence that the clinical notes were accessed by the Clinical Risk Midwife about five weeks after Mrs C's stillbirth, and explained that this would have been to commence the timeline for the (second) routine review. The Board said this issue had been discussed by the Senior Management Team within Midwifery, who were revisiting the process in light of this.

78. I asked if there were any criteria or guidelines about when and how to complete an REI review. The Board explained that there were no specific

criteria for an REI and this case did not meet the criteria for a significant adverse event review (which would be the relevant guideline).

Medical advice

79. My complaints reviewer noted Mr and Mrs C's concerns about the REI review, and asked Adviser 2 if the reviews carried out in this case were reasonable. Adviser 2 noted that the REI review was undertaken by a multi-disciplinary team, and included a detailed timeline of care, analysis of the important issues, and an action plan for carrying out the REI review recommendations. Adviser 2 considered this was reasonable and appropriate.

80. In relation to whether Mr and Mrs C should have been involved in the review, Adviser 2 referred to Scottish guidance: Learning from adverse events through reporting and review: A national framework for Scotland (2015), which indicates that patients and families should be involved in reviews. My complaints reviewer noted that the reviews undertaken in this case were not 'adverse event reviews' (as the Board had advised that this case had not met their criteria for a significant adverse event review). Rather, the Board had carried out routine perinatal reviews, followed by a further review (prompted by Mr and Mrs C's complaint and entered onto the REI tool).

81. My complaints reviewer asked Adviser 3 to clarify whether the guidance referred to by Adviser 2 applied to this case, and whether Mr and Mrs C should have been involved in the REI review process. While Adviser 3 considered it would have been good practice to involve Mr and Mrs C in the review, they did not consider the Board acted unreasonably in failing to do so (as there was no specific guidance requiring this). However, they suggested the Board may wish to review its guidance about reviews, to ensure that families who wished to meet with reviewers could do so, in order to better manage and resolve complaints.

82. Adviser 3 agreed with Adviser 2 that the way the REI review was carried out was appropriate, although they considered the REI review should have identified the concerns they found with the CTGs.

(d) Decision

83. Mr and Mrs C complained that no investigation was carried out into their baby's stillbirth until their complaint prompted this. However, the information provided by the Board is that routine reviews are carried out for all stillbirths.

The Board said this process had begun in this case, before the complaint was received (although they were not able to provide complete documentation to evidence this, as some of the documentation had been transferred to the later REI review). On balance, I accept the Board's evidence that routine investigations were underway when Mr and Mrs C brought their complaint (although I am critical that the Board did not keep documentation from each of the reviews, to ensure that they could fully evidence this process).

84. Mr and Mrs C were also disappointed that the Board did not involve them in the REI review carried out in response to their complaint. The advice I have received is that there was no specific requirement for the Board to involve Mr and Mrs C in this REI review (as this was a local REI review, rather than a significant adverse event review), although Adviser 3 considered the Board may wish to review their guidance about this, to ensure that families who wish to be involved in a review have the opportunity to do so. On balance, I am satisfied that there was no requirement for the Board to involve Mr and Mrs C in the REI review (although this would have been better practice). I also note that the REI review took into account the specific concerns Mr and Mrs C raised in their complaint (and commented on each of these points).

85. For the reasons set out above, I do not uphold this complaint.

86. Although I do not uphold this complaint, I am deeply concerned that the results of the Board's REI review were not shared openly with Mr and Mrs C (as noted under complaint one). I have drawn the Board's attention to Adviser 3's suggestion that they may wish to reconsider how they involve families in these kinds of reviews.

87. I am also concerned that the Board's REI review did not identify that two CTGs had been incorrectly interpreted as 'reassuring' (the REI review accepted the midwife's explanation of the second CTG, and did not identify any concerns with the first CTG). I consider the Board missed an opportunity to identify all of the learning from Mr and Mrs C's complaint, and I have recommended that our findings should be fed back to the clinicians involved (including those involved in the review). All of my recommendations and feedback for the Board are at the end of this letter.

(e) The Board acted unreasonably by failing to provide Mr and Mrs C with adequate information regarding NHS bereavement services for parents

Concerns raised by Mr and Mrs C

88. Mr and Mrs C said the Board did not provide any further contact or support (aside from a minimum level of home midwife visits). They said they were given the contact details for the Stillbirth and Neonatal Death Charity (SANDs), but they were not informed how to contact a bereavement midwife.

The Board's response

89. The Board noted that this issue had not been raised in Mr and Mrs C's original complaint to them. However, in response to our enquiries, the Board said the stillbirth checklist in the medical notes indicated they offered Mr and Mrs C a chaplaincy service. They also said that a dedicated bereavement midwife was not available at the time of these events and a business proposal has now been submitted for consideration of this post.

Medical advice

90. Adviser 1 said the clinical records show Mrs C was offered contact with the chaplain (which she wished to think about) and was also given the contact details for SANDs. Mrs C was also seen at home by her community midwife for the first seven days following the stillbirth, and then again on day nine. Adviser 1 explained that this was a high number of postnatal visits, as usually a midwife might only make three visits in the first ten days (although visits are always planned according to the needs of the woman). Adviser 1 said the clinical records indicate Mrs C declined a health visitor visit.

91. Adviser 1 also said there is no indication that Mr and Mrs C received any specialist bereavement support from the Board, which may have helped them through the first difficult days and weeks of losing their baby. Adviser 1 noted that it is good practice for maternity units to have access to at least one member of staff who has specialist knowledge and training in bereavement care, and many maternity units currently have such a midwife in place. Adviser 1 clarified that, while it was not a failing in care for the Board not to provide this, this is something the Board should seriously consider in order to appropriately support women who suffer stillbirth and neonatal death in the future.

(e) Decision

92. Mr and Mrs C considered the Board should have offered them more information about NHS bereavement services, following the loss of their baby. In particular, Mr and Mrs C were concerned that the Board did not give them the contact details of a bereavement midwife to support them through this time. The Board have explained that they did not have a bereavement midwife in post at the time of the events, although they are currently considering a business proposal to create this role.

93. While I acknowledge fully the importance of bereavement support, and I recognise how difficult this time must have been for Mr and Mrs C, what I have had to consider is whether the failure to provide a specialist bereavement midwife amounted to a failing in care. The advice I have received is that the lack of a bereavement midwife did not amount to an unreasonable standard of care (although it would have been better practice for the Board to provide this). I accept this advice, and I do not uphold this complaint.

94. I will bring Adviser 1's comments about the desirability of specialist bereavement support to the Board's attention.

Recommendations

What we are asking the Board to do for Mr and Mrs C:

Complaint number	What we found	What the organisation should do	Evidence SPSO needs to check that this has happened and the deadline
(a)	The Board failed to conduct further tests to clarify Mrs C's diagnosis; and failed to recognise abnormalities on two CTG recordings	Provide Mr and Mrs C with a written apology that meets the SPSO guidelines on making an apology available at https://www.spso.org.uk/leaflets-and-guidance	Copy of apology letter. By: 16 August 2017

We are asking the Board to improve the way they do things:

Complaint number	What we found	What should change	Evidence SPSO needs to check that this has happened and deadline
(a)	The Board failed to recognise abnormalities on two CTG recordings	Staff should competent and confident in interpreting CTGs, taking into account the clinical background of the case	Evidence that the Board has reviewed midwifery and obstetrics staff competence in conducting CTG, delivered appropriate training and development, and has a plan to ensure this is kept up to date By: 11 October 2017
(a)	The Board's complaint investigation did not identify all the failings in Mrs C's care	Clinical staff involved in Mrs C's care and in the complaint investigation should reflect on and learn from the findings of this report	Evidence that my findings have been shared, with appropriate support, with staff involved in Mrs C's care and in the REI review By: 16 August 2017

Complaint number	What we found	What should change	Evidence SPSO needs to check that this has happened and deadline
(a)	The Board's complaint response did not include the information and findings from their review	Where a clinical review is undertaken as part of a complaint investigation, the complaint response should include the findings of the review	Documentary evidence that the Board has processes in place to ensure someone involved in the review writes or reviews any complaint response By: 11 October 2017

Evidence of action already taken

The Board told us they had already taken action to fix the problem. We will ask them for evidence that this has happened:

Complaint number	What we found	What the organisation say they have done	Evidence SPSO needs to check that this has happened and deadline
(c)	The Board found the layout of maternity records could be improved to ensure key information is easily accessible to all clinical staff	Improve the layout of records, including by: using the MEWS chart for out-patient care in women with high risk; and developing a blood results summary sheet	Evidence that the changes in record layout have been implemented By: 11 October 2017

Feedback

Complaints handling: It was good practice by the Head of Midwifery/Nursing to escalate this complaint for a multi-disciplinary review (due to her concerns about the draft complaint response). However, the results of the review were not reflected in the final complaint response, and were never provided to the family (other than an offer to meet and discuss the results, which was not followed up when the family did not get in contact). If the Board had shared the REI review results and made appropriate apologies, this complaint might have been resolved earlier.

Response to SPSO investigation: The Board responded promptly to our enquiries.

Points to note: The professional advisers raised several points for the Board's consideration:

- In relation to continuity of care, Adviser 2 suggested the Board could consider how often women undergoing surveillance for high blood pressure are booked to see their own consultant (for example, in an antenatal clinic), so that decisions could be made with more continuity.
- In relation to the REI review, Adviser 3 suggested the Board may wish to review their guidance on clinical reviews prompted by complaint investigations, to ensure that families who wish to be involved in a review have this opportunity.
- In relation to support following a stillbirth, Adviser 1 said it is good practice for maternity units to have at least one member of staff who has specialist knowledge and training in bereavement care, and recommended that the Board should seriously consider and agree the business proposal for a bereavement midwife.

95. The Board have accepted the recommendations. The Board are asked to inform us of the steps that have been taken to implement these recommendations by the date specified. We will expect evidence (including supporting documentation) that appropriate action has been taken before we can confirm that the recommendations have been implemented.

Annex 1

Explanation of abbreviations used

Mr and Mrs C	the complainants
the Board	Fife NHS Board
Adviser 1	a midwife who gave independent advice on this case
Adviser 2	a consultant in obstetrics and gynaecology who gave advice on this case
Adviser 3	a consultant in obstetrics and gynaecology who gave advice on this case
CTG	cardiotocography recording
NICE	National Institute for Health and Care Excellence
Doctor 1	a consultant obstetrician and gynaecologist involved in Mrs C's care
REI	Rapid Events Investigation
MEWS	Modified Early Warning Score
Doctor 2	a consultant obstetrician and gynaecologist involved in Mrs C's care
RCOG	Royal College of Obstetricians and Gynaecologists
SANDs	Stillbirth and Neonatal Death Charity

Annex 2

Glossary of terms

cardiotocography (CTG)	a way of recording the fetal heartbeat and any uterine contractions, using a special machine
gestational hypertension	high blood pressure in pregnancy
Monitoring and Early Warning Scoring (MEWS) chart	a chart for monitoring key signs and observations, usually used for inpatients
pre-eclampsia	a condition that can affect pregnant women, particularly during the second half of pregnancy, which can lead to serious complications for both mother and baby
proteinuria	levels of protein in the urine

Annex 3

List of legislation and policies considered

Green Top Guideline 31: The Investigation and Management of the Small for Gestational Age Foetus, 2014 (the RCOG Guideline)

Healthcare Improvement Scotland, Learning from adverse events through reporting and review: A national framework for Scotland (2015)

NICE Clinical Guideline 107 (2010): Hypertension in pregnancy, diagnosis and management ('the NICE Guideline')

NHS Fife Clinical Guidance Document: Management of Pregnancy Induced Hypertension, March 2011 ('the 2011 Guidelines')

NHS Fife Clinical Guidance Document: Hypertension, Pre-eclampsia and Eclampsia, December 2016 ('the 2016 Guidelines')