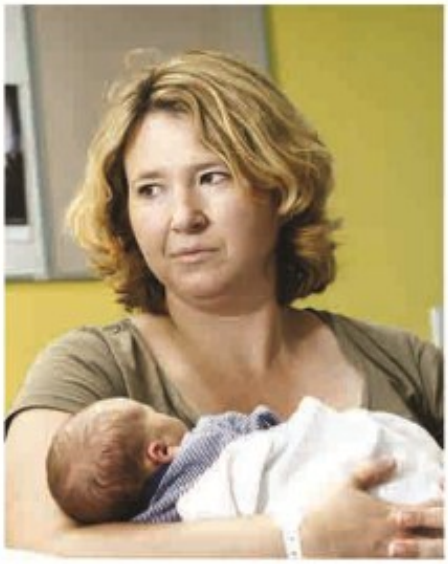
NHS England

Peer Review of Colchester Hospital University Foundation Trust Maternity Services

July 2014



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East of England Strategic Clinical Network –

Maternity, Newborn, Children and Young People.

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1. EXECUTIVE SUMMARY

1.1. A Peer Review of the Maternity Services at Colchester Hospital University Foundation Trust (CHUFT) was jointly commissioned in March, 2014 by the Trust and North East Essex Clinical Commissioning Group (NEE CCG).

1.2. The main purpose was to assess the opportunities for improvement and support the Trust in improving maternity services for women and assess the viability to continue to provide intra-partum care on three sites.

1.3. The Peer Review was undertaken by a team facilitated by the Strategic Clinical Network of the East of England.

1.4. The Peer Review Team (PRT) spent two days in the Trust on the 3-4 June 2014, interviewing key management, clinical staff, and key stakeholders including women.

1.5. The Trust has been the subject of a number of reviews of its maternity services and now needs to use the learning from these reviews to ensure improvement and a reduction in serious incidents.

1.6. Births at CHUFT have risen gradually over the last decade from 3,298 in 2002-03 to 3,926 in 2013-14 (19% v national 21%) in keeping with the national trend is now levelling again.

1.7. A longer term review of strategic capacity is required across the health system to ensure a safe and sustainable service now and for the future. This needs to be done in conjunction with the rest of Essex to understand the greater demographic need and projections around the whole population and catchment.

1.8. Significant investment by the Trust in the last year has resulted in improved levels of midwifery staff and a recently appointed Consultant Obstetrician but a more formal annual review of staffing is required to ensure the resources match the clinical activity and acuity.

1.9. The current midwife-to birth ratio is currently 1:30 and therefore not compliant with the RCOG standards within Safer Childbirth; the need to cover three sites also compounds this and has led to the closure of the units. However it is above the East of England average of 1:39 but below the England average of 1:29.5.

1.10. The number of women giving birth at the two free standing Midwifery Led Birth Units is small and there are insufficient births to warrant a 24/7 day service.

1.11. An urgent review of the midwifery staffing model should be undertaken along with a review of the clinical pathways, patient information, escalation and communication and quality and governance of these centres. This should be done with engagement from commissioners, support services (such as Ambulance) and local women.

1.12. The Trust needs to review its risk management structures and clinical governance within the service. There is much good practice but the Maternity Dashboard needs a review and refresh to ensure its contents are acted upon and continuous improvements are made.

1.13. There are a number of other considerations that the Trust should consider as a result of the Peer Review to ensure that the Maternity Services are safe and sustainable.
1.14. The CHUFT and NEE CCG Boards need to be assured through this process that the maternity services are safe and the boards need to ensure that they have sight of outcomes as well as performance.
1.15. The recommendation by the RCOG review of ensuring the delivery suite is supported by a supernumerary Senior Midwife (band 7) needs to be acted upon immediately and audited to ensure compliance. This has important safety benefits enabling an overall view of clinical activity to be constantly evaluated. This is the only major concern noted and requires immediate action.
1.16. Much good practice was seen by the PRT and the enthusiasm and commitment to woman and families is to be commended.

2. TERMS OF REFERENCE

2.1. The maternity services quality review project group is a collaboration of leaders from CHUFT Division of Women and Children services and NEECCG. The group is chaired by NEECCG Director of Nursing and Clinical quality. The responsibility of the group is to assess the safety and quality of the commissioned maternity services provided by CHUFT and to provide assurance to both the organisations boards about the governance framework. This included clinical pathways, staffing, escalation, communication, clinical outcomes as well as the views of stakeholders and service users (appendix1).

A project initiation document was formulated by the CCG Commissioning Manager for maternity and agreed by the Project group, which jointly commissioned the overarching review involving external experts and utilising key lines of enquiry that reflected the emerging themes.

3. BACKGROUND AND OVERVIEW

3.1. In March 2014 Colchester Hospital University Foundation Trust (CHUFT) closed the Tendring Peninsula Midwifery Led Units (MLU's).
3.2. The CCG was advised by CHUFT that the closure was due to ongoing issues with Midwifery staffing across the whole Maternity service at the Trust.
3.3. The CCG had also raised concerns over an increasing number of Serious Incidents (SIs) which prompted the NEE CCG Commissioner for Maternity Services to undertake a thematic analysis, which included recommendations made by the Royal College of Obstetricians and Gynaecologists (RCOG) review in October 2012.
3.4. The RCOG review assessed the Trust against the 30 standards outlined in the professional standards document Standards for Maternity Care (2008). This brings together 817 standards across the whole pathway of care.
3.5. This review made a number of recommendations, some of which are still to be implemented by the Trust.

3.6. The CHUFT Board and NEE CCG agreed that a review of the Maternity services across the Trust would provide an opportunity to look for a longer term sustainable solution to the maternity services within North East Essex that would support high quality, safe and sustainable options for women giving birth.

3.7. The CCG and CHUFT agreed to collaborate, as part of the review, by setting up a joint Project group which had clear terms of reference. The Project group was overseen by the Project Board, which included CEO representation from both CHUFT and NEE CCG would report to each organisation's Board and provide a direction of travel for the service.

3.8. The Project group worked with the East of England Strategic Clinical Network for Maternity, Newborn, Children and Young People (SCN) to appoint a small Peer Review Team (PRT*) (appendix 2).*

3.9. The PRT visited the Trust 3-4 June 2014, following a review of a number of key documents and review of national documents *(appendix 3).*

3.10. The PRT used Key Lines of Enquiry (KLOE) to support the peer review and concentrated on the following themes *(appendix 4)* following discussion with the Trust and Commissioners:

- Governance – Clinical;
- Operational Efficacy;
- Professional Leadership.

3.11. It was agreed by the Project group that the review would be supportive and look for key areas of strong practice and where opportunities for improvement can be achieved. The initial headlines from the review would then be presented by the PRT at the end of the visit, with the first draft report being made available to the Project Board by 24 June 2014.

4. NATIONAL CONTEXT

4.1. In the report to the Health Select Committee it was noted that "The vast majority of women have good outcomes from NHS maternity services and most rate the care they receive as excellent or very good. However, performance and outcomes could be much better. The rate of stillbirths and babies dying within seven days of birth is higher in England than in the other UK nations, there is significant variability in the quality of care between Trusts, and there are persistent inequalities in the experiences of different groups of women. When NHS maternity care goes wrong, the impact can be devastating for those affected and costly for the taxpayer. Nearly a fifth of spending on maternity services is for clinical negligence cover.

4.2. Having a baby is the most common reason for admission to hospital in England. Births are getting more complex and the proportion of deliveries requiring intervention has increased over the last ten years. This is due to increasing levels of obesity and more women over the age of 40 giving birth (i) Despite this, birth remains for most women a normal physiological event and most can be cared for by Midwives who have a statutory role in ensuring a safe pregnancy for mum and good outcome for the foetus (ii)

4.3. Home births make up around 3% of all births each year, with about 10% of deliveries taking place in midwife-led units on the same site as the main obstetric units.

4.4. Maternity units are classified by their delivery size and required supporting infrastructure.

Full Spectrum of Options with Increasing Complexity

Pre & Post Natal Care	Standalone MLBU	Low Risk Obstetric Unit	High Risk Obstetric Unit
Staff: Midwife or obstetrician led (networked)	**Staff:** Midwifery Led	**Staff:** Midwife or obstetrician led (networked)	Staff: Obstetric consultant led with anaesthetic support and access to gynaecological surgery and ICU and midwife services
Services provided: ✓ routine ante and postnatal OP appointments, ✓ Early Pregnancy Unit	**Services Provided:** ✓ Routine ante and postnatal OP ✓ appointments; low ✓ risk births, ✓ Early ✓ Pregnancy Unit	**Services Provided:** ✓ Births low risk ✓ As previous	**Services Provided:** **Births;** antenatal and post natal care, co-located emergency gynaecology service, 24/7 emergency theatres
Births Covered : ✓ None	**Births Covered:** ✓ Low Risk	**Births Covered :** ✓ **Low Risk**	**Births:** Covered: All births
Diagnostic Support : ✓ Simple Haematological ✓ and Biochemical testing ✓ (blood) and ultrasound ✓ Early Pregnancy Unit	Diagnostic Support : As previous	Diagnostic Support : As previous	Diagnostic Support : ICU Level 2 As previous, plus interventional radiology, laboratory services including blood transfusion
ICU Requirement : **X None**	ICU Requirement : X None	ICU Requirement : XNone	ICU Requirement : ✓ Yes
Neonatal Requirements : ✓ **None**	✓ None	✓ Level 1 Special Care Baby Unit	✓ Level 2 / Local Neonatal Unit

Table 1. Models of Maternity Care

4.5. With the publication of Maternity Matters1 (DH 2007), the ‘Place of Birth’ became one of the four national choice guarantees that each maternity unit in England had to achieve compliance with.

4.6. During 2008-2009 the East of England as part of the Darzi Clinical Review ‘Towards the Best Together’ outlined that each of the 18 Maternity and Obstetric Units should look to provide MLU’s adjacent to Obstetric led units. It also set out Standards for Supervision of Midwives (2009). Both national, regional policy therefore supports the move towards normalisation and delivery as close to home as possible.

4.7. However there is recognition that for highly specialist care choice may not be in the best interests of the mother or baby and those units should where possible collaborate in networks of care to fully support safe and sustainable care.

4.8. The Place of Birth Study (2011) noted for healthy multiparous women with a low risk pregnancy there is no difference in adverse perinatal outcomes (iii) between planned births at home or in a midwife-led unit (co-located or stand-alone) compared to planned birth in an obstetrics unit.

4.9. For healthy nulliparous women with a low risk pregnancy, the risk of adverse perinatal outcomes (iv) is 75% higher for planned births at home (adjusted OR 1.75, 95% CI 1.07-2.86) compared to planned birth in an obstetrics unit; there is no corresponding increase in risk for midwife-led units.

4.10. Transfers from non-obstetric settings to obstetrics settings are relatively common and are more frequent for nulliparous women (36% to 45%) than for multiparous women (9% to 13%).

4.11. Among women who plan to give birth at home or in a midwife-led unit there is a higher likelihood of a normal birth, with less intervention (v).

4.12. The evidence about size of units and outcomes is inconclusive. Mortality is 200-300% higher for infants born in units less than 500 births/year and 40-80% higher for infants born in units less than 1,000 births/year (vi).

4.13. In a study covering 750,491 women, lower volume hospitals were not associated with higher risk of adverse outcomes in low risk pregnancies (47% of pregnancies) (vii).

4.14. There are approximately 90 standalone MLBUs in the UK some are more successful than others. Nationally standalone units are seen are often underused and some appear to be unstainable.

4.15. Over half of all standalone centres (viii) have seen falls in numbers of women giving birth over a three year period. Decline is variously attributed to:

- risk averse GPs and mothers-to-be;
- poor marketing of the units;
- Temporary closures.

4.16. Standalone MLU’s typically manage to retain 10% of delivery volumes. While there is no agreed level at which a midwife-led unit is viable, the Royal College of Midwives states that units with fewer than 300 births a year (i.e. less than 1 baby per day) are unlikely to break even if they are fully staffed around the clock.

5. WORKFORCE

5.1. Both Obstetric and Midwifery workforce remains the biggest single issue for most maternity units. More than half of obstetric units are unable to consistently provide the right amount of consultant cover (ix).

5.2. “Although births in England increased by over 21% between 2001 and 2010, the number of midwives only increased by around 15%, from 18,048 to 20,790.”Care Quality Commission, June 2012.

5.3. In its evidence to the pay review body in 2011, the Royal College of Midwives stated that nationally, a shortage of midwives means that no region is able to meet the recommended ratio of births to midwives (x).

5.4. Despite support from the previous Strategic Health Authority (SHA) and initiatives from Health Education England (HEE); numbers of Midwives per birth ratio are well below the national requirement of 29.5 midwives to births at 37.9 in the east of England.

5.5. It is also clear that supporting women with levels of choice available in practice is restricted when maternity units have to be closed for short periods to safeguard the quality and safety of care when demand might outstrip capacity. Over a quarter of maternity units had to close to admissions for half a day or more between April and September 2012. The main reported reason for these closures was a lack of either physical capacity or midwives.

5.6. To meet the RCOG Standards for consultant presence on the labour wards for small to medium sized units require 60 hours of consultant presence a week and for units delivering over 4,000 births it rises to 168 hours per week.

6. CHUFT MATERNITY SERVICES

6.1. Colchester Hospital University Foundation Trust is a District General Hospital within which the Maternity services sit.

6.2. There are approximately 4,100 births annually across the service, which include the two free standing MLU’s at Harwich and Clacton, which operate a 24/7 service. At the time of the review, CHUFT maternity services were not offering women the option to birth at the MLU’s at these sites.

6.3. The service on the main hospital site at Colchester comprises of a Consultant Obstetric Unit with a Co-located Midwifery Led Unit.

7. KEY LINES OF ENQUIRY FINDINGS

7.1. The two day visit was facilitated through 6 sessions and each KLOE was led by one of the PRT.

7.2. The PRT also reviewed a number of key documents and guidelines to aid their discussions with members of the teams.

7.3. There arose a number of recurrent themes throughout the two days which were prevalent throughout the KLOE:

7.3.1. Leadership and Structure;
7.3.2. Relationships;
7.3.3. Midwifery Led Birthing Units and;
7.3.4. Management of Change.

7.4. CHUFT Maternity services achieved Level 2 NHS Litigation Authority (NHS LA) Clinical Negligence Scheme for Trusts (CNST) when last assessed in 2012.
7.5. Overall the PRT found a committed, enthusiastic workforce, with dedicated obstetricians and midwives. There are numerous examples of good practice, and some of the considerations in this document are to support initiatives that are already underway in the department.

8. GOVERNANCE – CLINICAL

8.1. Clinical Governance within maternity units is of paramount importance and both the RCOG (2012) and Clinical Negligence Scheme for Trusts (CNST), as well as the CCG thematic analysis review of Serious Incidents (SIs), had similar themes suggesting improvements were required in this area.
8.2. The “Maternity Services Risk Strategy” (Version 11) outlines the risk management process within the maternity services at the Trust. This is currently being updated. Consideration should be given to ensuring that this reflects the new management structure of the Trust so that lines of accountability are clear to all staff.
8.3. The roles outlined in the document would benefit from clarity in the roles of the Divisional Director (DD), Clinical Obstetric Lead (COL) and the Head of Midwifery (HOM).
8.4. It is impressive that the commissioners are interested and involved in the development of maternity services at the Trust. This provides a key relationship on which to build a safe and sustainable service for the future.
8.5. At the time of the review the NEE CCG had recognised the need for a joint strategic group and this was in the progress of being set up by the CCG Commissioning Manager for maternity services. It is paramount that this approach is sustained to engender positive working relationships and a collaboration that will monitor the overall quality and outcomes of the service. However it remains the responsibility of CHUFT to ensure a “ward to board” governance framework to monitor quality and outcomes of the service it provides.
8.6. This could be improved further by considering the internal process of monitoring the Electronic DATIX reporting system to ensure that the Senior Midwife for Risk Management closely monitors the reports on DATIX, ensures they are investigated and incidents escalated where appropriate.
8.7. The investigation of DATIX should ideally be undertaken by the Ward Manager of each area or Team fostering a culture where Patient Safety is everyone’s business.
8.8. Additionally the Trust Strategy contained a section on National Screening however the Maternity Strategy did not. This should include governance arrangements for

Antenatal and Newborn Screening within the service. This will be required as part of the new Quality Assurance process of the National Antenatal and Newborn Screening Programme.

8.9. Consideration should also be given to including a monthly Maternity Governance meeting as part of the meeting structure. This would provide a greater focus on the service and facilitate discussion on how clinical outcomes could be improved and enhanced.

8.10. The team may wish to consider aligning the agenda to the three strands of quality outlined by Darzi : Clinical Effectiveness, Patient Safety and Patient Experience. This would enable the team to maintain an overall view of quality in the service or the five domains of the Outcomes Framework.

Risk Management.

Adverse Clinical Incident Reporting

8.11. Between the periods October 2012 - January 2014 the Trust have reported 60 SIs to the CCG. Many of these have recurring themes including delays on transfer, guidelines and staffing. A thematic review and analysis was undertaken by the CCG and presented to the CCG Board on the 25 March 2014.

8.12. A number of the SIs were closed at Level 0 by NEE CCG suggesting that the Trust needs to review the process of declaring when an adverse incident becomes an SI. In reviewing the Trusts “Serious Incidence Procedure” the Trust may wish to ensure that senior clinical staff from the maternity service are involved in this discussion. Their clinical expertise could assist in reducing the number of SIs that are reported to NEE CCG at Level 0.

8.13. Another reason for the larger number of SIs reported is the classification of unexpected admissions to the Neonatal Unit. The team would recommend the adoption of only reporting those term babies (greater than 37 completed weeks) who require intensive care being reported as SIs. This approach is adopted by other organisations in the East of England and nationally.

8.14. This is particularly relevant where there is no formal Transitional Care unit to which babies requiring support post birth beyond normal care are admitted. It would still be regarded as good practice to audit, perhaps quarterly, the number of lower acuity admissions to the neonatal unit.

8.15. Single cases of the more severe Hypoxic Ischaemic Encephalopathy (HIE) babies should be reviewed individually and the moderate and mild cases reviewed as cohorts with a root cause analysis tool used, thus ensuring that lessons and trends are identified. This should be then reviewed jointly with the neonatal team.

Maternity Dashboard Review

8.16. The team felt that the Trust Maternity Dashboard should be reviewed and ‘cleansed’. This is because the current performance, data and governance are all summarised. This has the potential to lead to :

- risk issues being lost within the excessive amount of data displayed;

- the dashboard loses its form and function and the ;
- potential to miss rising trends, and importantly;
- The lost opportunity to discuss quality improvement on how “red flagged” areas may be addressed.

8.17. During the review period, the NEE CCG commissioning manager for maternity services with CHUFT senior clinical leads were in discussion about the maternity dashboard. Consideration should be given to reviewing the thresholds on the dashboard as there are some excellent results for women achieving Midwifery led births at 23%. Many other units are aspiring to achieve 20% so this should be recognised as an achievement.

8.18. Recently the Strategic Clinical Network has written to all Maternity Providers recommending how Postpartum Haemorrhage (PPH) should be classified so that benchmarking across the East of England could be undertaken.

8.19. In summary it is recommended the service should consider setting up a small ‘task and finish’ group to review the Maternity Dashboard and consider :

- A separate report that summarises clinical outcomes – this would include key data on place of birth, numbers and reasons for transfers to the obstetric unit for delivery, Induction of Labour rates and reasons for induction;
- A separate report that summarises performance and access data- this should reflect the National Key Performance Indicators (KPIs) such as smoking cessation rates etc. and should be aligned to the quality schedule performance review between the Trust and Commissioners and based on outcomes improving;
- A focus on quality improvement where there is Red, Amber and Green rated issues and the formulation of a risk assessment register for those areas consistently classified as red with clarity over risk mitigation and timescales.

Postpartum Haemorrhage

8.20. The SI’s involving a PPH and the recommendations made by the RCOG in 2012 have been implemented and good progress was seen by the team; however there is no room for complacency and the PRT suggest that the service consider the use of a robust Root Cause Analysis (RCA) Tool for PPHs over 2 litres.

8.21. The Statistical Process Control (SPC) methodology could be considered, to establish the normal variance in incidence of PPH and enabling evaluation of interventions and their impact (or otherwise). http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/statistical_process_control.

8.22. This also allows for the review of Human Factors against the clinical guidelines in place.

Clinical Guidelines

8.23. This is currently the responsibility of the Delivery Suite Lead (in addition to Risk Management). There is a comprehensive guideline collection which was updated for the NHSLA visit in 2012.

8.24. A strategy for review of guidelines is in place. Guideline development occurs within a fairly small circle of individuals, and ratification takes place at the same forum (Clinical Practices Group).

8.25. The team should consider that the development and ratification process should include wide multi-disciplinary input, with midwives taking the lead where appropriate, and with support for those unfamiliar with that process. Obstetric trainees and supervisors of midwives should routinely be involved in the process. Ratification of guidelines should be at the maternity governance meeting. Guidelines to include auditable outcomes (if not already). Dissemination of guideline changes could be summarised in a document circulated to all staff at least twice a year.

8.26. Systematic review of all new publications from e.g. NICE/RCOG, could be undertaken by use of a Gap analysis (using a standardised proforma) comparing with existing guideline. This can be used to debate appropriate amendments at Guideline Group.

8.27. Feedback of the actions taken when new guidelines published from NICE should occur at the Trust wide Governance and Quality forum using standardised proforma to provide assurance that guideline is being reviewed. Any resource consequences should be taken to the management meeting.

8.28. Reinforcement of guideline content can take place, e.g. by Consultants accessing guidelines at any opportunity on ward rounds and during teaching to remind the team of the appropriate management.

Clinical Audit

8.29. Whilst there was evidence of clinical audit the service needs to develop an annual maternity audit programme.

8.30. Each audit undertaken should also have an associated action plan to inform the future audit cycle of the maternity service in order to achieve further improvement in clinical outcomes. This will also provide assurance to the board and commissioners regarding quality improvement.

Perinatal mortality & morbidity

8.31. A review of perinatal deaths was requested by the CEO of CHUFT in response to a concern raised by the NEE CCG in February 2014. The review concluded in March 2014 and covered all perinatal deaths during the period October 2013 – December 2013.

Perinatal deaths are not currently reported in a robust process to the Trust Board, and not systematically reviewed. Currently all deaths are treated as a serious incident. There was uncertainty as to which cases at the limits of viability should legitimately be included in the statistics. Cases were discussed at a perinatal meeting, but there was no formal structured review process to provide assurance to the governance meeting.

8.32. Potential perinatal morbidity cases where neonatal input would be required postnatally, e.g. for a fetal anomaly, were not discussed routinely as part of a standardised process, but more usually as ad hoc discussions sometimes at the

Delivery Suite Forum. Consultant Neonatologists have initiatives and innovations that require the backing of management.

Sharing Lessons Learnt

8.33. The staff recognised that 'closing the loop' and ensuring lessons learnt were made widely available to staff was a challenge.

8.34. Too much reliance has been placed on the Maternity Risk Newsletter to fulfil this overall purpose. This document is very lengthy and includes blocks of text with no colour or images, reducing readability. There are no checks of whether it has been read and digested by maternity service staff.

8.35. The team should consider designating a consultant ward round a 'Safety Round' at least once a week, collating any learning points (such as non-compliance with guidelines) and compiling one sheet of A4 with practice points for all staff.

Recommendations/Considerations for Clinical Governance

Category	Recommendation/Considerations*	Target Date for Completion	Responsible Officer
1.1 Risk Management/Adverse Incident Reporting	Review Maternity Risk Strategy and operational processes	September 2014	CD/CL/HOM
2.1 Maternity Dashboard	Set up task and finish group to review and operationalise	October 2014	CD
3.1 Postpartum Haemorrhage	Set up Statistical Process Control for review and audit of Post-partum Haemorrhage	October 2014	CL/HOM
4.1 Clinical Guidelines	Set up MDT review group	October 2014	CL/HOM
5.1 Audit	Develop an annual audit programme for the maternity service linked to Serious Incidents, complaints etc.	October 2014	CL/HOM
6.1 Perinatal Mortality and Morbidity	Set up formal annual review	April 2015	CD/CL/HOM
7.1 Sharing Lessons Learnt	Consider designating a consultant ward round a 'Safety Round' once a week	September 2014	CL/HOM

9. OPERATIONAL EFFICACY

Workforce

9.1. For this area the team concentrated on reviewing the workforce of both the Midwives, Consultants and supporting infrastructure.

9.2. There was much to recommend with evidence of strong commitment to the Trust and service low sickness and absence rates and clear leadership from the frontline clinical staff. This has been further strengthened by the appointment of a 9th Consultant.

9.3. There appeared to be energy and vision to support development which the Trust needs to support and harness.

9.4. The Midwifery leadership was visible and the working relationships between the Midwives and Obstetric colleagues were said to be good.

9.5. Staff were passionate about their work and confident that woman and families received excellent care. This was supported by women/ user comments to the PRT.

9.6. On visits to both Clacton and Harwich it was evident that although the recent closures had resulted in difficulties all staff had behaved in a professional manner when confronted by very disappointed and angry women. There were many examples of staff going the 'extra mile' to ensure that women were supported through this period.

9.7. Midwifery staff levels of 1:30 are not considered sustainable and it was suggested that a review of the model of staffing of the standalone MLU's should be undertaken as a matter of urgency, and before they are reopened by the Trust.

9.8. The Trust should consider commissioning Birthrate plus in 2014 to assess the current workforce requirements and review requirement for further business case to increase to 1:28 Midwives across the service. The Trust should then repeat in each subsequent year at QRT 4 the financial Birthrate Plus calculation tool to inform the annual budget setting and activity profiling process. This should also be discussed at Board level and form part of the annual Nursing Board Report on Nursing and Midwifery Staffing.

9.9. The consultant workforce is working at an extreme intensity which cannot be sustained. Their commitment to developing and working a 'Consultant of the Week' system is to be applauded.

9.10. Some consultant posts were filled with locums at present and there was no consultant in a substantive post with special interest in Maternal and Fetal Medicine with ultrasound and invasive diagnostic testing skills, although a retired colleague was providing some obstetric ultrasound on a sessional basis.

9.11. The Consultant workforce would benefit from the appointment of at least one further consultant prioritising a special interest in Fetal Medicine.

9.12. All the Obstetric Trainees spoken to by the PRT were complimentary about the experience and training they received at CHUFT. All those trainees who attended reported that they were happy with their posts, felt supported and that they were well-trained. They particularly appreciated the organisation of the on call rota such that they were always on call with the same Specialist Register, enabling a good working relationship to develop where they got to know each other well, enabling

competencies of the more junior doctor to be continuously assessed and thereby allowing more opportunities to perform supervised tasks.

Daily Operational Management of the Unit

9.13. There were clear processes for the daily operational management of the unit with clear escalation procedures in place. The unit could consider implementing the National Patient Survey Association (NPSA) Intrapartum Scorecard.

9.14. Consideration should be given to displaying the numbers of staff on duty against the expected in an area accessible to women and families. This would further support the Director of Nursing Bi- annual Board Report on Nursing and Midwifery Staffing.

Delivery Suite

9.15. It is good to see that the recommendations of the RCOG report are being implemented by the Trust, particularly through building works to the reception area. This will dramatically improve the experience for woman arriving on the delivery suite.

9.16. Currently the senior midwife (band 7) on the delivery suite is not supernumerary. It is strongly recommended that this is addressed as this will support and reduce the incidence of SI's that are due to Cardiotocograph (CTG) interpretations, escalation of concerns and delays in clinical reviews. The team consider this will be an effective intervention in reducing Intrapartum adverse incidents.

Obstetric Theatres

9.17. There were two elective caesarean section (CS) lists which had separate staffing arrangements, with 24h recovery nurses and theatre-based scrub nurses. These lists are due to return to the delivery suite area when the building work for the second theatre is complete. Two lists did not provide enough capacity for all elective CS and so others were performed by the on call staff which could lead to delays and postponements for the women, which was seen as less than ideal and regrettable for the women, as well as a potential risk.

9.18. The appointment of the new Obstetric Anaesthetic Lead was seen very positively.

9.19. There is no formal Anaesthetic Antenatal Assessment clinic; Anaesthetists do their utmost to see women when they attended Antenatal Clinic for other reasons, but this was on an *ad hoc* basis and could not be guaranteed.

9.20. There was no consistent anaesthetic assessment proforma or document used by the anaesthetists; generally a letter would be dictated and placed in their hand-held records and in a delivery suite folder. Some anaesthetists accepted referrals for Body Mass Index (BMI) greater than 40 and some used a BMI greater than 45 threshold.

9.21. Women booked for elective CS would be seen by the anaesthetist when they attended the day before surgery, which is applauded.

9.22. With the current CS rate and birth rate, a third regular weekly Elective CS list is required and a Service Level Agreement (SLA) with anaesthetics (or equivalent) to examine this and the need for an anaesthetic antenatal clinic (perhaps fortnightly) to ensure there is consistency of referral criteria for anaesthetic assessment, and documentation of management plans by anaesthetists.

Neonatal Unit

9.23. The unit appeared well organised and is part of a network of care. It is designated as a Local Neonatal Unit (Level 2) providing short term ventilation and high dependency care to babies greater than 28 weeks gestation.

9.24. It has just reached safe staffing levels as set out in the Neonatal Commissioning Toolkit (DH 2009) for nursing and medical staff. It has a community outreach nursing service to support early discharge.

9.25. It would like to develop a Transitional Care service and needs to develop a robust business case in support of this best practice. However the unit works well in supporting the maternity service.

9.26. It has some issues with its environment which are outside the scope of this review.

Safeguarding Woman and Babies

9.27. Maternity safeguarding is closely aligned to the general adult and children's teams and operates as part of the corporate quality team, which is to be commended.

9.28. There is a CHUFT Specialist Nurse for safeguarding children as well as a Senior Named Nurse and Senior named Midwife supported by a Named Doctor and a deputy. There is a proactive approach within the service for safeguarding training for all staff. The Head of Midwifery provided evidence of the training profile.

IT System/Record-Keeping

9.29. The Medway IT system had been implemented but not all groups of staff were yet able to use/access it (e.g. Anaesthetists). Project management and training had been patchy and the support for its implementation limited.

9.30. Main hospital notes were routinely accessible; it was unusual for them not to be available.

Handovers

9.31. Formal handovers took place regularly throughout the day at specified times. A 'Handover book' was compiled and details of patients were included. This remained on the delivery suite. On call staff did not have individual patient/task lists. The new Handover room being constructed was described to us as a great asset and focal point for Handovers to take place as well as for teaching, display of key learning points etc.

9.32. There is communication with the neonatal teams on a daily basis at handover and these discussions are documented.

9.33. The Situation, Background, Assessment and Recommendation (SBAR) tool is used informally and not completely consistently. There is no prompt 'sticker' or equivalent and it is not used formally in telephone discussions between obstetric staff, although trainees felt that it was used in principle.

9.34. The service should consider the use of printed patient lists for all on call staff (being mindful of Information Governance issues around these). This can be updated electronically twice daily by a designated obstetric trainee and personal copies provided for on call staff.

9.35. The SBAR tool could be used more formally, and a simple sticker could be helpful.

Data Quality

9.36. The Medway IT system had been implemented but not all groups of staff were yet able to use/access it (e.g. Anaesthetists). Project management and training had been patchy and the support for its implementation limited.

9.37. Main hospital notes were routinely accessible; it was unusual for them not to be available.

9.38. The service should consider investment in more project management support and training for the maternity IT system, to maximise its usefulness and prevent staff disengagement. This will support data accuracy, which in turn will support clinical and financial probity.

Management Structure

9.39. The PRT recognised that the Trust as an organisation has been through a turbulent period and that the new Clinical Directorate Structure within the Trust was still 'bedding down'. There was some concern expressed about the lack of a clinician in the Clinical Director role, and lack of clarity over the clinical support to this role.

9.40. The Trust Board may choose to review this in the light of key themes emerging form the review and the need to ensure that clinical leadership is supported and developed for the future.

Financial Management

9.41. The financial stewardship provided by the financial accountant is strong and they have knowledge of the clinical challenges and issues. The Cost Saving Improvement Plan has a governance framework and a quality impact assessment of all schemes is undertaken.

Midwifery Lead Units

9.42. Coastal MLU's settings are an asset to the service and very important to local users. There was anger and confusion amongst the service users when the units were closed. Community midwives from the standalone units were passionate about the service and the benefits to the local populations and keen to engage in exploring ways of reopening them.

9.43. The case-mix in one of the coastal towns was high-risk with a high level of complex cases; the need for more specialist midwife input into dealing with vulnerable women was acknowledged. There was sometimes lack of clarity regarding the degree of urgency when ambulance services were summoned for transfers.

9.44. The significant proportion of women receiving midwife-led care in all settings was commended. The high home birth rate is also excellent and would be the envy of most other services.

9.45. A project group should be formed to look at reopening the coastal units in a financially sustainable way.

9.46. Eligibility criteria should be revisited.

9.47. CHUFT and NEE CCG recognise that a specialist midwifery role would be valuable, due to the increasing numbers of women with complex care needs who are accessing maternity care. There is a need to revise and enhance the care pathways that support vulnerable women and their families across the whole service.
9.48. All stakeholders must work collaboratively in the project group so that operational and clinical pathways are revised and developed based on best practice standards endorsing safety, quality and sustainability.
9.49. When the units are reopened in a 'rebranded' form, this is an opportunity for much positive publicity, but needs to provide the women with assurances that it will remain available for predetermined period.
9.50. Ongoing thematic reviews of reasons for transfer from the MLU's to Colchester would be helpful.

Key Recommendations/Considerations for Operational Efficacy

Category	Recommendation/Considerations*	Target Date for Completion	Responsible Officer
8.1 Workforce	Implement supernumerary senior midwife (band 7) on Delivery Suite	Immediate	Clinical Director/HOM
	Birthrate Plus Review and annual calculation against activity and acuity	End of 2014	HOM/Senior Midwifery Team
	Consider need to appoint further Consultant with special interest in fetal medicine	Review November 2014	Clinical Director/Medical Director
9.1 Delivery Suite	Implement the SBAR tool on delivery suite	August 2014	Delivery Suite Clinical leads
	Consider obstetric theatre service and the implication for anaesthetics	Review September 2014	Obstetric & Anaesthetic Clinical Leads
10.1 Midwife –led birthing units	Develop a specialist midwifery role to support vulnerable women as well as integrated operational/clinical Midwife led care pathways including pathways for vulnerable women.	End of 2014	HOM/Senior midwifery team
11.1 Neonatal services	Consider Transitional Care service	Review November 2014	HOM/ Paed Matron

10. CLINICAL LEADERSHIP

10.1. The Midwifery Leadership Model within the service is well structured; however the broader structure is unwieldy and there is potential for duplication and lack of clarity over roles.

10.2. There are 10 specialist roles and a creative programme of development of the midwifery support assistant's.

10.3. There are good relationships within the medical and midwifery teams.

10.4. There is a good relationship with the NEE CCG Maternity commissioner which aids collaboration and supports a strong learning and sharing culture at a clinical level.

10.5. Changes to the Community Midwives ways of working have meant that the morale for this group of Midwives was low at time of the Peer Review. There remain significant challenges in engaging with this group as they felt 'let down' by the Trust management at a time of significant change.

10.6. However sickness and absence were low and there was a strong commitment to the woman and professional pride in their roles as Midwives.

10.7. Some staff who are long serving need support to deal with change and the rapid nature of change within the wider organisation. There needs to be some positive steps to nurture and grow leaders to support succession planning, as well as supporting more mature Midwives to deal with change.

Key Recommendations/Considerations for Professional Leadership

Category	Recommendation/considerations*	Target Date for Completion	Responsible Officer
12.1	Enhance Clinicians (Midwives& Obstetricians) leadership development opportunities	Immediate	Clinical Director/HOM
13.1	Promote a proactive culture – create opportunities for multi-professional learning and service development	End of 2014	HOM/Senior Midwifery Team Obstetric Lead
14.1	Consider the Local Supervising Officer and CHUFT Supervisor of Midwives present the Supervisory review annual report to CHUFT Board	End of 2014	Divisional Director
15.1	Enable Obstetric/midwifery leaders to visit other maternity services To observe and learn from peers	End 2014	Clinical Director/HOM
16.1	Consider appropriate change management models to effectively manage future changes at CHUFT	September 2014	Div. Director & Senior management team

11. MATERNITY SERVICE USERS

11.1. The peer review team facilitated a focus group attended by women and their partners. There was an open discussion directed by the delegates at the meeting.

The group was enthusiastic and interested in maternity care. The women in the focus group spoke very highly of their experience of antenatal care as well as their birthing experience. The approach to postnatal care was not considered to be as good.

Inter-professional communication and information sharing was considered. The suggestion being that the approach needed to be more consistent and appropriate to the individual woman's needs.

The women considered that community midwifery services need to focus on ensuring that care is appropriately prioritised and equitable for all women, based on clinical need.

12. ACKNOWLEDGEMENTS

NHS England - East of England Strategic Clinical Network would like to thank all the people at Colchester Hospital University Foundation Trust for their contribution to the supportive peer review visit.

We appreciated your open, honest and transparent responses to the review process as well as your interest and dedication to the maternity service and your willingness to support and work with us.

The Peer Review team especially thank the Maternity Services Liaison Committee members as well as the women, husbands/partners and families who willingly gave their time to share opinion and make comments about the maternity care at CHUFT.

Colchester Hospital University Foundation Trust

- Dr Sally Irvine – Chairman
- Dr Lucy Moore – Interim Chief Executive Officer
- Ms Kim Hodgson – (previous) Interim Chief Executive Officer
- Ms Amanda Hallums – Divisional Director – Women's and Children's Services
- Ms Dymphna Sexton-Bradshaw – Associate Director Operations, Women, Children & CASH Services. Head of Midwifery.
- Miss Jo Osbourne – Clinical Lead Women's Services. Consultant Obstetrician & Gynaecologist
- Ms Julia Bates – Divisional Governance Lead
- Ms Julie Hinchcliffe – Lead Midwife Delivery Suite
- Ms Lynda Pearce – Matron Children's services
- Consultant Obstetricians and medical colleagues
- Midwives and support staff from all areas of maternity services.
- Nursing & Medical Staff Neonatal unit
- Dr Angela Tillett – Divisional Director surgery
- Ms Anna Lamborne – PA to Associate Director of operations – Head of Midwifery

North East Essex Clinical Commissioning Group

- Ms Lisa Llewelyn – Director of Nursing & Clinical Quality
- Ms Louise Hagger – Commissioning Manager, maternity services & Project Manager.
- Ms Nicola Callaghan-Brown - Project Support Board
- Shane Gordon – Chief Executive Officer – Programme Board NEE CCG.

NHS England

- Ms Ruth Ashmore – Associate Director SCN – Senate, East of England
- Ms Joy Kirby – Local Supervising Authority Officer. NHS England East of England

13. APPENDICES

1. Terms of reference
2. The Peer Review Team
3. Key Documents
4. Key Lines of Enquiry

North East Essex
Clinical Commissioning Group

Appendix 1 TERMS OF REFERENCE

NEE Maternity Services Quality Review Project Group

These terms of reference were agreed by the above group on 08.04.14

Membership

Role	Name	Trust
Commissioning Manager Maternity Services & Project Manager	Louise Hagger	NEE CCG
Project Support Officer	Nicola Callaghan-Brown	NEE CCG
Divisional Director – Women's and Children's	Amanda Hallums	CHUFT
Director of Nursing & Clinical Quality	Lisa Llewellyn	NEE CCG

Programme Board:-
Shane Gordon - Chief Executive Officer, NEE CCG
Kim Hodgson – Interim Chief Executive Officer, CHUFT

Purpose of the Group and General TOR.

The Project Group is responsible for the operational delivery of the Project Initiation Document (PID) for the quality review of maternity services in North East Essex (NEE). The purpose of the group is to manage and co-ordinate the identified work to facilitate the external review.

The quality review project will be managed where possible to PRINCE2 project management principles. The process will be transparent and open and the documents made available to stakeholders upon request.

The Project Group is chaired by the Project Manager who is responsible for:

- Organising and planning the project process.
- Maintaining an efficient and auditable project administration function in conjunction with the Project Support.
- Monitoring and managing progress against the overarching project plan.
- Identifying, recording and managing project risk.

- Ensuring adequate documentation of all aspects of the project in conjunction with the Project Support.
- Working collaboratively with the external review team and CHUFT.
- Progress reporting to the Project Board via the Highlight report.

Project Group members must:-

- Work comprehensively accommodating views that are different from their own, seeking consensus and accepting compromise to reach agreement on the issues before them.
- Ensure that best practice from across the NHS is shared to enhance delivery.
- Ensure that proposals arising from the project are assessed for their equalities impact and can demonstrate that they will contribute to reducing health inequalities.
- Production of a weekly checkpoint report by to the Project Manager.
- Ensure that records and documentation are maintained and retained for audit purposes.
- Ensuring that risk management processes are in place by the way of a risk log which is then fed upwards to the Project Manager via the highlight report.

Specific TOR.

The Project Group will support the external review team in undertaking a review that:

Assesses the safety and quality of maternity services delivered by CHUFT and to give assurance to the trust boards of CHUFT and NEE CCG on the governance framework. This includes clinical pathways, staffing, escalation, communication, clinical outcomes and the views of relevant stakeholders and service users.

The scope of the external review will include:

- The appropriateness of clinical pathways based on nationally published best practice, including the review of clinical policies and guidance.
- The staffing levels, team configuration, advanced/specialist skills.
- The knowledge and skills of staff to deliver safe, competent care including mandatory training, supervision, safeguarding supervision, practice development and peer review.
- Case reviews, to assess the standard of clinical care provided and the quality of record keeping.
- The efficacy of the interface between the central delivery suite (CDS) and MLU's.
- To review the process for escalation, cumulative risk assessment and communication.
- To review governance and risk management frameworks.

- To review the clinical outcomes of the deliveries including maternal and neonatal well-being. This is to include unplanned admissions to the NNU.
- To elicit the views of relevant stakeholders regarding the quality of the service provided.
- To include any feedback from service users received via the PALS departments for both CHUFT and the CCG and views of the Maternity Services Liaison Committee (MSLC).
- To elicit the views of staff working across maternity services at CHUFT where appropriate.
- Where appropriate to benchmark the services provided against other maternity services within the county.

Method of Working

All Project Group agenda items must be forwarded to the Project Support by Close of Business (C.O.B.) four (4) working days prior to the next scheduled meeting.

The Project Group agenda, with attached meeting papers will be distributed at least two (2) working days prior to the next scheduled meeting.

The minutes of each Project Group meeting will be recorded and distributed by the Project Support.

Full copies of the minutes, including attachments, shall be provided to all Project Group members no later than 5 working days following each meeting.

Chair
The NEE CCG Director of Nursing and Clinical Quality will act as Chair of the Project Group. The Project Manager will deputise as Chair for meetings.

Quorum
A full quorum of attendees is required for decision making.

Frequency of Meetings
The Project Group will meet bi-weekly for a maximum time of one hour, with additional meetings with the external review team as required.

Changes to the Terms of Reference (ToR)
Changes to the ToR and function of the Project Group may be proposed at any meeting of the Project Group with due notice of the proposed change having been given on the agenda of the meeting. Any change shall only become operative after consideration and approval by the Project Group.

Accountability
This group will virtually report to:
- The NEE Maternity Services Quality Review Project Board

Date approved: 08.04.14.

APPENDIX 2:

The Peer Review Team:

- Melanie Clements MBBS FRCPCH - SCN Clinical Director & Consultant Paediatrician
- Jayne Haley MA RM RGN (som) - SCN Manager MNC&YP
- Shirley A Steel FRCOG - Consultant Obstetrician & Gynaecologist
- Penny Brett MSc BSc PgDip RM RN - Acting General Manager FPH & Head of Midwifery. East of England Senate member.
- Susan Barnes BA/BA(Hons) PgCert RM RGN - SCN Quality Improvement lead – Maternity.
- Louise Raybould - SCN Senior Quality Improvement Lead - Maternity new-born children & young people.

APPENDIX 3:

Key Documents

Peer Review Team – Preparatory Documents.

CHUFT Board of Directors (extract) of minutes of meeting – March 2013

CHUFT Maternity Action log – May 2014

CHUFT Maternity Complaints chart – 2013/14

CHUFT Maternity Dashboard – December 2013

CHUFT Maternity Education & training data sheet – April 2013

CHUFT Maternity Governance Report – April 2014

CHUFT Investigation (45 day) report 796 – October 2013

CHUFT Maternity Operational Plan (no date)

CHUFT Maternity Preceptorship package for newly qualified midwives – September 2013

CHUFT Maternity Risk Management Strategy Version 11 – May 2013 Annual Report 2013-14

CHUFT Maternity Training Needs Analysis, including skills drills Version 2 – June 2012

CHUFT Organisational Chart – May 2014

CHUFT Risk Management Newsletter – April 2014

CHUFT Review of Board decision – Temporary Closure of Tendring Units to Birth (no date)

CHUFT Supervisors of Midwives

CHUFT Temporary Reconfiguration of Maternity services – March 2014

Investigation report – Reporting of perinatal Deaths October – December 2013 – April 2014

Local Supervisory Authority Audit of midwifery Supervision – 2011/12

Local Supervising Authority National Forum (UK) guidelines for the Statutory Supervision of Midwives – National Guideline decision making tool – July 2012

Local Supervisory Authority Report of Supervisory Investigation – August 2013

Local Supervising Authority – Statutory supervision of Midwives LSA Standards for England, Audit Tool

North East Essex CCG – Maternity Services Quality Review Project Group – Project Initiation Document Versions 4, 5 & 6 April 2014

North East Essex CCG – Maternity Services Quality Review Project Group – Terms of Reference Version 3 – April 2014

NHS Litigation Authority, Clinical Negligence Scheme for Trusts – CHUFT Maternity Risk Management Standards 2012-13.

RCOG *'Learning from experience'* Action plan – November 2012

RCOG Review – CHUFT – October 2012

Report to NHS North East Essex Clinical Commissioning Group Board- March 2014

Review of CHUFT Maternity Serious incidents – part 2.7a – 2013

Templates – Antenatal, Intrapartum, Postnatal, Electronic fetal monitoring & record keeping – audit tools – April 2014

East of England
Strategic Clinical Networks

APPENDIX 4

Strategic Clinical Network East of England – external peer support team

Key Lines of Enquiry - CHUFT – Maternity Services

June 2014

The SCN East of England support team have reviewed CHUFT data and previous professional review reports to determine the broad key lines of enquiry and emerging themes.

The SCN team aims to provide supplementary enabling solutions to the current challenges within maternity services through engagement and supportive enquiry with CHUFT maternity services multi-professional teams.

The SCN support team are accountable to the NNE CCG Maternity Services Quality review project group.

Key lines of enquiry

Governance – Clinical

- Rationale for MLU closures within Tendring Peninsula – action plans
- Maternity Pathways, Obstetric policies, guidelines – formulation, approval, ratification process resulting in implementation and evaluation to demonstrate patient safety and improved outcomes.
- Risk Assessments – Patients/ People and Environment
- Risk management – framework and process - Incidents, SI's complaints and claims triangulation/ learning and how care is changed as a result of lessons learned
- Stakeholder engagement and experience of service users (MSLC, staff, CCG etc.)
- Maternity/supervisory and Obstetrics - Audit profile
- LEAP and other action plans for service improvement - status and approach
- Midwifery supervision – action plan and approach to recruitment and training
- CHUFT and CCG governance frameworks – interface – front line to board
- Safeguarding process – everybody's business?
- Local Supervisory authority /SI process and interface with CHUFT & CCG
- Change management process and approach to sustainable change by CHUFT

Operational Efficacy

- Staffing - workforce planning (birth-rate+), recruitment and retention, succession planning process.
- Record Keeping – approach to improvement.
- Interface Obstetrics/midwifery, hospital midwifery/MLU, Maternity/Neonatal services, other internal services as well as external services e.g. ambulance services, Local authority – planning services, operational problem solving, commissioning and innovation.
- Benchmarking CHUFT Maternity services against other maternity services
- Communication - with women/patients, between professionals/ departments and organisations personnel.
- Compliance of clinical and operational policies.
- Emergency transfer – MLU/CHUFT
- Emergency call process for MLU/home birth system (maternal or neonate)
- Management of deteriorating patient (including clinical efficiency)
- Staff handovers – midwifery and obstetrics in all areas including delivery suite
- Obstetric Theatre management – roles and responsibilities
- Activity and acuity – Escalation
- Term neonatal admissions to neonatal unit

Professional Leadership

- Staff – CPD – Mandatory/statutory, specific to role training. Appraisal, leadership development and rota of opportunity to work in all areas.
- Performance management issues – professional practice
- Approach to multi-disciplinary learning and developing services – innovation and managing small scale change.
- Professional relationships within the service and with key professionals outside maternity care e.g. neonatal services, medical teams etc.
- Succession planning, Preceptorship, mentoring, coaching
- Culture and leadership style within the service – embedding a positive culture of change for the improvement of patient outcomes.

14. GLOSSARY OF TERMS

BMI	Body Mass Index measure
CCG	Clinical Commissioning Group
CEO	Chief Executive Officer
CHUFT	Colchester Hospital University Foundation Trust
CNST	Clinical Negligence Scheme for Trusts
COL	Clinical Obstetric Lead
CS	Caesarean Section
CTG	Cardiotocography
DATIX	The computer system used for registering/monitoring serious incidents.
DD	Divisional Director
DH	Department of Health
GP	General Practitioner
HEE	Health Education England
HIE	Hypoxic Ischaemic Encephalopathy
HOM	Head of Midwifery
IT	Information Technology
KLOE	Key Lines Of Enquiry
KPI	Key Performance Indicators
MDT	Multi-disciplinary Team
MLU	Midwife Led Unit
NEECCG	North East Essex Clinical Commissioning Group
NHS	National Health Service
NHSLA	National Health Service Litigation Authority
NICE	National Institute for Clinical Excellence
NPSA	National Patient Survey Association

PPH	Post - Partum Haemorrhage
PRT	Peer Review Team
QRT	Quarter (as in Finance terms QRT 4)
RCA	Root Cause Analysis
RCOG	Royal College of Obstetricians & Gynaecologists
SBAR	Situation, Background, Assessment & Recommendations
SCN	Strategic Clinical Network
SHA	Strategic Health Authority
SI	Serious Incidents
SLA	Service Level Agreement
SPC	Statistical Process Control

Link to NHS Choices Glossary http://www.nhs.uk/Pages/HomePage.aspx

15. REFERENCES

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[ii] Maternity Matters DH 2007

[iii] Birthplace in England Collaborative Group, Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study, BMJ, 2011, 343:d7400

[iv] Composite neonatal mortality/morbidity outcome measure: includes perinatal mortality, stillbirth after start of care of labour, early neonatal death, neonatal encephalopathy, meconium aspiration syndrome, brachial plexus injury, fractured humerus and fractured clavicle.

[v] NICE CG 55, 2007, Intrapartum care: planning place of birth

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[viii] Health Service Journal March 2011

[ix] Commons select committee 31st January 2014http://www.parliament.uk/business/committees/committees-a-z/commons-select/publicaccountscommittee/news/maternity-services-report/

[x] Royal College of Midwives Submission to NHS Pay Review Body, September 2011; CQC, Market Report Issue 1, June 2012; Press search: Commons Select Committee - NHS midwives shortage remains despite increasing numbers