CTG Interpretation Training: High Level Audit

West Midlands Maternity & Children’s Strategic Clinical Network
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Background
The West Midlands Strategic Clinical Network highlighted a number of areas for attention in maternity and newborn services, driven from both the work towards a stillbirth national care bundle; and also from the outputs of an SCN maternity gap analysis during 2014.
One area of attention out of this work was to understand training and review of competencies for CTG interpretation.

National Care Bundle
NHS England are designing a national care bundle, bringing together a number of elements likely to reduce stillbirth. The care bundle elements, within which there are more detailed interventions, are:

1. Reducing smoking in pregnancy by carrying out a Carbon Monoxide (CO) test at booking to identify smokers (or those exposed to tobacco smoke) and referring to stop smoking service/specialist as appropriate.
2. Identification and surveillance of pregnancies with fetal growth restriction.
3. Raising awareness amongst pregnant women of the importance of detecting and reporting reduced fetal movement (RFM), and ensuring providers have protocols in place, based on best available evidence, to manage care for women who report RFM.
4. Effective fetal monitoring during labour.

Aim
The aim of this work was to explore the West Midlands’ position around element 4 of the care bundle, by understanding what training is currently undertaken by all professionals within West Midlands maternity units who are reading and interpreting CTG reports. Additional to training received, the SCN also considers what peer reviewing staff are receiving around their levels of competency.

Approach
A basic audit was designed and distributed to all Heads of Midwifery for completion. Audit submissions were received from the following organisations listed within Figure 1, by Operational Delivery network geography:

Fig1: CTG audit submissions received
<table>
<thead>
<tr>
<th>Maternity &amp; Newborn Network</th>
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<tbody>
<tr>
<td>Heart of England Foundation Trust</td>
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<tr>
<td>Wye Valley Hospital</td>
</tr>
<tr>
<td>Birmingham Women's Hospital</td>
</tr>
<tr>
<td>Staffordshire, Shropshire &amp; Black Country Maternity &amp; Newborn Network</td>
</tr>
<tr>
<td>Royal Wolverhampton Hospital</td>
</tr>
<tr>
<td>Walsall Hospital</td>
</tr>
<tr>
<td>Dudley Group of Hospitals</td>
</tr>
<tr>
<td>Shrewsbury &amp; Telford Hospitals</td>
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<tr>
<td>University Hospital of North Midlands</td>
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A total of 11 full submissions were received, with 1 submission (UHNM) providing a part-submission of questions 1-2 only.

**Findings**

Results for the high level audit are detailed below:

**Q1. Who is currently able to read and interpret CTGs during labour in your Trust?**

All Trusts confirmed that midwives at Bands 6/7 and Consultants are able to read and interpret CTGs during a labour, with 11/12 submissions also highlighting that Band 8a midwives are able to perform this same task.

The audit asked units to advise of any other professionals that could also read and interpret CTGs, with some duplication of answers, as follows:

- Band 5 midwives (n=10)
- Registrars (n=3)
- Specialist registrars (n=1)
- Junior doctors (n=3)
- Senior House Officers (n=2)
- Trainee obstetricians (n=1)
- Preceptor midwives (n=2)

**Q2. What initial training is provided to interpret CTGs?**

Internal classroom training is being completed by 9/11 Trusts – with one of these also utilising external classroom training; and one additional unit having classroom training only available externally. In addition, 10/11 units have e-learning training and 2 comments were received detailing further training, as follows:

- Walsall hospital – forums by consultants
- Royal Wolverhampton Hospital - 1:1 with Band 7 or practice development midwives.

Figure 2 details all initial training provided, by Trust/unit.
Q3. Is CTG interpretation included in mandatory training?

All 11 full submissions confirmed that CTG interpretation is included in mandatory training.

Q4. If so, how often should CTG mandatory training be completed?

Figure 3 depicts the frequency of mandatory CTG training by Trust/ unit. 7 units confirmed that this is completed annually, with a further 4 units confirming this is completed 6 monthly. Comments received were as follows:

- Royal Wolverhampton Hospital - In house intrapartum study days / supervisor led study days ran monthly - all midwifery and medical staff have to attend on an annual basis.
- Wye Valley Hospital - 6 monthly e-learning and annual face to face
Q5. Do staff regularly interpret each other’s patients’ CTG to provide additional interpretation?

All completing units answered “yes” to this question

Q6. Is CTG training kept up to date through any other route?

Many additional comments were received, as detailed in Figure 4:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Training Methods</th>
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<tbody>
<tr>
<td>George Eliott Hospital</td>
<td>In the past we have used various formats, workbooks, lectures</td>
</tr>
<tr>
<td>Shrewsbury and Telford Hospital</td>
<td>Multidisciplinary meetings - review and discussion of cases</td>
</tr>
<tr>
<td>Walsall Hospital</td>
<td>By CPD Midwife and Delivery Suite Consultant</td>
</tr>
<tr>
<td>University Hospital of Coventry and Warwickshire</td>
<td>Senior Midwives also attend Advanced Life Support Obstetrics (ALSO) Training which includes a module on CTG. Staff are also support to attend external study days which requires a self-nomination</td>
</tr>
<tr>
<td>Heartlands Hospital</td>
<td>e-learning Perinatal meetings Clinical risk meetings Daily delivery suite interpretation session</td>
</tr>
<tr>
<td>Dudley Group of Hospitals</td>
<td>K2 on line CTG interpretation package</td>
</tr>
<tr>
<td>Royal Wolverhampton Hospital</td>
<td>Attendance at the IPSD and SLSD are closely monitored by the Practice Development Midwife. All staff should be updated 6 monthly by attending these days which are mandatory. The K2 teaching package is provided and staff are encouraged to complete. Uptake of the package is monitored. CTG compliance is reported on monthly to the matron by the PD Midwife. 1:1 sessions are available and are encouraged.</td>
</tr>
<tr>
<td>Wye Valley Hospital</td>
<td>Baby lifeline courses</td>
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**Conclusion**

The audit suggests that CTG interpretation training within our responding units across the West Midlands is both regular and varied in its delivery. Furthermore, units report that staff are all regularly having their CTGs interpreted by colleagues to quality check competencies.

**Further actions**

The Maternity and Children’s Strategic Clinical Network continues to work with the Operational Delivery Networks to explore ways in which to increase the quality of the CTG training which is given to our units.

A recommended programme of study days has been identified, with funding to be agreed.