NHS
Yorkshire and the Humber
Clinical Networks

Maternal Enhanced and Critical Care Recommendations

Yorkshire and the Humber

April 2018

This document forms the first Maternal Enhanced and Critical Care (MEaCC) Recommendations for Yorkshire and the Humber and should be used in line with the Yorkshire and the Humber MEaCC Competencies and Training Framework.

Foreword

We are increasingly tasked with caring for women with complex medical needs in busy maternity units. Several recent reports, including the National Maternity Review (2015), have highlighted the need for improved multidisciplinary care working across geographical and specialty boundaries.

Our aim is not to tell Trusts what their maternity units should look like, but rather to establish the skills and competencies a nurse or midwife should have when caring for a woman with enhanced or critical care needs, whether this care is delivered in a maternity or critical care unit.

In 2016, a regional workshop was held to identify enhanced and critical care priorities in maternity for Yorkshire and the Humber (Y&H). Following this, the Y&H Maternal Enhanced and Critical Care (MEaCC) Task and Finish group was established to review these priorities, national standards and recommendations to develop regional recommendations. This multidisciplinary group included representatives from obstetrics, midwifery, obstetric anaesthesia, critical care nursing and medicine, and NHS England.

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Introduction and Definitions of Care

The following recommendations have been developed by the MEaCC Task and Finish group on behalf of the Y&H Maternity Clinical Network. They draw heavily on established and draft national standards and recommendations with input from acute trusts and stakeholders across the region.

These recommendations set out best practice for how we would like acute trusts to work in regard to Maternal Enhanced and Critical Care, for women who are cared for in hospital and supports the Y&H MEaCC Competency Framework.

The following definitions have been agreed by the Y&H MEaCC Task and Finish Group.

MEaCC Definitions of Care	
Standard Maternity Care	Patients whose needs can be met through normal ward care in an acute hospital.
Enhanced Maternity Care	Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional advice and support from the critical care team.

Enhanced Maternity Care

Enhanced Maternity Care (EMC) is a new standard of care beyond normal maternity care for women with medical or surgical problems during pregnancy or the post-partum period, but without the severity of illness that requires full critical care support. Through EMC competencies we focus on early recognition and response to deterioration and closer working between maternity and critical care teams to optimise care.

(Draft Enhanced Care of the Sick Mother; Standards for Maternal Critical Care - unpublished)

Deteriorating Patient / Early Intervention

MEaCC Recommendations:
Deteriorating Patient – Early Intervention

Standard
On any admission a risk assessment should be completed by the admitting midwife and any risk factors or pre-existing management plans identified.
Women at risk of deterioration should be escalated. The plan should be clearly documented in the woman's notes and reviewed and updated at every contact.
For women who are at risk of becoming severely ill, multidisciplinary planning of their pregnancy and intra-partum care should take place.
Robust escalation guidance should be in place to ensure the early recognition and response to the acutely deteriorating pregnant woman.
Evidenced based tools for midwives to recognise and manage deteriorating women with clear pathways of escalation and help should be in place/available.
Any woman who presents as unwell is assessed and appropriately referred, escalated or admitted for further assessment. There is an explicit mechanism for following up any woman discharged with any ongoing concerns.
Physiological observations should be recorded and acted upon by staff who have been trained to undertake these procedures and who understand their clinical relevance.
Help must be sought as soon as possible if any practitioner feels unable to adequately deal with the situation, or feels that the woman could deteriorate further and warrants a more comprehensive assessment.

Delivering Care and Working in Teams

MEaCC Recommendations:
Delivering Care and Working in Teams

Standard
Safe maternity teams need: • clarity about team objectives and roles • effective leadership • clear and agreed procedures for communication.
All obstetric units must have a lead midwife, obstetrician and obstetric anaesthetist for Enhanced Maternal Care (EMC).
Maternity units need to review enhanced and critical care demand and capacity regularly. Ensure that they employ enough staff with the right mix of skills.
Maternity services should undertake regular training needs analysis and must establish training resources to enable midwifery and nursing staff to achieve and maintain skills in EMC.
The lead midwives must maintain a record of all training completed – and on all training required and planned but not yet undertaken including staff that have EMC competencies.
Pregnant or recently pregnant women must have access at all times to a healthcare professional who has EMC competencies.
Classification of care must be formally recorded by the maternity team and reported in ward rounds and handovers.
A representative for EMC must be part of their hospitals critical care delivery group or its equivalent.
Women who require care that falls outside EMC provided on delivery suite must be referred as soon as possible to the general critical care service. The route of escalation to critical care services must be clearly defined. The decision to admit a woman to critical care should involve both the consultant caring for the patient on the ward and the consultant in critical care.
Critical care outreach or an equivalent service must be available and provide clinical support and education to EMC services.
Enhanced
Obstetric units delivering EMC or level 2 critical care should be members of a regional maternal critical care network (MCC), which itself should have a formal relationship with the local critical care operational delivery network and MCC.

Obstetric Early Warning Score (ObsEWS)

MEaCC Recommendations:
Obstetric Early Warning Score (ObsEWS)

Standard

An obstetric early warning score ObsEWS must be applied to all women presenting to acute care services who are known to be pregnant or who are within 42 days of delivery. All obstetric units and acute hospitals in the UK must update their ObsEWS to incorporate the following features:

a) Only six physiological parameters may contribute to the early warning score
- Respiratory rate
- Oxygen saturation
- Heart rate
- Systolic blood pressure
- Diastolic blood pressure
- Temperature.

b) No other parameters must be included in the calculation of an early warning score and additional supplementary observations (such as urine output or lochia) must be recorded separately from the early warning observations.

c) Clinical concern about a woman's condition remains an important criterion for summoning help, regardless of the early warning score.

d) Reduced level of consciousness is not an early warning sign but an indication of established critical illness requiring urgent senior clinical attention.

e) Where an aggregate score is calculated, the points assigned to abnormal values must be adjusted to align with the numerical values used in the Royal College of Physicians of London National Early Warning Chart i.e. score of 5-6 medium risk, score of 7 or more high risk.

Clear guidance must be given regarding the expected frequency of observations; this must include a specific schedule of observations for women after caesarean section. For all other pregnant or recently pregnant women, a minimum expected frequency of observation is usually once every 24 hours, with four hour being the minimum frequency for women at high risk of deterioration.

The response to abnormal scores must be clearly described in a simple flow chart. It must only contain one intermediate step before the involvement of senior clinical staff (usually a Consultant).

The Situation-Background-Assessment-Recommendation and Response (SBARR) communication tool should be promoted for use between health care professionals to effect escalation in cases of concern identified by the ObsEWS.

Acutely ill mother in a designated General Critical Care

MEaCC Recommendations:
Acutely ill mother in a designated General Critical Care

Standard
In antenatal admissions, when fetal viability after delivery might be at risk, a health care professional trained in neonatal resuscitation should be available within 10 minutes and a Consultant Neonatologist or Paediatrician must be able to attend within 30 minutes.
Enhanced
Any critical care unit that admits antenatal women over 20 weeks gestation must have rapid access to obstetric and paediatric services able to attend in an emergency. They must also have a clear plan for performing a peri-mortem caesarean section in the event of maternal cardiac arrest with appropriate neonatal resuscitation equipment.
An obstetric team (normally consisting of a Consultant Obstetrician, Consultant Obstetric Anaesthetist and a midwife) must review all women admitted to critical care at least once in every 24 hour period.
Critical Care
Level 3 antenatal admissions and postnatal admissions that are anticipated to last more than 48 hours must be considered for transfer to a nominated regional or supra-regional critical care unit with experience in maternal critical care.
All critical care units that admit pregnant or recently pregnant women must have a named lead clinician for maternal critical care and obstetric services (including obstetric anaesthesia).
Breast feeding (including the use of breast pumps) must be encouraged and supported in all postnatal women admitted to critical care.
All women admitted to critical care must be offered an appointment in a critical care follow-up clinic or a postnatal review which includes input from a clinician with experience of critical care follow-up.
Physical contact between a mother and her baby should be maintained during postnatal critical illness, even if the mother is unconscious. This contact and other events of the admission should be recorded in critical care diary which can be used in psychological rehabilitation after critical care or in bereavement counselling.
Intensive care networks should consider nominating specific units as the nominated regional or supra-regional unit in maternal critical care.

Recognising, Transferring and Clinical Responsibility outside of Maternity

MEaCC Recommendations:
Recognising, Transferring and Clinical Responsibility Outside of Maternity

Standard
Lead professionals in maternity services have a responsibility to ensure staff are deemed competent in the early recognition of acutely ill and deteriorating patients and are able to perform the initial resuscitation of such patients.
Awareness of mental health needs continued monitoring, for adverse impact on pregnancy is required from the midwife providing education and information to family members for their role later in the recovery period.
A senior clinician* must be involved in accordance with the above escalation policy within one hour of any deterioration. *ST5 and above or the senior midwife who is responsible for the High Risk Maternity Unit. This is also applicable to all women in midwife and obstetric units, presenting to acute care services and for intrapartum care in all settings.
Enhanced
Critically ill pregnant or recently pregnant patients who undergo intra- or inter- facility transfer must be transferred in accordance with the intensive care society transfer guideline.
Inter-hospital transfers involving an ambulance must occur as appropriate priority 1 or 2 transfers.
The SBARR communication tool must be promoted for use between healthcare professionals at times of deterioration, with immediate referral to the appropriate specialist centres of expertise as soon as symptoms of deterioration develop.
Consider Critical Care Outreach Teams, when available, to review pregnant or recently pregnant women with an acute deterioration who are admitted to a general ward area.

Patients Reflections

MEaCC Recommendations:
Patients Reflections

Enhanced

Patients must be followed-up to monitor for all the common physical problems after critical illness, most commonly muscle weakness, and also to pick up any psychological problems such as post-traumatic stress disorder (see guidelines for the provision of intensive care services, 2015).

Patients and their partners should be given access to expertise for counselling including concerns about issues around blood transfusion.

All patients who have been critically ill should have a general obstetric follow-up appointment, usually after 6 weeks.

All women who have been admitted to critical care should be offered critical care follow-up.

Where possible obstetric and critical care follow ups should be joint.

Critical Care Outreach Teams should work collaboratively with the critical care unit and maternity unit to ensure seamless transition of care between units.

Critical Care Outreach Teams and midwives should work collaboratively in providing joint multidisciplinary education relating to recognition of acute illness to encourage sharing of knowledge and skills.

Critical Care

Any critical care unit admitting obstetric patients should identify a Nurse who is the lead for matters relating to maternal critical care including training and education.

Each critical care unit should have a nominated link Midwife to support training and education.

Additional training for critical care outreach teams should include aspects of maternal care as part of the core curriculum (as for critical care nursing) to underpin their practice and recognise any specific issues related to maternal care.

Where possible, Critical Care Outreach Team members should spend some time on a delivery unit in order to have exposure to the uncomplicated birth and well/normal pregnancy.

Education

MEaCC Recommendations: **Education**

Standard
All midwives should be provided with the education, training and assessment in line with the MEaCC training framework (see Competency and Training Document) to ensure that they have competencies appropriate to the level of care they are providing.
At a local level, the most important educational priority is multidisciplinary skills training. This often takes place in the form of simulated scenarios. It is vital that all obstetric units develop the skill and resources to provide maternal critical illness scenarios in multidisciplinary simulation and that these sessions provide appropriate feedback/debriefing so that lessons learnt can be rapidly adopted into clinical practice.
Enhanced
Enhanced Maternity Care/Maternal Critical Care training needs as defined must be expanded in line with the new Enhanced Maternity Care Framework 2018.
Midwives providing enhanced maternity care must spend time on a designated critical care unit with clear objectives to satisfy the requirements of the EMC framework.
Speciality Midwives with enhanced skills should be supported in this role, including the provision of access to appropriate education.
The competency framework document must be translated into high quality clinical preceptorship training, underpinned by midwifery, critical care and critical care outreach collaboration.
Critical Care Outreach Teams should work collaboratively with the critical care unit and maternity unit to ensure seamless transition of care between units.
Critical Care Outreach Teams and Midwives should work collaboratively in providing joint multidisciplinary education relating to recognition of acute illness to encourage sharing of knowledge and skills.
Multidisciplinary training (which should include simulation and the impact of human factors on clinical performance) must be available to all health care professionals who have a role in enhanced maternity care at least once a year. The responsibility for ensuring that such training takes place lies with the lead clinicians for EMC.

Education

Critical Care
Any critical care unit admitting obstetric patients should identify a Nurse who is the lead for matters relating to maternal critical care including training and education.
Each critical care unit should have a nominated link Midwife to support training and education.
Additional training for Critical Care Outreach Teams should include aspects of maternal care as part of the core curriculum (as for critical care nursing) to underpin their practice and recognise any specific issues related to maternal care.
Where possible, Critical Care Outreach Team members should spend some time on a delivery unit in order to have exposure to the uncomplicated birth and well/normal pregnancy.

Monitoring Standards and Quality Indicators

MEaCC Recommendations: **Monitoring Standards and Quality Indicators**
Enhanced
When available an Enhanced Maternity Care mandatory dataset must be collected and reported.
Data must be collected prospectively, validated locally and stored electronically. Many of these data may already be collected locally on other reporting systems, and can be retrieved from these systems.
Data must be collected by appropriately trained staff, quality assured and stored securely in accordance with local guidelines on safe data storage.
The Enhanced Maternity Care dataset and the designated critical care data collection should be of equally high quality irrespective of where the care is delivered.
A traffic light system or similar should be used to access compliance with agreed quality indicators, and a system should be in place for responding to deviations from agreed standards. These can be added to a maternity dashboard for monthly review.

Serious and Critical Incidents, Reporting and Reviews

MEaCC Recommendations:
Serious and Critical Incidents, Reporting and Reviews

Standard
All maternity services should undertake a critical incident analysis and peer supervision with regular multidisciplinary meetings to review severe maternal morbidity cases.
There must be a written risk management policy, including trigger incidents, adverse incident reporting and multi-professional review, with feedback to providers and users to progress quality improvement.
There must be a process to ensure that all critical incidents, including all maternal and perinatal deaths, are thoroughly reviewed by a multi-disciplinary group, including service user representation and independent peers, and with feedback to providers and families to ensure that there is reflective learning and quality improvement measures are put in place.

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