Guidelines Title	Obstetric High Dependency Care		
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Category:	Please enter below where you would like this guideline to appear in DATIX. i.e. Obstetrics – Labour Ward – Procedures Obstetrics - Labour ward - Medical problems		
Author(s / Amended by):	Lesley Hawthorne - Elaine Appleby		
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Date of next review:	21.9.14 31.3.18 25/06/2018 reviewed by Debbie Horner - currently safe. Extended for 6 months. Under review 26/10/2018 – reviewed by Debbie Horner – currently safe. Extended for another 6 months. New Review date 26/05/2019 24.05.2019 extended for a further 6 months to 24.11.2019, currently under review		

Responsibilities of staff

Medical

There is a dedicated consultant obstetrician and anaesthetist during the daytime on weekdays and out of hours there is a consultant on call for each specialty. The consultants' responsibility is to review clinical progress and advise appropriate care. Should clinical condition deteriorate, consultant obstetrician and anaesthetist should be advised at an early stage. If advice is sought from other specialities, it is the consultant obstetrician of the day for labour ward who should instigate this.

There is a resident SHO and registrar in obstetrics and a resident trainee anaesthetist competent in obstetric anaesthesia 24 hours a day. An anaesthetic registrar is also resident on ICU and available in the main hospital. It is the responsibility of the SHO in obstetrics to clerk all admissions and implement treatments/referrals. The resident anaesthetist should be available for help in venous access, pain relief, respiratory and cardiovascular support and fluid management

A consultant led ward round is performed 4 times per day Monday to Friday and more often if clinically indicated.
Other specialists including haematologists, renal physicians and consultant anaesthetists in intensive care are involved at an early stage should this be indicated. This will be decided by senior clinicians i.e obstetric/anaesthetic consultant. Radiology services are available 24/7 and those women requiring more detailed imaging (including vascular procedures) are transferred to the main hospital site.

Midwifery

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All women on HDU in maternity receive one-to-one care by the most appropriately trained midwife on duty. It is the role of the coordinating midwife to inform medical staff of any woman who requires or potentially requires HDU care. These women will be reviewed on the multidisciplinary ward rounds by consultant obstetrician and anaesthetist.

Link to Labour Ward Staffing

Monitoring and Equipment

All women are monitored using the Yorkshire Obstetric Critical Care Group chart (PET) or Obstetric High Dependency Chart and will be located in Room 6 or equivalent.

MEWS scoring is performed regularly on *all* women depending on clinical condition, and acted on accordingly. This is in line with the rest of the Trust.

Link to Early recognition of severely ill pregnant woman (MEWS)

Medical equipment available on Room 6

- Monitor for P, BP, ECG, SaO2 and with transducer facility for invasive monitoring
- Equipment for insertion and management of invasive monitoring (arterial and CVP)
- Piped oxygen and suction, including facilities for high inspired humidified oxygen therapy
- Intravenous fluid warmer*
- Forced air warming device*
- Blood gas analyser (on the labour ward)
- Infusion pumps
- Massive haemorrhage equipment*
- Emergency eclampsia drugs (in drug cupboard in room 6)
- Transfer equipment – monitor and ventilator (obtained from ITU if required)
- Computer terminal to facilitate access to blood results , PACS system
- Copy of hospital obstetric guidelines (also available on hospital intranet)
- Resuscitation trolley with defibrillator and airway management equipment (in adjacent recovery)
- There is an ultrasound machine available for central and difficult IV access
- Hemacue for Hb monitoring*
- A trolley for difficult intubation and airway management*

  * Denotes equipment available in theatre which is in close proximity to Room 6

Criteria for High Dependency Care (within the maternity service)

- Any woman requiring Level 1 or Level 2 care

  Level 1: Women at risk of their condition deteriorating (e.g. sepsis, all high-risk surgical patients), or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional support from the critical care team

  Level 2: Women requiring more detailed observation or intervention including support for a single failing organ system or post-operative care and those 'stepping down' from higher levels of care (e.g. ITU, Renal Unit, Acute Medical/Surgical Ward)

- Any woman who is on the Regional Pre-eclampsia Protocol

Link to Regional Pre-eclampsia Protocol

- Any woman who has had a major obstetric haemorrhage

Link to Major Obstetric Haemorrhage

An ITU Outreach service is available Mon to Fri during daytime hours. Contact # 6775

Guidance for staff on involvement of other clinicians

- Any woman who requires specialist medical or surgical opinion / input beyond the scope of the obstetric / anaesthetic multidisciplinary team e.g haematological, infectious diseases, renal, general surgical

Criteria for Transfer to HDU/ITU (outside the maternity service)

- Any woman requiring Level 3 care - advanced respiratory support or basic respiratory support together with support of other organ systems
- Any woman who cannot be appropriately monitored or managed on the delivery suite HDU e.g in the event of escalation or more than 2 women requiring level 1 or 2 care.
- Any woman who requires specialist care e.g renal, inotropic support that cannot be managed in the maternity unit
- Unconscious patient
- Cardiac arrest
- Any woman requiring HDU care and specialist radiological / surgical expertise that cannot be performed in maternity unit
- If at any time it is felt by the medical or midwifery staff that transfer to ITU is appropriate, this decision will be discussed by senior clinicians and coordinating midwife and referral made if deemed appropriate

Requirements of each staff group when transferring women to ITU/HDU

- Consultant anaesthetist to be informed and/or attend woman for transfer
- Consultant anaesthetist on call for ITU to be informed (this may be the same consultant on call for labour ward)
- Consultant obstetrician to be informed and/or attend
- Duty anaesthetist or anaesthetic registrar to accompany patient during transfer (by ambulance)
- Attending midwife to accompany woman during transfer
- Handover of care on ITU/HDU by individual staff groups

Link to Maternal Transfer and Handover of Care

Documentation

This will be documented in the maternal records by all members of the multidisciplinary team; this includes the High Dependency charts

Link to Training Needs Analysis

Audit and Monitoring

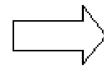
See auditable standards

Check additional reference at end

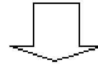
See below for MEWS flowchart

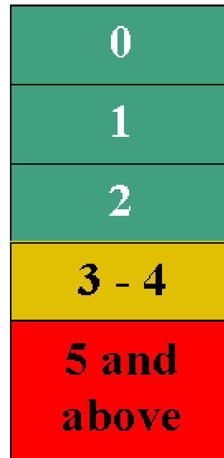
Patient Observation

- Heart Rate
- Systolic BP
- Resp Rate
- Urine Output (last 4 hrs)
- Central Nervous System
- O_2 Sats
- Resp Support

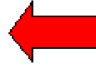


MEWS Score





Inform Senior Nurse / Contact Junior Doctor within responsible Consultants Team to review patient & make Clinical Decision



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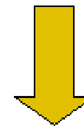
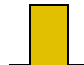
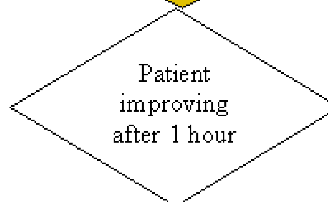


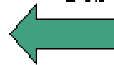
Patient attended within 30 minutes

Or sooner if necessary





Yes



Continue monitoring MEWS and reactive Algorithm if necessary

No

Contact Patients Consultant / Outreach Team

This protocol is a guideline and does not replace clinical judgement. In the event of an acute emergency, this algorithm may **NOT** be appropriate.

NB. Chronically ill patients will always have a higher MEWS, therefore consider what is normal for them.

Outreach Mobile 07779022757 or #6 775. Outreach Hours 08:00 - 17:30, Mon to Fri.

Modified Early Warning Score (MEWS)							
SCORE	3	2	1	0	1	2	3
Heart Rate		40 or Less	41 - 50	51 - 100	101 - 110	111 - 130	More than 130
Systolic BP	70 or less	71 - 80	81 - 100	101 - 179	180 - 199	200 - 220	More than 220
Resp Rate		Less than 8	8 - 11	12 - 20	21 - 25	26 - 30	More than 30
Urine output last 4 hrs/mls	80 mls or Less	81 - 120 mls	121 - 200 mls	201 - 800 mls	More than 800 mls		
Conscious Level			C	A	V	P	U
			Confused	Awake & Responsive	Responds Verbal Commands	Responds Painful Stimuli	Unresponsive
O_2 sats	85% or less	86 - 89%	90 - 94%	95 - 100%			
Resp Support	CPAP BIPAP NIPPV	O_2 >35% or Mask with Non Re-Breath Bag	O_2 35% & below Nasal Cannula 2 - 4 Ltr	Room Air			

References:

1 Yorkshire Obstetric Critical Care Group. 24 hour High Dependency Chart. *Link Midwives Network.* . 2002;

1. CEMACH (2004) The sixth report of the Confidential Enquiries into Maternal Deaths in the UK Why Mothers Die 2000 – 2002
2. CEMACH (2005) Saving Mothers Lives (2002 – 2005)
3. CNST (Pilot) Maternity Clinical Risk Management Standards 2008
4. Providing equity of critical and maternity are for the critically ill pregnant or recently pregnant woman. April 2011