

# **Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline**

**V4.1**

**April 2024**

# 1. Aim/Purpose of this Guideline

1.1. The MEOWS observation chart facilitates a standardised approach to recording vital signs to record routine clinical data and track a patient's clinical condition to alert the clinical team to any untoward clinical deterioration and to monitor clinical recovery. The MEOWS should determine the urgency and scale of the clinical response. This guideline is to provide guidance for staff within the maternity services on recognising and monitoring the obstetric patient using MEOWS. This will enable early recognition of deterioration, advice on the level of monitoring required, facilitate better communication with the multi-disciplinary team and ensure prompt management of any woman who is deteriorating.

This guideline to be read in consideration with the following guidelines:

- [Venous Thromboembolism \(VTE\) in Pregnancy, Labour, and Postnatal period –Diagnosis, Referral, Treatment and Ongoing Management Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Eclampsia and Severe Pre- eclampsia Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Vaginal Birth After Caesarean Section \(VBAC\) \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Epidural Analgesia for Labour Pain Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Caesarean Section \(CS\) Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Obstetric Haemorrhage Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Maternal Collapse in Pregnancy and Puerperium, Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Severely Ill Obstetric Woman Early Recognition and Management Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Sepsis: Management of Maternal Sepsis Clinical Guideline \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)
- [Maternity Recovery and Post-Operative Care Clinical Guideline V4.0 \(cornwall.nhs.uk\)](http://cornwall.nhs.uk)

1.2. This version supersedes any previous versions of this document.

1.3. This guideline makes recommendations for women and people who are pregnant. For simplicity of language the guideline uses the term women throughout, but this should be taken to also include people who do not identify as women but who are pregnant, in labour and in the postnatal period. When discussing with a person who does not identify as a woman, please ask them their preferred pronouns, and then ensure this is clearly documented in their notes to inform all health care professionals.

## **Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.**

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

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## **2. The Guidance**

- 2.1. Early recognition of critical illness, prompt involvement of senior clinical staff and multidisciplinary team working remain key factors in providing high quality care (MBRRACE, 2016).
  - 2.1.1 The early detection of critical illness in pregnant women remains a challenge to all professionals involved in their care. The relative rarity of such events combined with the normal physiological changes associated with pregnancy and childbirth compound the complexity of early detection.
  - 2.1.2 It is recognised that pregnancy and labour are normal physiological events. However, recording of physiological observations is an integral part of maternity care. Regular recording and scoring of these observations will aid the recognition of any changes in a woman's condition. Using MEOWS will prompt early referral to the appropriate practitioner who can undertake a full review, order appropriate investigations resuscitate and treat as required.
  - 2.1.3 MEOWS is a way of formalising measurement of physical variables which are translated into a score which has a critical threshold, above which medical review and intervention is required (see appendix 3).
  - 2.1.4 The small changes in the combined physiological variables measured by MEOWS may pick up deterioration earlier than an obvious change in an individual variable. Early detection will trigger prompt intervention that will either reverse further physiological decline or facilitate timely referral to an appropriate person.

- 2.1.5 There is a potential for any woman to be at risk of physiological deterioration and this cannot always be predicted. The use of MEOWS does not demand critical care or define treatment in maternity care but is a tool to aid early recognition and management of deteriorating woman, thus all women must have AN MEOWS score charted on admission or initial assessment in both hospital and community setting (oxygen saturations are not required in the community setting). It must be acknowledged that no tool can replace the actual physical examination of a woman and clinical assessment of her condition. Often there are clinical signs that precede collapse.
- 2.1.6 The use of an early warning score is supported by NICE guidance (2007).

## 2.2 Use of MEOWS chart

2.2.1 MEOWS is calculated by scoring the values of a full set of observations carried out routinely for all women by staff which include:

- Temperature.
- Systolic blood pressure.
- Diastolic blood pressure.
- Heart rate.
- Respiratory rate.
- Oxygen saturation. Remember the score is uplifted by 2 points for women requiring supplemental oxygen to maintain recommended oxygen saturation.
- Level of consciousness using AVPU (see appendix 3). Pain score.
- PV bleeding.

A total of 5 or more or 3 in one parameter will trigger an increased frequency to a minimum of hourly observations and midwife to urgently escalate care to the obstetric team (please see MEOWS chart appendix 3). A new score of 5 or more is a key threshold and is indicative of potential deterioration. All women with a MEOWS score of 5 with known infection, or high risk of infection or suspected infection 'think sepsis' and undertake the sepsis assessment tool.

### 2.2.2 Escalation and clinical response timings

The woman should receive an urgent Obstetric or anaesthetic review within the timescale set on the MEOWS chart. First escalation of care is appropriate to Senior House Officer (SHO) level. If the SHO is unable to attend escalate to the Specialty Registrar level (SpR). If the SpR is unable to attend within original the time scale, escalate to the anaesthetic SpR or Consultant obstetrician.

If  $\geq 5$  or 3 in any one parameter (Amber) Midwife to urgently inform the obstetric team caring for the patient using the Situation, Background, Assessment, Recommendation, Decision (SBARD) tool. Urgent assessment by obstetrician or anaesthetist to take place within 45 minutes of the observations. The midwife should inform the Delivery Suite Coordinator so that they have oversight and can assist in achieving timely reviews.

- If  $\geq 7$  (Red) Midwife to immediately inform the obstetric team caring for the patient using the SBARD tool- this should be least at specialist registrar level and take place within 30 minutes of the observations. Consider via 2222.
- Ensure clinical care is in an environment with monitoring facilities.
- Emergency assessment by the Obstetric or Anaesthetic team.
- Inform Outreach/CCU if senior review not occurred within 30 minutes of the observations or patient deteriorating.

### 2.3 Respiratory rate and MEOWS

- Changes in the respiratory rate are often an early warning sign that the woman's condition is deteriorating.
- It is vital to also note the regularity, pattern, and description of the breathing.
- A change in the respiratory rate is an accurate predictor of deterioration in physical condition, often before changes in any other parameters are observed.

### 2.4 Oxygen saturation and MEOWS

Sat O<sub>2</sub> monitoring should be undertaken for all women except in the community.

### 2.5 Temperature and MEOWS

During labour, a slight transient raise in temperature is often observed and this may also be seen as a response to epidural anaesthesia. The patient's temperature should be considered in the context of other potential risk factors however a rise in temperature observed at any other time in the pregnancy continuum must be closely observed.

A marked rise in temperature or a marked fall could indicate an impending risk of infection or sepsis. The early recognition and appropriate treatment for sepsis is essential.

### 2.6 Heart rate and MEOWS

Most women have an increased heart rate (of about 20 bpm) in pregnancy compared to the non-pregnant state due to the associated physiological changes. The pulse will also increase during periods of strenuous activity and/or stress. A sudden rise in heart rate may be in response to labour, pain, fear, anxiety, etc. and in isolation (all other parameters are normal) should be observed. A

prolonged tachycardia, in conjunction with any other abnormal observation, must be treated as potentially very serious.

A slow pulse may result from effective pain relief such as an epidural, especially when the woman is relaxed and possibly able to sleep.

However, slower heart rates can also be:

- Drug induced e.g. such as epidural local anaesthetic leaking directly into the blood stream.
- Present in cardiac complications.
- In conjunction with a raised blood pressure and sudden loss of consciousness could indicate cerebral haemorrhage.

## 2.7 Blood pressure and MEOWS

2.7.1 During pregnancy there are natural variations in BP due to the associated physiological changes: e.g., diastolic may fall around 20mmHg from non- pregnant state in the first trimester. Underlying hypertensive problems/renal disease with these conditions women may not exhibit a first trimester drop in blood pressure and may go on to have hypertensive problems in this or later pregnancies.

### 2.7.2 Pre-eclampsia

- Some women developing pre-eclampsia may be normotensive.
- In the presence of proteinuria and altered blood profiles women should be closely monitored.

### 2.7.3 Identifying significant changes in BP

The systolic pressure is sensitive to activity, stress, anxiety, and transient rises up to 150 are considered normal.

- A lower systolic reading is common in pregnancy.
- A sudden decrease in blood pressure especially with a corresponding increase in pulse rate may indicate haemorrhage.
- Diastolic blood pressure may rise prior to systolic blood pressure drop and can be the first indication of developing hypovolaemia.

## 2.8 Pain scores and MEOWS

Pain scores should be assessed between contractions (if in labour) or when the woman is resting. Any pain outside that expected of normal labour is abnormal, and this should be regularly reviewed and documented, including site, type of pain (constant, intermittent, on movement only, sharp, dull, etc.) as well as the intensity. Following surgical intervention pain is a normal physiological response to trauma but pain assessment is essential to ensure adequate analgesia is prescribed and administered.

## 2.9 Conscious level and MEOWS

It is essential to recognize the importance of new-onset confusion, disorientation, delirium as a sign of potentially serious clinical deterioration.

A	Alert and conscious
V	Responds to voice
P	Responds to pain
U	Unresponsive

## 2.10 Observation parameters

2.10.1 The frequency of observations is described on the MEOWS chart and is dependent on the MEOWS score.

2.10.2 Maternity support workers are essential and valued members of the maternity workforce and have the skills to undertake most aspects of MEOWS observations. These can be recorded with the exception of pain score and PV bleeding, and it is the responsibility of the Maternity Support Worker carrying out the observations to alert the midwife/nurse responsible for the patient so that the MEOWS score can be completed. A MSW cannot complete a full MEOWS score on any patient.

## 2.11 The process for use of MEOWS

All women admitted must have a MEOWS score calculated and frequency of monitoring and clinical response appropriate to score as per MEOWS chart.

## 2.12 Delivery Suite

2.12.1. MEOWS every 4 hours (unless clinically indicated to do more frequently). Perform a full set of observations and calculate and document a MEOWS score on the partogram. If the score indicates escalation to the obstetric team use the SBARD hand over tool.

2.12.2. Any observations considered abnormal for the clinical situation must trigger a full MEOWS assessment and score to determine the frequency of monitoring and escalation of care.

## 2.13 Antenatal Ward

Frequency of observations will depend on the nature of the admission or as indicated the MEOWS score. As a minimum a full set of observations must be carried out and charted on the MEOWS chart every 12 hours.

## 2.14 Postnatal Care

2.14.1 All women must have a full set of observations prior to transfer to the postnatal ward or discharge home from delivery suite MEOWS score

calculated. The nature of further observations and escalation of care will depend on the MEOWS score.

- 2.14.2 All women who score MEOWS of 5 or above or have had sepsis screening, please refer the baby to the neonatologist.

## 2.15 Community

- 2.15.1 All women must have a baseline set of observations charted on a MEOWS chart in the community setting. Further observations and escalation of care will depend on MEOWS score (without sa02).
- 2.15.2 The MEOWS scoring should be used in the pre-hospital assessment of acutely ill women by 'first responders' e.g., community midwives and ambulance services to triage and communicate acute-illness severity to the receiving hospital. If the score is >7 continuous monitoring is indicated and cannot be achieved until SWAST arrives. Therefore, the community midwife will undertake MEOWS observations every 15 minutes until able to achieve continuous monitoring.
- 2.15.3 In the event that a woman deteriorates and becomes seriously ill, it may be appropriate to involve medical staff from other disciplines such as critical care, haematology, and renal medicine. This will be a consultant-to-consultant referral.

## 2.16 Roles and responsibilities

### 2.16.1 Maternity Support Worker (MSW)

To obtain vital signs observations and record them on the MEOWS chart reporting to a named midwife any abnormalities detected (any observations that score one or above).

### 2.16.2 Midwife

- 2.16.2.1. To assess additional parameters of MEOWS and calculate the total score or undertake full MEOWS observations and score.
- 2.16.2.2. To escalate within the required timeframes following the MEOWS triggers table.
- 2.16.2.3. To ensure the escalation is followed appropriately and escalate further (to Outreach/ICU teams) if unable to obtain senior review and/or clear care plan within the 30 min timescale or if woman is deteriorating rapidly.

### 2.16.3 Obstetric team

- 2.16.3.1 To respond to the escalation as per MEOWS triggers table.
- 2.16.3.2. Doctors called to review patients with a MEOWS trigger should ensure that there is a clear patient review and time limited management plan in the medical notes and discussed with the midwife caring for the patient.

- 2.16.3.3. If the physiological parameters are accepted by the medical staff as appropriate/ normal / acceptable for that individual patient, then this should be clearly indicated in the midwifery and medical notes.
- 2.16.3.4. If women deteriorate and become severely ill to coordinate involvement from the multidisciplinary team if required (Anesthetic Team, Outreach etc.).
- 2.16.3.5. Regular Consultant involvement is needed in care of women who deteriorate and become severely ill.

**2.16.4. Anesthetic team**

- 2.16.4.1. All severely ill women should be reviewed by multidisciplinary team involving the Anesthetists.
- 2.16.4.2. For the Consultant Anesthetist to liaise with the Intensive Therapy Unit (ITU) / High Dependency Unit (HDU) team if transfer is necessary.
- 2.16.4.3. To document care plans in maternal notes with the planned review times.

### **3. Monitoring compliance and effectiveness**

<b>Information Category</b>	<b>Detail of process and methodology for monitoring compliance</b>
<b>Element to be monitored</b>	Application of this guideline.
<b>Lead</b>	Audit midwife.
<b>Tool</b>	Documentation Audit on a Word or Excel template specific to the topic.
<b>Frequency</b>	Weekly MEOWS audit on all acute clinical areas on five sets of notes.
<b>Reporting arrangements</b>	Results will be shared weekly at the huddle and added to safety brief and handover. A formal report of the results will be provided at the Audit Review Team Meeting.  Non-compliance identified will be discussed on an individual basis by Patient Safety Midwife or Matrons.  If a theme of no-compliance is identified an action plan made by the audit midwife.
<b>Acting on recommendations and Lead(s)</b>	Action leads will be identified and a time frame for the action to be completed.  The action plan will be monitored at the Patient Safety meeting.

Information Category	Detail of process and methodology for monitoring compliance
<b>Change in practice and lessons to be shared</b>	<p>Required changes to practice will be identified and actioned.</p> <p>A lead member of the team will be identified to take each change forward where appropriate.</p> <p>Lessons will be shared with all the relevant stakeholders.</p> <p>The results of the audits will be distributed to all staff through the Patient Safety Newsletter.</p>

## 4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the [Equality Diversity And Inclusion Policy](#) or the [Equality and Diversity website](#).

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

## Appendix 1. Governance Information

Information Category	Detailed Information
<b>Document Title:</b>	Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline V4.1
<b>This document replaces (exact title of previous version):</b>	Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline V4.0
<b>Date Issued/Approved:</b>	April 2024
<b>Date Valid From:</b>	April 2024
<b>Date Valid To:</b>	February 2027
<b>Directorate / Department responsible (author/owner):</b>	Katharine Sprigge, Anaesthetic Consultant
<b>Contact details:</b>	01872 252879
<b>Brief summary of contents:</b>	To provide guidance for staff within the maternity services on recognising and monitoring the obstetric patient using MEOWS to promote early recognition of deterioration, advice on the level of monitoring required, facilitate better communication with the multi-disciplinary team and ensure prompt management of any woman who is deteriorating.
<b>Suggested Keywords:</b>	Pregnancy complications, MEOWS
<b>Target Audience:</b>	<b>RCHT:</b> Yes <b>CFT:</b> No <b>CIOB ICB:</b> No
<b>Executive Director responsible for Policy:</b>	Chief Medical Officer
<b>Approval route for consultation and ratification:</b>	Maternity Guidelines Group
<b>Manager confirming approval processes:</b>	Caroline Chappell
<b>Name of Governance Lead confirming consultation and ratification:</b>	Tamara Thirlby
<b>Links to key external standards:</b>	CNST 4.9

Information Category	Detailed Information
<b>Related Documents:</b>	<p>References:</p> <ul style="list-style-type: none"> <li>• National Early Warning Score (NEWS2) standardising the assessment of acute-illness severity in the NHS (2017) Royal College of Physicians.</li> <li>• NICE (2007) Acutely ill patients in hospital: recognising and responding to deterioration CG 50.</li> <li>• NICE (2014) Intrapartum care for healthy women and babies CG 190.</li> <li>• Lewis G. 2007 The confidential enquiries into child health (CEMACH) saving mothers' lives.</li> <li>• Centre for maternal enquiries (CEMACE) saving mothers; lives 2011.</li> <li>• National Patient Safety Agency (2007a) Recognising and responding appropriately to early signs of deterioration in hospitalised patients.</li> <li>• Maternal Collapse in pregnancy and puerperium RCOG green top guideline No:56 2011.</li> </ul>
<b>Training Need Identified?</b>	No
<b>Publication Location (refer to Policy on Policies – Approvals and Ratification):</b>	Internet and Intranet
<b>Document Library Folder/Sub Folder:</b>	Clinical / Midwifery and Obstetrics

### Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
October 2017	V1.0	Initial Issue	Sarah-Jane Pedler, Practice Development Midwife and Karen Watkins, Obstetric Consultant
March 2018	2.0	Updated in line with CQC recommendations see New 2018 in body of text.	Maternity Guidelines Group and Helen Odell, Safety, and quality Improvement lead

Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline V4.1

Date	Version Number	Summary of Changes	Changes Made by
August 2019	2.1	Updated following recommendations from the Health Safety Investigation Branch (HSIB) regarding escalation times.	Sarah-Jane Pedler, Practice Development Midwife
June 2020	2.2	1.3. Inclusion statement. 2.12. Women in first stage of labour who score MEOWS 0 on initial assessment do not require MEOWS scoring for 12 hours (removed). Women in second stage of labour (removed). Full set of observations and MEOWS score every 4 hours unless indicated more frequently on partogram and if escalation indicated use SBARD hand over tool (added). 2.13. Full set of observations carried out and charted on MEOWS chart every 12 hours on antenatal ward (added). Updated Trust templates	Josie Dodgson, Patient Safety Midwife
March 2021	3.0	Full version update.	Rachel Mullins, Practice Development Midwife
February 2024	V4.0	Full update	Katharine Sprigge, Consultant Anaesthetist.
April 2024	V4.1	Update to 2.2.2. clarifying need to escalate to Delivery Suite (DS) coordinator.	Catherine Wills, Practice Development Midwife

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**All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.**

**This document is only valid on the day of printing.**

**Controlled Document.**

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline V4.1

## Appendix 2. Equality Impact Assessment

### Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance, please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team  
[rcht.inclusion@nhs.net](mailto:rcht.inclusion@nhs.net)

Information Category	Detailed Information
<b>Name of the strategy / policy / proposal / service function to be assessed:</b>	Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman Clinical Guideline V4.1
<b>Directorate and service area:</b>	Obstetrics and Gynaecology
<b>Is this a new or existing Policy?</b>	Existing
<b>Name of individual completing EIA</b> (Should be completed by an individual with a good understanding of the Service/Policy):	Catherine Wills, Maternity Guidelines Midwife
<b>Contact details:</b>	01872 255019

Information Category	Detailed Information
<b>1. Policy Aim - Who is the Policy aimed at?</b>  (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To provide guidance for staff within the maternity services on recognising and monitoring the obstetric patient using MEOWS.
<b>2. Policy Objectives</b>	Early recognition of deterioration, advice on the level of monitoring required, facilitate better communication with the multi-disciplinary team and ensure prompt management of any woman who is deteriorating.
<b>3. Policy Intended Outcomes</b>	Safe, appropriate care of women in community and hospital environment.
<b>4. How will you measure each outcome?</b>	Compliance monitoring tool.
<b>5. Who is intended to benefit from the policy?</b>	All pregnant and newly delivered women.

Information Category	Detailed Information
<b>6a. Who did you consult with?</b> (Please select Yes or No for each category)	<ul style="list-style-type: none"> <li>• Workforce: Yes</li> <li>• Patients/ visitors: No</li> <li>• Local groups/ system partners: No</li> <li>• External organisations: No</li> <li>• Other: No</li> </ul>
<b>6b. Please list the individuals/groups who have been consulted about this policy.</b>	<b>Please record specific names of individuals/ groups:</b> Maternity Guidelines Group.
<b>6c. What was the outcome of the consultation?</b>	Guideline Agreed
<b>6d. Have you used any of the following to assist your assessment?</b>	<b>National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:</b> No

**7. The Impact**

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
<b>Age</b>	No	
<b>Sex</b> (male or female)	No	
<b>Gender reassignment</b> (Transgender, non-binary, gender fluid etc.)	No	
<b>Race</b>	No	
<b>Disability</b> (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
<b>Religion or belief</b>	No	
<b>Marriage and civil partnership</b>	No	

Protected Characteristic	(Yes or No)	Rationale
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

**A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.**

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Catherine Wills, Maternity Guidelines Midwife.

**If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:**  
[Section 2. Full Equality Analysis](#)

# Appendix 3. MEOWS Chart CHA2712

This form is available for printing by ordering via Unit 4.

File in 3rd spine  
Sample Signatures to be recorded on the back page.



**Royal Cornwall Hospitals**  
NHS Trust

## MEOWS OBSERVATION CHART

(Modified Early Obstetric Warning Score)

NHS No: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

CR No: \_\_\_\_\_

**CONTACTING CRITICAL CARE OUTREACH**

Available 24 hours a day on: Bleep 3504 or Bleep 3513

Any patients referred will be reviewed and followed-up as appropriate with clinical responsibility resting with referring teams unless Critical Care Unit admission is required.

Location: \_\_\_\_\_

Date: \_\_\_\_\_

SECTION SIX

Risk Assessment - Outline clinical response to MEOWS triggers		
MEOWS score	Frequency of monitoring	Clinical response
0	Minimum 12 hourly	<ul style="list-style-type: none"> <li>Continue routine MEOWS monitoring with every set of observations</li> </ul>
Total 1 - 4	Minimum 4 - 6 hourly	<ul style="list-style-type: none"> <li>Inform midwife who must assess the patient</li> <li>Midwife to decide if increased frequency of monitoring and / or escalation of clinical care if required</li> </ul>
If $\geq 5$ or 3 in any one parameter	Increased frequency to a minimum of 1 hourly	<ul style="list-style-type: none"> <li>Midwife to urgently inform the Obstetric team caring for the patient using the SBARD tool</li> <li>Urgent assessment by obstetrician or anaesthetist to take place within 30 minutes of the observations</li> <li>Clinical care in an environment with monitoring facilities</li> </ul>
If $\geq 7$	Continuous monitoring of vital signs	<ul style="list-style-type: none"> <li>Midwife to immediately inform the Obstetric team caring for the patient using the SBARD tool - this should be at least Specialist Registrar level and take place within 30 minutes of the observations. Consider via 2222.</li> <li>Inform Anaesthetic team / Outreach / Critical Care Unit if senior review not occurred within 30 minutes or patient deteriorating</li> </ul>

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CHA2712 V8 02/2020  
Review due: 02/2023

**MEOVS KEY**

**0 1 2 3**

DATE				DATE		
TIME				TIME		
<b>RESP. RATE</b>	≥25		3		≥25	
	21-24		2		21-24	
	11-20		0		11-20	
	9-10		1		9-10	
	≤8		3		≤8	
<b>SpO<sub>2</sub></b>	≥96		1		≥96	
	94-95		2		94-95	
	92-93		3		92-93	
	≤91		3		≤91	
	Supplementary O <sub>2</sub> %	%	2		%	
<b>TEMP</b>	40.0		3		40.0	
	≥39°		2		≥39°	
	38°		1		38°	
	37.5°		0		37.5°	
	37°		0		37°	
	≤35°		1		≤35°	
<b>HEART RATE</b>	150		3		150	
	140		2		140	
	130		1		130	
	120		0		120	
	110		1		110	
	100		0		100	
	90		0		90	
	80		1		80	
	70		1		70	
	60		3		60	
	40		3		40	
<b>SYSTOLIC BLOOD PRESSURE</b>	180		3		180	
	170		2		170	
	160		1		160	
	150		0		150	
	140		0		140	
	130		1		130	
	120		1		120	
	110		2		110	
	100		2		100	
	90		3		90	
	50		3		50	
<b>DIASTOLIC BLOOD PRESSURE</b>	120		3		120	
	110		2		110	
	100		1		100	
	90		0		90	
	80		0		80	
	70		1		70	
	60		1		60	
	50		0		50	
	40		1		40	
	<b>Level of consciousness</b>	Alert				Alert
		V / P / U				V / P / U
<b>Parameters</b>	Pain score				Pain score	
	Appearance score				Appearance	
	PV bleeding score				PV	
<b>TOTAL SCORE</b>					<b>TOTAL SCORE</b>	
<b>INITIALS</b>					<b>INITIALS</b>	
Pain 5 - Asleep 0 - No pain 1 - Mild 2 - Moderate 3 - Severe Assessed in between contractions		0 = A - Alert 2 = V - Verbal stimuli 3 = P - Painful stimuli 3 = U - Unresponsive		Appearance 0 - Looks well 2 - Looks unwell		
				AN PV bleeding 0 - None 2 - Any bleeding 3 - Heavy		
				PN PV bleeding 0 - Normal 2 - Moderate 3 - Heavy		

Date:

All in patient label

Time	Intake (ml)				Output (ml)								Initials of Clinician
	Oral / Intragastic	Intravenous	Hourly Total	Running Total	Urine	Vomit / Aspiration	Drains	Blood Loss	Hourly Total	Running Total	Running Balance		
0800													
0900													
1000													
1100													
1200													
1300													
1400													
1500													
1600													
1700													
1800													
1900													
12hr Totals													
2000													
2100													
2200													
2300													
2400													
0100													
0200													
0300													
0400													
0500													
0600													
0700													
12hr Totals													
24hr Totals													
Intake =			Output =			24 hour balance =							

**URINE OUTPUT CALCULATION**

Mls/kg/hr	Volume
0.5 mls/kg/hr=	mls
1.0 ml/kg/hr=	mls
2.0 mls/kg/hr=	mls

Patients Weight  Kgs      Bowels open    Yes     No

Commence New MEOWS chart, once fluid balance chart completed.

