Western Health
and Social Care Trust

GUIDANCE ON MEASURING & RECORDING VITAL SIGNS ON PATIENTS IN ACUTE ADULT AND MATERNITY WARDS

July 2023

Western Health
and Social Care Trust

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1.0 INTRODUCTION

1.1 Background

It is the responsibility of each ward/unit manager to ensure all nurses, midwives, students and healthcare assistants who undertake vital signs monitoring, are trained and competent in the accurate recording of all vital signs: blood pressure, pulse rate, respiratory rate, temperature, and oxygen saturations and in the application of the National Early Warning Scores referred to as NEWS.

While NEWS 2 is the system in use in Acute adult wards, within Maternity Services the Obstetric Early Warning Scoring system (OEWS) is used.

The principles within this document are applicable to both services and where there is a distinct difference this has been highlighted.

Patients who are admitted to hospital believe that they are entering a place of safety and they, and their families and carers, have a right to believe that they will receive the best possible care there.

Patients who are, or become, acutely unwell in hospital may receive suboptimal care because their deterioration is not recognised, not appreciated or not acted upon sufficiently quickly.

The National Patient Safety Agency (NPSA) launched the fifth Patient Safety Observatory Report '**Safer Care for the Acutely Ill Patient: Learning from Serious Incidents'** in July 2007 in which patient deterioration was identified as a key theme.

The report contains a detailed analysis of serious patient safety incidents reported to the Agency's National Reported Learning System (NRLS) over a one-year period. Three key themes form the report:

- There was no vital signs recorded for a prolonged period and therefore changes in a patient's condition went undetected;
- A lack of recognition of the importance of the patients deterioration and/or no action taken other than recording of observations;
- A delay in the patient receiving medical attention, even when deterioration was detected and recognised.

A core component of the early identification of a deteriorating patient is the ability to recognise and respond to signs of deterioration in the patient. In other situations, there may be difficulties with communication between the patient and clinical staff. These difficulties are well recognised for some patient groups, for instance certain disabled patients and those with learning disabilities. In this situation, the role played by the family/carer is often invaluable in assisting clinical staff.

1.2 Purpose

The purpose of this policy is to provide evidence based guidance for staff in when to measure and record patients vital signs and the subsequent actions to take when deterioration is detected, thus ensuring patients are cared for in an efficient and effective manner.

2.0 SCOPE OF THE GUIDELINE

All staff caring for adult patients in the acute hospital setting should be familiar with and follow the instructions within this document.

3.0 ROLES & RESPONSIBILITIES

It is the responsibility of each member of staff to ensure that they complete NEWS2 / MEWS/ OEWS charts correctly and have completed the relevant learning.

3.1 Sister / Charge Nurse Responsibility

It is the responsibility of the ward sister/charge nurse to ensure that:

- Varying sizes of blood pressure equipment cuffs (including disposables), should be readily available on each ward.
- Monitors and equipment are kept in good service, with regular planned servicing by the Estates Department (or supplier) and this should be recorded. An equipment servicing log should be kept on every ward area/department.
- Defective equipment is withdrawn immediately from patient use, is labelling as faulty and sent to Estates for repair or decommissioning.
- Staff know how to use the equipment correctly.
- Portable monitoring equipment reliant upon batteries should be kept charged when not in use.
- Equipment is cleaned as per Trust Infection Prevention and Control Guidance
- Audits of NEWS 2 **/** Modified Early Warning Score **(**MEWS) / OEWS charts are completed as per the Trust requirements and improvement plans put in place where appropriate action taken to improve.
- Staff are released to attend relevant training on equipment used in the ward/department and NEWS training.

4.0 KEY PRINCIPLES

4.1 NEWS 2 & Obstetric Early Warning Score Chart

- There has been a regional agreement that all Health and Social Care Trusts will implement the NEWS 2 system referred to as a track and trigger system from March 2019.
- The NEWS 2 system provides a single standardised early warning system that provides a standardised score to determine illness severity and support consistent clinical decision-making and appropriate clinical response.
- The NEWS 2 /MEWS/OEWS systems also incorporate an action plan directing staff actions against a range of numerical values. A higher NEWS 2/MEWS/ OEWS score reflects a greater degree of risk to clinical deterioration.
- Actions taken as a response to the NEWS 2/MEWS/OEWS action plan must be recorded either on the vital signs chart or in the patient's main nursing notes.
- NEWS 2 should NOT be used in children i.e. <16yrs of age or in women who are pregnant (20 weeks +)
- Within Maternity services the track and trigger system in use is Obstetric Early Warning Score Chart (OEWS).
- The NEWS scores actions have been adopted in certain areas to reflect their current medical model for escalation

Whilst NEWS 2 / MEWS/OEWS will assist in identifying 50% of deteriorating sick patients, staff MUST use their clinical judgment and seek advice if they have concerns regardless of the score.

4.2 Initiation of measuring and recording patients vital signs

The decision to commence measurement and recording of patients vital signs should be supported with the following information;

- The rationale for measuring and recording the vital signs.
- The range of vital signs that must be recorded. The full range of vital signs must be recorded unless there is an explicit medical instruction to do otherwise in the medical notes.
- The frequency with which they must be recorded (this may change as a response to care and treatment).
- The duration of time that they must be measured and recorded for.
- Reduction of the frequency and or range of vital signs to be measured and recorded should be documented preferably in the Nursing and in the medical notes i.e. end of life/ palliative care.
- There will be times when patients will require vital signs recorded at set intervals which may differ to the frequency of NEWS monitoring as directed by the NEWS Score e.g. post-operative or post procedure observations, observations during blood transfusion etc. However, at

no times should the frequency of observations be any longer than that directed by the NEWS Score.

- Patients receiving a blood transfusion require their vital signs to be monitored during this process. The guidance provided on the frequency and range of vital signs to be recorded should follow according to the guidance in the Trust Blood Component Prescription and Transfusion Record.

5.0 PATIENT RECORD DETAILS

5.1 Vital Signs Chart

The doctor, nurse, midwife or healthcare support worker member must ensure:

- The patient's name, date of birth, Health & Care number is recorded accurately on the Vital Signs chart.
- The date and time (using the 24 hour clock) must be documented on each occasion that the vital signs have been measured.
- When a patient is moved from one clinical area to another the transfer must be clearly identified on the vital signs chart. (See Appendix A)
- The oxygen section should be completed using the recommended codes.
  (See Appendix B).

6.0 FREQUENCY OF MEASURING AND RECORDING VITAL SIGNS

- The frequency of measurement and recording of a patient's vital signs should always be based on the health and wellbeing of the individual patient and as per guidance in the NEWS 2 **/** MEWS/OEWS.
- A complete baseline set of vital signs should be undertaken on all patients within **one hour of admission onto the ward/department or sooner depending on the patient's condition.**
- Thereafter all adult patients in an **Acute hospital** setting should have as a minimum **one full set of vital signs recorded in a 12 hour period.**
- Maternity patients should have their vital signs **recorded at least daily.**

7.0 SUBSEQUENT SETS OF VITAL SIGNS

- Determining the next appropriate time to record a set of vital signs should be based on the findings of the vital signs, the NEWS 2 / MEWS/OEWS, how well the patient is expressing they are and the nurse's clinical judgement. In some instances this timing may be set by medical staff using clinical judgement.
- The time frame for the vital signs to be measured and recorded must be clearly recorded on the chart.

Whilst recognised as best practice, it may not be possible in clinical practice to complete observations at the exact frequency indicated. When NEWS 2 compliance audits are being undertaken the following acceptable variance to the frequency of Vital Signs being carried out must be taken into account.

Observation Frequency	Acceptable Variance (minutes)
½ Hourly	5 minutes
1 Hourly	10 minutes
2 Hourly	15 minutes
4 Hourly	30 minutes
6 Hourly and Over	60 minutes

- Additional continuation sheets should not be used to document the actions taken, a new chart needs to be commenced.

8.0 DELAYED DISCHARGE PATIENTS

Patients whose acute episode of care is over, but who have been delayed in being discharged, should have one set of vital signs recorded in a twelve hour period, or as indicated by their condition.

9.0 END OF LIFE

- Routine observations may not be appropriate during end of life care. In such circumstances the decision to discontinue routine observations should be discussed with the patient, the family and the consultant, and the decision documented in writing in the medical and nursing notes.
- Where the patient is placed on the care of the dying pathway the guidance contained in the pathway should be adhered to.

10.0 IMPLEMENTATION

The guideline shall be available for staff to access on the Trust Intranet under Trust documents in the Primary Care and Older Peoples Directorate guidelines section.

10.1 Delegation of vital signs monitoring

Delegation of measuring and monitoring of vital signs and calculation of NEWS 2 /MEWS/ OEWS to a senior Nursing Assistant (Band 3) can be done within the delegation framework and should include:

- A written record of the decision to delegate the task by senior management including the training, competency assessment,

supervision and annual assessment must be documented in the individual staff record.
- Senior Nursing Assistants must have completed and successfully passed a recognised vocational qualification on vital signs management through the Trust's Education Programme.
- An annual review of the senior Nursing Assistant's knowledge and skills must be undertaken by the senior Nursing team on the ward, to ensure skill and competency is maintained.
- This review should be recorded in the individual staff record.

Nursing and/or Midwifery students on pre-registration education programmes, approved under relevant 2018/2019 NMC education standards, must be given the opportunity to have experience of and become proficient in measuring, monitoring and calculation of NEWS 2 /MEWS/ OEWS/vital signs where required by the student's programme. This experience must be under the appropriate supervision of a registered nurse, registered midwife or registered health and social care professional who is adequately experienced in this skill and who will be accountable for determining the required level of direct or indirect supervision and responsible for signing/countersigning documentation.

10.2 Exceptions to delegating vital signs monitoring

Exceptions to the delegation of the measuring and recording vital signs to senior Nursing Assistants should include

- Patients within critical care,
- Patients post-surgery within the previous 24 /48 hours(Please refer to Appendix C for exceptions within Maternity Wards/ Departments),
- Level two patients cared for within general wards ,
- Patient with a head injury in the first 24 hour period,
- Patients post seizure in the first 24 hour period,
- Any patient a registered Nurse is concerned about.

This list is not exhaustive or exclusive to these clinical scenarios.
It is the responsibility of the Nurse/Midwife to ensure that delegation of this task is safe for individual patients and if not, the Nurse/ Midwife must undertake the recording and monitoring of vital signs.

11.0 MONITORING

Monitoring of the implementation of this policy will be the responsibility of Ward Sister/ Charge Nurse / Head of Service and the Lead Nurses.

12.0 EVIDENCE BASE/REFERENCES

Royal College of Physicians

13.0 CONSULTATION PROCESS

This policy has been developed using the NEWS 2 template and supporting information endorsed by the Royal College of Physicians London.

14.0 EQUALITY STATEMENT

In line with duties under the equality legislation (Section 75 of the Northern Ireland Act 1998), Targeting Social Need Initiative, Disability discrimination and the Human Rights Act 1998, an initial screening exercise to ascertain if this guidance should be subject to a full impact assessment has been carried out.

The outcome of the Equality screening for this guidance is:

Major Impact	
Minor Impact	
No Impact	√

15.0 SIGNATORIES

__________________________________ **Date:** ___

____
Name
Title

__________________________________ **Date:** ____

____
Name
Title

16.0 APPENDICES/ ATTACHMENTS

APPENDIX A NEWS 2 Chart (Sample)

NEWS Chart -

Observation chart for the National Early Warning Score (NEWS2)

Western Health and Social Care Trust

The NEWS 2 should not be used in children (ie age<16 years) or in women who are pregnant. (20 wks+)
NEWS may be unreliable in patients with spinal cord injury - Use with caution.

Write in CAPITAL LETTERS or use addressograph

Surname: SMITH
First names: JOHN
Health and Care No: 1234567890
DOB: 03/11/42

NEWS key: 0 1 2 3

FULL NAME: JOHN SMITH
DATE OF BIRTH: 03/11/42
DATE OF ADMISSION: 1/2/2020

2020

Parameter	Ranges	Score
A+B Respirations (Breaths/min)	≥25	3
	21–24	2
	18–20	
	15–17	
	12–14	
	9–11	1
	≤8	3
A+B SpO₂ Scale 1 (Oxygen saturation (%))	≥96	
	94–95	1
	92–93	2
	≤91	3
SpO₂ Scale 2† (Oxygen saturation (%))	≥97 on O₂	3
	95–96 on O₂	2
	93–94 on O₂	1
	≥93 on air	
	88–92	
	86–87	1
	84–85	2
	≤83%	3
Air or oxygen?	A=Air	
	O₂ L/min	2
	Device	
C Blood pressure (mmHg)	≥220	3
	201–219	
	181–200	
	161–180	
	141–160	
	121–140	
	111–120	
	101–110	1
	91–100	2
	81–90	3
	71–80	3
	61–70	3
	51–60	3
	≤50	3
C Pulse (Beats/min)	≥131	3
	121–130	2
	111–120	2
	101–110	1
	91–100	1
	81–90	
	71–80	
	61–70	
	51–60	
	41–50	1
	31–40	3
	≤30	3
D Consciousness	Alert	
	Confusion	3
	V	3
	P	3
	U	3
E Temperature (°C)	≥39.1°	2
	38.1–39.0°	1
	37.1–38.0°	
	36.1–37.0°	
	35.1–36.0°	1
	≤35.0°	3

†ONLY use Scale 2 under the direction of a qualified clinician. Use Scale 2 if target range is 88–92%, eg in hypercapnic respiratory failure.

NEWS TOTAL: 0 0 3 5 6 6 4 9 6 6 4 2

Monitoring frequency
Escalation of care Y/N
Initials
Pain Score (0-10)
Nausea Score (0-3)

National Early Warning Score 2 (NEWS2) © Royal College of Physicians 2017

APPENDIX B Codes for recording oxygen delivery

Codes for recording oxygen delivery on the NEWS observations chart	
A (breathing air)	RM (reservoir mask)
N (nasal cannula)	TM (tracheostomy mask)
SM (simple mask)	CP (CPAP mask)
V (Venturi mask and percentage) e.g. V24, V28, V35, V40, V80	H (humidified oxygen and percentage) e.g. H28, H35, H40, H60
NIV (patient on NIV system)	OTH (other, specify___________)

APPENDIX C Exceptions to Delegation within Maternity Wards / Departments.

BAND 3 MATERNITY SUPPORT WORKERS MAY BE DELEGATED THE TASK OF MEASURING AND RECORDING VITAL SIGNS FOR THE FOLLOWING OBSTETRIC (ANTENATAL, INTRANATAL AND POSTNATAL) INPATIENT:

- Patients post-surgery within the previous 24 /48 hours
- Daily measurements as part of a postnatal or antenatal examination

The maternity support worker must inform the named midwife if he/she has any concerns regarding the patient's vital signs (any score on Obstetric Early Warning Score Chart) or general well-being.

- **In an obstetric emergency** a maternity support worker may occasionally be delegated the task of measuring and recording vital signs (in the presence of a midwife) if the midwifery and obstetric team are delegated other necessary tasks. The team leader for the obstetric emergency has the responsibility of interpreting these vital signs in context with the complete clinical picture.

It is the responsibility of the Nurse/Midwife to ensure that delegation of this task is safe for individual patients and if not, the Nurse/ Midwife must undertake the recording and monitoring of vital signs.