Introduction

This policy should be read in conjunction with the Early Warning Score (EWS) see trust intranet policy as this will highlight the frequency of clinical observations for specific patient groups based on clinical presentation to staff involved in the recording of clinical observations and subsequent patient management.

This policy covers Central Manchester University Hospitals Foundation NHS Trust adult in-patient areas, including theatre areas and all day case areas for adult patients.

Nurses, midwives and doctors have a pivotal role in the early identification of patients at risk of deterioration through the monitoring of patient observations and assessment. The importance of accurate observations is clearly documented and essential according to the NPSA (NPSA, 2007). The NICE clinical guidance 50 “Caring for the Acutely ill Patient” and linked competency document also ensure that standards are set for the assessment and treatment of patients within hospitals. This observation policy sets the standard for the accurate monitoring of observations, utilising research and best practice and by referring to the NICE competency document to ensure that the national standard is met and maintained.

Purpose

General Points

• Outpatient areas are not to be included within this policy; however the lead clinician and lead nurse of the outpatient clinics will determine the frequency of observations and the type of observations required following a risk assessment of patients as a general principle to be treated in each area. If the patient deteriorates the local policy should be followed.

• All patients being cared for in in-patient clinical areas, should have their observations performed, with the frequency as stated below.

• When observations are taken, a full set of observations should always be recorded, to include Pulse Rate, Respiratory Rate, Blood Pressure, Temperature and Neurological Status and oxygen saturation (see EWS policy), the exception is St Mary’s Obstetric areas (see Maternity EWS policy). If an observation is unrecordable or undetectable e.g. SaO2 or blood pressure, escalate to the nurse in charge to assess the patient, refer to medical team if required

• A full set of observations including the EWS, must be undertaken on admission to all clinical areas (except theatre when they will be undertaken on discharge). Thereafter the frequency of subsequent observations will depend on the specialty and clinical condition of the patient. The only exception to this is St Mary’s Obstetric areas where a robust assessment criteria is in place, designed to assess appropriateness for individual patients to determine who is eligible for the maternity EWS (see Maternity EWS policy)

• When patients are transferred from one ward/ department to another, a full
A set of observations must be completed by the receiving practitioner within 10 minutes of arrival, with the exceptions as above.

- Patient observations should be measured by an appropriately trained and competent member of staff (see EWS policy).
- The frequency of observations should be determined by the nurses in charge of the shift / registrar or consultant managing the patient care and should be clearly documented on the observation chart or inputted into BORAS; unless a patient has an EWS of ≥3 when it is expected observations will be recorded hourly as a minimum (see EWS policy) and point 3.

- All observations should be documented on the Trust Temperature, Pulse and Respiration Chart (TPR) or agreed local documentation that has been reviewed by the critical care delivery group for use. Observations should then be initialed or inputted into the bedside observation recognition and alerting system. (BORAS)

- Only the Trust TPR chart should be used; if specific local documentation is required this must be agreed by the Critical Care delivery group. This local documentation must have EWS, frequency and space for initializing observations. A list of the alternative TPR charts is to be kept by the Outreach team. The outreach team will keep a live list of all Trust TPR charts in use.

- The frequency should be documented on the TPR chart or patient documentation by the medical team or nurse in charge of the patient or inputted into the BORAS system.

- All chart entries should be clear, legible, written in black pen and the time and date of the observations clearly documented (see EWS policy).

- Ensure appropriate infection control measures have been taken between patients and isolation policy utilized when appropriate as per Trust policy.

- It is important to remember that all medical devices require pre-use and post-use checks in accordance with training guidance. All staff must aware of the indications and contraindications for use and the device is used for its intended purpose. Medical device users must be aware of the battery functionality of devices they use and how to identify, troubleshoot any user issues and report faulty devices to MEAM and via the Incident reporting system. To ensure that observations taken and recorded are as accurate as possible, it is important to remember that equipment can fail and provide false readings if the user is unfamiliar with all of the above. Review the patient using clinical skills and question and check any spurious readings.
### Standards for clinical observations

<table>
<thead>
<tr>
<th>Why measured?</th>
<th>Standard</th>
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<tbody>
<tr>
<td>A. Respiratory monitoring</td>
<td>The Respiration rate is taken to:</td>
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<tr>
<td></td>
<td>• Determine baseline respiratory status</td>
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<td></td>
<td>• Identifies respiratory disease.</td>
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<td>• Identifies other complications (e.g. such as infection, shock, Acute Renal Failure, etc.)</td>
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<td></td>
<td>• Monitor fluctuations and potential deterioration.</td>
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<td></td>
<td>• Observe pattern and character of breathing.</td>
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<td></td>
<td>• Explain procedure to patient and gain consent.</td>
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<td></td>
<td>• Ensure you have a clear view of the patients' ribcage.</td>
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<td>• Inspiration and expiration counts as one cycle.</td>
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<td></td>
<td>• Count the patient’s respiratory rate for one full minute. (Ensure a clock or watch with a second hand is visible).</td>
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<td>• During or after counting the rate, assess the character of breathing.</td>
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<td></td>
<td>Note: Remember normal breathing is smooth and quiet; signs of difficulty breathing are shallow breathing, noisy breathing, wheezing, and the inability to speak clearly. Lifting the shoulders and use of accessory muscles on inspiration are signs of increased respiratory effort.</td>
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<td></td>
<td>• Document the respiratory rate as a number on the TPR chart, agreed documentation or patientrack system and other respiratory observations in the nursing notes.</td>
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<td></td>
<td>• Report any deterioration or other obvious changes to a senior member of staff.</td>
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<tr>
<td></td>
<td>• Respond to any EWS triggers as per policy</td>
</tr>
<tr>
<td>Why measured?</td>
<td>Standard</td>
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</table>
| **B. Pulse Rate Monitoring** | The pulse or heart rate is taken to:  
- Determine baseline cardiovascular status.  
- Monitor fluctuations and potential deterioration.  
- Assess cardiovascular function.  |
| | • Explain procedure to patient and gain consent.  
• Place one or two fingers over the pulse site (radial pulse is area of choice, use the third finger and fourth finger- not thumb or index finger), applying gentle pressure prior to taking the blood pressure.  
• Identify the pulse.  
• Count the beats felt for one full minute (ensure a clock or watch with a second hand is visible)  
• During counting the rate; assess the rhythm and strength of the pulse.  
• Remember a normal rhythm is regular; missing beats, irregularities and weak thready or bounding pulses may need further investigation and should be reported to a senior member of staff.  
• If the patient has an irregular heart rate, a radial and apex pulse can be measured simultaneously by two practitioners to assess variance  
• Document heart rate on the TPR chart, agreed local documentation or patienttrack system and other pulse observations in the nursing notes.  
• Report any deterioration or other obvious changes to a senior member of staff.  
• Respond to any EWS triggers as per policy. |
<table>
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| **C. Automated Blood pressure monitoring** | **- Explain procedure to patient and gain consent.**  
**- Remove restrictive clothing from patients arm.**  
**- Ensure the patient's arm is supported, with the cuff sitting around the arm at heart level. (The inflatable part of the cuff should cover at least 80% of the upper arm).**  
**- For automated machines press start and wait until the device indicates the reading is complete**  
**Note:** Remember; a very low BP is dangerous as this reflects a lack of blood and oxygen to the brain, kidneys, gut and skin. Just as a very high BP is dangerous as this may cause stroke, heart failure or renal failure. Either of these may require further investigation.  
**- Automated machines can be inaccurate; recheck manually if in any doubt of reading or blood pressure alters significantly;**  
  Systolic ↓ by 30 or is <90 or ↑ > 160 mmHg  
  Diastolic ↓ by 20 or is <50 or ↑ > 90 mmHg  
  or the pulse rate is irregular**  
**- Document the reading on the TPR chart, agreed documentation or patienttrack system report any significant rise or fall in BP recordings to a senior member of staff.**  
**- Respond to any EWS triggers as per policy** |
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| **D. Manual blood pressure monitoring**  
Qualified practitioners and HealthCare support workers who routinely use manual blood pressure monitoring, are only to undertake this type of clinical observation, once successful completion of competence and assessment are demonstrated, as per section 5. If the patients automated blood pressure in any doubt, has significantly dropped from normal limit or has an irregular pulse a manual blood pressure must be checked (see point d).  
The blood pressure recordings are taken to:  
• Determine a baseline.  
• Monitor fluctuations and potential deterioration.  
• Assess response to treatments and or medications. |  
• Explain procedure to patient and gain consent.  
• Remove restrictive clothing from patients arm.  
• Ensure the patient’s arm is supported, with the cuff sitting around the arm at heart level. (The inflatable part of the cuff should cover at least 80% of upper arm.)  
• Check equipment, ensure: the level is at zero, all tubing is into with no leaks and that the column is upright and visible.  
• Apply appropriately sized cuff.  
• Inflate the cuff until the radial pulse can no longer be felt manually, observe the reading and fully deflate the cuff. This provides an estimation of systolic pressure.  
• Apply the stethoscope over the brachial pulse point and inflate the cuff to 30mmhg greater than the estimated systolic pressure.  
• Deflate the cuff at a rate of 2mmhg per second.  
• On hearing the first pulse sound, note the level in the column. This is the systolic pressure  
• The disappearance of the pulse sound indicates the diastolic pressure.  
• Document the reading on the TPR chart, agreed local documentation or patientrack system; report any significant rise or fall in BP recordings to a senior member of staff.  
• Respond to any EWS triggers as per policy. |
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<tr>
<td><strong>E. Pulse Oximetry</strong></td>
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<tr>
<td>The pulse Oximetry reading are undertaken to:</td>
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<tr>
<td>• Determine a baseline.</td>
<td>• Explain procedure to patient and gain consent</td>
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<tr>
<td>• Monitor fluctuations and potential deterioration.</td>
<td>• Apply probe to finger</td>
</tr>
<tr>
<td>• Assess response to treatments</td>
<td>• Look at wave form or signal indicator</td>
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<tr>
<td>Limitations</td>
<td>Document saturation indicated on TPR chart, agreed local Documentation or patientrack system</td>
</tr>
<tr>
<td>• Poor peripheral blood flow</td>
<td>It gives information regarding saturations – not patient ventilation or levels of CO2- consider patient status</td>
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<tr>
<td>• Cardiac arrhythmias</td>
<td></td>
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<tr>
<td>• Bright overhead lights</td>
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<tr>
<td>• Carboxyhaemoglobin</td>
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<tr>
<td>• Nail varnish</td>
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**Note:** It gives information regarding saturations – not patient ventilation or levels of CO2- consider patient status.
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| **F.**<br>**Temperature monitoring** | **Explain procedure to patient and gain consent**<br>**Preferably tympanic temperature should be measured**<br>**Place a clean plastic protector over the tympanic probe.**<br>**Carefully insert the probe into the ear canal ensuring a snug fit, for genius 1 thermometer without causing patient discomfort (you will need to pull the ear gently upwards and slightly out to do this. This is not required for the smaller genius 2 thermometer**<br>**Press the start button and wait until the device indicates the reading is complete.**<br>**Remove the probe and dispose of the plastic probe protector.**<br>**When using axillary, use specific devise for under the arm**<br>**Place the thermometer in the centre of the armpit with the arm firmly against the chest**<br>**Leave in place as per devise instructions**<br>**For oral measurement, use specifically for under the tongue**<br>**Place under the tongue in the sublingual pocket**<br>**Leave in place for 3-5 minutes**<br>**Note: Remember that there may be other factors to consider regarding the patient’s temperature including environmental factors, circadian rhythms, ear wax and so on.**<br>**Document the reading on the TPR chart agreed local documentation or BORAS system. Other observations such as shivering, or sweating in the nursing notes.**<br>**Respond to any EWS triggers as per policy.**

The temperature is taken to:<br>• Assess for deviation from the normal range which may indicate; Disease, deterioration in condition, infection or reaction to treatment.
Why measured? | Standard
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**G. Alert, Voice, Pain or Unconscious (AVPU)**

The AVPU assessments are undertaken to:
- Determine a baseline for the patient.
- Monitor fluctuations and potential deterioration.
- Assess response to treatments
- To complete the full EWS assessment for a patient

Note: If the patient has a new alteration to their mental state, further assessment and treatment will be required.
- The patient’s ability to manage their airway should be a priority
- Following an AVPU assessment, further assessment may be required see point 2

- Assess patient’s mental state by speaking to the patient and assessing whether they are alert and orientated, if so mark as “alert”
- If the patient’s conscious level is slightly altered and they are newly confused or are not alert but responding only when spoken too, they should be marked as “responding to voice/new confusion”
- If a patient is not responding to voice, administer painful stimuli – such as periorbital push (if no facial fractures) or the trapezius pinch, to assess response, if responds should be marked as “responding to pain”
- If a patient is not responding to painful stimuli then the patient should be marked as “unresponsive”, - seek assistance
- Document AVPU indicated on TPR chart, agreed local Documentation or patientrack system

**Neurological Observations**
- Indications: Patients with; Drugs overdose, head injury, falls with suspected head trauma, patients with new confusion or altered level of consciousness, unstable epileptic, any other patient defined by medical team.
- Registered Practitioners only to undertake neurological observations using the Glasgow Coma Score.
- The entire observations set should be undertaken by the same RN including vital signs to ensure consistency in the assessment process is maintained.
- The same RN should endeavour to perform neurological observation of the patient for their entire shift to ensure consistency in observation taking is maintained.
- The frequency of neurological observations should be defined by the medical team on a patient specific basis and documented clearly in the patient’s medical records.
For a patient who has had a fall with suspected injury to the head; either witnessed or anecdotal, or obvious sign of injury to the head, neurological observations should be undertaken:

- ½ hourly for 2 hours
- Hourly for 4 hours
- 2 hourly for 6 hours
- 4 hourly for 12 hours
  - then until medical review dictates otherwise.

The designated Trust neurological examination chart should be used.

In relation to a patient with a significant head injury, refer to the inpatient adult head injury guidelines for frequency of observations and management plan.

**Frequency of observations**

- The frequency of observations should be as per EWS policy and determined by; a Registered Nurse in charge of the shift, Senior Doctor (Registrar or Consultant) and should be clearly documented on the observation chart; unless a patient has a EWS of ≥ 3 when observations will be recorded hourly as a minimum.
- All patients should have a minimum of 12 hourly observations, with the exceptions as per below.
- All acute (non-elective) admissions should have a minimum of 4 hourly observations for 48hrs from the last trigger ≥ 3 or for 48hrs from admission/transfer if not triggering on the EWS.
- Within the Emergency Department frequency is a minimum of hourly as per Trust EWS policy (latest version available on the intranet)
- All Post operative patients should have frequency as below unless medical staff document alternative request;
  - 30 minutes for 2 hours
  - Hourly for 2 hours
  - As patient need dictates minimum 4 hourly for 48hrs from the last trigger ≥ 3 or for 48hrs post surgery if not triggering on the EWS.
- All transfers from a higher level of care, for example Critical care or the coronary care unit to a ward must have a minimum of 4 hourly observations for 48hrs from the last trigger ≥ 3 or for 48hrs from transfer if not triggering on the EWS.
- When a patient is on the Liverpool care pathway the observations may be stopped according to the End of Life Policy.
- If a patient is a delayed discharge home and medically fit, it must be recorded in medical notes that their observations may reduce to daily and observations must be recorded on the day of discharge home.
• Observation frequency can be reduced by a senior team member; Consultant, registrar or Registered Nurse in charge of shift (Trust member only) and should be documented on the TPR chart or / and in the patient case notes with a clear reason for reason for change.
• If a patient is on more frequent than hourly observations, then Temperature can be recorded hourly, unless other clinical symptoms suggest a change in Temperature. The previous recording can be used to calculate the EWS.
• If a patient is to be absent from the ward for investigations when observations are due then the observations should be taken prior to transfer (exception when transferred to theatre).
• If a patient is absent from the ward when clinical observations are due they must be completed with in 10 minutes of return to the ward.

Communication
• Ensure concise and effective communication when referring patients to senior members of the team or other team members
• Use the SBAR tool as a guide for communication to maintain standards and effective Communication

Patients refusing to consent to have observations completed or confused patients who lack capacity (see consent policy available on the intranet)
• Give full explanations regarding the importance of clinical observations.
• With continued refusal, inform the nurse in charge and document in the nursing notes and refer to appropriate member of parent medical team for review within an hour for full assessment.

Measurement of acute pain / pain scores
• Accurate pain assessment is essential for effective pain management and gives the patient an active role in their care. Good pain management improves quality of care, aids recovery and reduces the risk of chronic pain developing.
• There are a number of tools available to assess pain intensity and gauge the effectiveness of a particular treatment. It is important to choose the most appropriate tool for your patient. The preferred scale in the trust is the 0 – 10 numerical rating scale. 0 = No pain & 10 = the worst pain possible
• If this scale is not appropriate, details of other scales can be found in the acute pain guidelines (on the Trust intranet) or by contacting the acute pain team. Please see appendix 9 for details of the behavioural pain scale for use with ventilated and sedated patients in critical care.
• Assessing pain intensity-The patient is asked: “What number would you give to your pain right now, if 0 is no pain and 10 is the worst pain possible”. The patient’s verbal report should be obtained at rest and also during activity such as coughing, deep breathing or moving. Pain scores should be clearly documented at rest and movement, as well as actions taken to relieve pain. All pain scores of 5 or more should result in an intervention being made.

If a pain score of 5 or more is given, further information about the pain can be obtained to aid management. This includes assessment of:
- Location
- Duration: e.g. is it constant or does it come and go? How long does it last?
- Quality: can the patient describe what it feels like e.g. burning, aching, sharp.

• Frequency of pain assessment
The frequency of pain assessment should be based on patient’s pain intensity.
At the very minimum pain should be assessed:
- On admission
- Along with routine recording of other vital signs
- Within 1 hour of an analgesic intervention to ascertain its effect.
For patients who have a PCA or epidural in place, pain scores should be assessed according to local guidelines.
For further information on pain assessment please see the Acute Pain Manual available on every ward and the intranet.

Competency for Registered Bank Staff
For Bank only Registered Nurses working in the trust; they will be emailed by NHSP administrators, with a link to the Observations and EWS Trust Policy with instructions that they must read and sign they have read the Policy. On the orientation sheet when they first work in a ward there will be a check to sign by the nurse in charge and themselves, that they have gone through the policies and understand the processes that occur in CMFT with respect to undertaking and appropriate action relating to observation recording and results.

Competency for CSW Bank Staff
For Bank CSW they will be sent a copy of the observation and EWS supportive reading booklet supplied by the NVQ team and will be sent a copy of the assessment document. The questions should be completed before attendance to the ward and once completed they should call the NVQ assessors to observe them undertaking observations in practice. Once 5 sets have been
completed and assessed as competent they will receive a sticker for their badges that indicates they are competent to undertake observations, if this assessment is not complete they should not undertake observations in clinical wards unless observed and counter signed. From 1\textsuperscript{st} April 2011 all CSW bank staff must display the sticker on their name badge or will not be able to undertake observations. (see below)

Observation competency for NHSP CSW.

- NHSP CSW staff currently employed by the Trust
  - The observation assessment documentation previously completed is to be taken to the NVQ assessors’ office in order to obtain a competency sticker for the back of the name badge to enable observation recording in the clinical area.

- NHSP CSW new to the Trust
  - Attend NHSP office to obtain the clinical observation and assessment manual
  - Contact the NVQ assessors to complete assessments in order to obtain a competency sticker for the back of the name badge to enable observation recording in the clinical area.

The sticker looks like this

In the absence of the observation competency sticker CSW staff must not perform observations.