

## **PHYSIOLOGICAL OBSERVATIONS POLICY FOR INPATIENTS AND MINOR INJURY UNITS (including Wessex House)**

To be read in conjunction with the Policy for:

**Somerset Treatment Escalation Plan (STEP) and Resuscitation  
Decision, Resuscitation Policy, Infection Prevention and Control  
Policy, Clozapine Policy and Health and Safety Policy**

Version:	7.1
Date issued:	<b>December 2015/August 2016/ September 2018</b>
Review date:	<b>November 2018</b>
Relevant Staff Group/s:	All staff who measure, record and act on physiological observations in inpatient settings (CH and MH), including medical staff, agency nurses and student nurses

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## DOCUMENT CONTROL

<b>Reference</b> NV/Jun/12/POP	<b>Version</b> 7.1	<b>Status</b> Final	<b>Author</b> Senior Nurse for Clinical Practice
<b>Amendments</b> Amended to include Minor Injury Units following review by the Board. Amendments following NHSLA review. Small amendments following review by Wessex House. Appendices B and D updated in line with national guidelines. November 2015 – amended to include NEWS observation chart and update roles and responsibilities. August 2016 Updated Appendix E. September 2018 minor changes to update sepsis pathway and documentation on RiO.			
<b>Document objectives:</b> To set a minimum standard of type and frequency of observations to be taken in inpatients wards and MIUs and to ensure that abnormal results are acted on appropriately and in a timely manner.			
<b>Training/resource implications:</b> Training provided by Clinical Skills Facilitators			
<b>Approving body</b>	Clinical Governance Group	Date: December 2015 June 2016	
<b>Equality Impact Assessment</b>	Impact Part 1	Date: September 2012	
<b>Clinical Audit Standards</b>	Yes	Date: TBA	
<b>Ratification Body</b>	Senior Management Team	Date: December 2015 August 2016	
<b>Date of issue</b>	<b>December 2015/August 2016 September 2018</b>		
<b>Review date</b>	<b>November 2018</b>		
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## 1. INTRODUCTION

1.1 To set a minimum standard of type and frequency of physiological observations to be taken in Inpatients Wards and Minor Injury Units and to ensure that abnormal results are acted on appropriately and in a timely manner (includes Wessex House).

### Background

1.2 The literature states that patients in hospital are at risk of physiological deterioration.

1.2.1 Not all patient deterioration can be predicted so therefore all patients require close observation which includes the taking and recording of vital signs.

1.2.2 There is evidence that there is poor recognition of physiological deterioration.

1.2.3 Although deterioration can be recognised through vital signs, these are not always regularly recorded.

1.2.4 If abnormal vital signs are recorded, appropriate action is not always taken.

1.2.5 Some observations are not included in the National Early Warning Score (NEWS) but still represent an important indication of the patient's condition e.g. capillary blood glucose, urine output and pain score.

### Guidance

1.3 This policy provides guidance to nurses and other health care staff in the following:

1.3.1 Undertaking the right observations

- The physical observations (vital signs) that should be undertaken on inpatients
- The frequency of observations and when the frequency should be increased or reduced

1.3.2 Recognising the deteriorating patient

- How observations should be recorded and assessed
- Using the National Early Warning score to guide clinical decision making
- The abnormal ranges of observations that should cause concern (guided by NEWS)

1.3.3 Initiating simple rescue measures

- How to make a referral for a deteriorating patient
- The initial actions that can be taken to prevent deterioration or promote a dignified death

- 1.3.4 The guidance includes use of the NEWS system and other observations that should be followed. The additional importance of 'nurse concern' and clinical judgement as factors in predicting deterioration should not be underestimated and any member of staff should escalate their concern by calling for help. The SBAR communication prompt model is a useful aid when doing this.

## 2. PURPOSE AND RATIONALE

- 2.1 This policy applies to all inpatients, Minor Injury Units and Wessex House within the Trust.

- 2.1.2 **Exclusions - This does not apply to patients in labour. For those patients on the End of Life Register, an individual assessment must be done to determine the ceiling of care and level of assessment appropriate for each patient.**

This policy will;

- Support the use of the NEWS score to guide clinical decision making (Appendix A)
- Highlight the abnormal ranges of observations that should cause concern
- Provide resources to support ward staff and training
- Reinforce the Communication Standard – when to call for help
- Follow best practice as recommended by the National Institute for Clinical Excellence (NICE) guidelines Acutely Ill Patients in Hospital, National Patient Safety Agency (NPSA) Recognising and Responding appropriately to early signs of deterioration in hospitalised patients (2007), Patient Safety First, The 'How to Guide' for reducing harm from deterioration (2008)

## 3. DUTIES AND RESPONSIBILITIES

- 3.1 The **Trust Board** has a duty to care for patients receiving care and treatment from the Trust.
- 3.2 The **Director of Nursing and Patient Safety** is responsible for this policy, but will delegate authority for the overall implementation and ongoing management of this policy to the Leads of Services this policy applies to.
- 3.3 The **Senior Nurse for Clinical Practice** is the author of this policy and also the Lead for Deteriorating Patients. This role includes the monitoring of all unplanned transfers and investigation of incidents where appropriate action, such as observations or calling for help, have not been taken. Any learning needs are fed back to the team leader/ward manager. This is reported quarterly to the Clinical Governance Group in the Deteriorating Patients Improvement Action Plan.

- 3.4 The **Clinical Governance Group** will discuss the quarterly report and may decide on actions to be taken by the relevant Best Practice Groups.
- 3.5 The appropriate **Best Practice Groups** will review the physiological observation audit and will oversee and report on the action plan.
- 3.6 All **Ward Managers/Team Leaders** have a duty to ensure that the staff working in their team are trained, competent and confident to undertake physiological observations. It is the responsibility of the person delegating the task to ensure the member of staff undertaking the delegated duty is competent. The person delegating the task remains accountable for that delegation. The ward manager/team leader is also responsible for ensuring staff complete a DATIX for all unplanned transfers, and for assisting in the investigation process of any incidents, as well as feeding back any learning to their team.
- 3.7 The **Clinical Practice Team** will provide a rolling programme of training in Physiological Observations and Recognition and Rescue of Deteriorating Patients, accessible via the learning and development intranet page. They are also responsible for assisting in the investigation of any unplanned transfers.

#### 4. **DEFINITIONS AND SYMBOLS USED**

NEWS – National Early Warning Score  
AIM - Acute Illness Management - Early Intervention and Treatment  
ILS - Intermediate Life Support  
ALS - Advanced Life Support  
AVPU - **A**lert, responds to **V**oice, responds to **P**ain, **U**nresponsive  
RR - Respiratory Rate  
HR - Heart Rate  
SBP - Systolic Blood Pressure  
SpO<sub>2</sub> - Saturation (peripheral) of oxygen  
GCS - Glasgow Coma Score  
CRT - Capillary Refill Time  
SBAR - Situation, Background, Assessment, Recommendations  
< means 'smaller than'  
> means 'greater than'

#### 5. **STATEMENT OF POLICY AND GUIDANCE**

- 5.1 All patients should have temperature, pulse, respiration rate, blood pressure, SpO<sub>2</sub> and conscious level recorded on admission. This is recorded within the RiO End of Bed Observation section.
- 5.1.1 If a patient appears unwell, think 'could it be sepsis? The sepsis screening and action pathway is available on the clinical practice page of the Trust intranet on <http://intranet.sompar.nhs.uk/media/4994/sepsis-screening-and-action-pathway-7-sept-2017.pdf>

## **Physiological observations to be undertaken on all Inpatient wards**

5.2 There are five main physiological observations that are regularly measured as “vital signs”. These are all included in the NEWS system.

- Temperature
- Pulse
- Respiration rate
- Blood pressure
- Oxygen saturation
- Conscious level

5.2.1 There are two additional observations that can provide important physiological information:

- Urine output \* includes fluid chart with accurate fluid balance
- Capillary Blood Glucose
- Pain score – recorded on RiO

### **Frequency of observations**

5.3 The details for frequency of observations for different specialities can be found in the appendices.

5.3.1 Any abnormal observations should initiate an “*alert*” and the abnormal ranges are provided by the NEWS scoring (Appendix A). The NEWS score consists of five measured variables; respiratory rate (RR), heart rate (HR), systolic blood pressure (SBP), conscious level and urine output.

5.3.2 The range for each observation scored is between 0 and 3; with a score of 0 being in the range, and 3 is the most deranged. A total NEWS score is derived by adding the six scores to get a total between 0 and 18, with 18 being the most deranged. A guide to abnormal ranges in other parameters is discussed below.

5.3.3 An *alert* should cause the practitioner to stop and think about the implications for the patient. An *alert* should prompt one or more of the following depending on the severity of the patient’s condition:

- Extra vigilance (additional observation parameters being measured)
- Further assessment and intervention by a competent practitioner
- Referral to the patient’s responsible medical practitioner
- 999 call

### **Physiological Observations: Normal and Abnormal Values**

(Please see appendix G for the Procedures for Measuring Physiological Observations)

## Temperature

- 5.4 This measurement is especially important in neutropenic patients, and for detecting sepsis.
- 5.4.1 Low temperature is as significant as high temperature. The Surviving Sepsis campaign defines one of the parameters for sepsis, as having a core temperature of  $>38^{\circ}\text{C}$  or  $<36^{\circ}\text{C}$ .
- 5.4.2 Hypothermia is defined as a core temperature  $<35^{\circ}\text{C}$  which can become fatal at  $<32^{\circ}\text{C}$ . Hypothermic patients should be warmed slowly using blankets.

## Pulse

- 5.5 The pulse is a reflection of the heart rate and is frequently measured via the saturation probe on the automated blood pressure machine; it will therefore be measuring the pulse in the finger. This poses three issues:
- The pulse might not reflect the true heart rate
  - Pulse properties cannot be determined. For example, volume, rate and rhythm
  - Practitioners may not develop expertise in assessing pulse properties
- 5.5.1 A manual pulse should be taken at least once per day to assess the pulse properties, and develop and maintain practitioner expertise.
- 5.5.2 A pulse rate of  $>90$  b/min or  $< 50$  b/min should initiate an *alert* and a manual pulse should be checked if the heart rate has been read from an automated machine. The rate and regularity should be checked and recorded within RiO.
- 5.5.3 Sepsis should be considered when the heart rate is  $>90$  b/min.
- 5.5.4 A 12 lead ECG should be performed as soon as possible, on any patient who has a new irregular pulse noted, or any other concerns with their pulse. This should be viewed by a doctor or practitioner who is competent to read ECGs, as soon as is practicably possible.
- 5.5.5 Patients receiving beta blocker medication will not be able to increase their heart rate to compensate for hypo perfusion conditions, and therefore other abnormal signs (high respiratory rate and low urinary output) will have extra significance.

## Respiration rate

- 5.6 Respiratory rate is the most sensitive indicator of deteriorating physiology and must be recorded in all patients.
- 5.6.1 A respiratory rate of  $< 12$  or  $> 20$  should initiate an *alert*.



- 5.6.2 Depth, symmetry and pattern of respiration should also be noted and recorded if abnormal in the progress notes.

### **Blood pressure**

- 5.7 Systolic blood pressure (SBP) less than 110 mmHg should initiate an *alert*).
- 5.7.1 A SBP  $\leq$  90mmHg may be a sign of severe sepsis, fluid loss or cardiac shock and requires further assessment of the patient.
- 5.7.2 The SBP should be greater than the heart rate. If the heart rate increases above the SBP it should initiate an *alert*.
- 5.7.3 Falling blood pressure should be regarded as late sign of deterioration.
- 5.7.4 In cases of very low blood pressure, the electronic BP measuring devices may not be accurate. Manual sphygmomanometers should be available to all areas and staff should be trained and competent to use them.
- 5.7.5 A blood pressure reading of 140/90 may indicate hypertension. If detected, then repeat again in half an hour, if still elevated refer to the patient's GP for further hypertension monitoring and plan of care.

### **Oxygen Saturation**

- 5.8 Oxygen saturation (SpO<sub>2</sub>) should be recorded on all patients.
- 5.8.1 Unless normal for patient, saturation  $\leq$  95% with or without supplemental oxygen needs to be addressed.
- 5.8.2 The concentration of supplemental oxygen should also be recorded and the oxygen delivery device noted. Oxygen must be prescribed on the Medicines Administration Record, unless it is being administered during a medical emergency.
- 5.8.3 If the patient has an oxygen saturation reading  $\leq$  90%, the device, flow and wall outlet should all be checked to ensure optimum oxygenation. Check oxygen cylinder capacity, if in use, and ensure there is an adequate supply.
- 5.8.4 Oxygen saturation does not measure carbon dioxide, and arterial blood gases should be considered in all patients with abnormal oxygen saturations (SpO<sub>2</sub>), breathing difficulties or unexplained low levels of consciousness.
- 5.8.5 Oxygen saturations will not be accurate in patients with hypoperfusion conditions. A capillary refill time (CRT) test and mottled knee sign can give further information on the patient's perfusion and may initiate an alert.

## Conscious level

- 5.9 Conscious level should be initially assessed on all patients using the AVPU scale.

AVPU Scale		
A	Alert	<i>Awake</i>
V	Responds to Voice	<i>Lethargy</i>
P	Responds to Pain	<i>Stupor</i>
U	Unresponsive	<i>Coma</i>

- 5.9.1 If a patient has a primary neurological problem the Glasgow Coma Score (GCS) should be used by a competent practitioner. For example, a head injury post fall. Neurological observations must be undertaken for at least 24 hours and then ceased following the guidance of a medical practitioner or Advanced/Emergency Nurse Practitioner.
- 5.9.2 Deterioration in conscious level can be caused by many factors, and a more comprehensive physical assessment should be undertaken by a competent practitioner.
- 5.9.3 New confusion or a change in conscious level is a significant indicator of deteriorating physiology and should be recorded as 3 on the NEWS score.
- 5.9.4 A response only to pain or unresponsive, correlates to a GCS of  $\leq 8$  and should be treated as a medical emergency.
- 5.9.5 Any deterioration in conscious level should be followed by a more in depth assessment of GCS, by a competent practitioner.
- 5.9.6 Patients having seizures are at significant risk and should have a senior medical review.

## Urine output

- 5.10 The optimum urine output is 0.5ml to 1ml / kg / hr. In a 70kg adult this is equal to 35 to 70 ml / hr. The minimum desired urine output is 0.5mls / kg / hr, which is equal to 35 ml/hr. Urine output is generally assessed over a two hour period.
- 5.10.1 In the majority of patients urine output does not need to be routinely measured, but should be considered in the following instances;
- Patients who's NEWS score is rising. For instance, consider measuring urine output for 24 hours if a patient has a NEWS score of  $> 4$
  - Patients with other abnormal signs such as high fever
  - Patients with other abnormal fluid losses such as vomiting, drains, stomas or diarrhoea

- 5.10.2 In Community Hospitals patients with primary urological or renal problems may have urine output observations done according to specialist advice.

### **Fluid Balance**

- 5.11 When a fluid balance monitoring is in use, it should be fully documented to include both input and output of fluids and the quantity for each entry. Abbreviations or entries such as OTT (out to toilet) or PU'd are not acceptable.
- 5.11.1 Patients receiving intravenous or subcutaneous fluid must have fluid balance monitored and be accurately completed at all times.
- 5.11.2 Daily and cumulative balances should be entered onto the RiO progress notes.
- 5.11.3 Insensible losses (sweat, moisture loss in breathing) are not normally recorded, but should be accounted for in patients with fluid balance problems. Normal insensible loss is approximately 500-1000mls in 24 hours but can greatly increase when a patient has a high temperature or rapid respiratory rate.

### **Assessing the Deteriorating Patient**

- 5.12 Staff should ensure the patient is able to understand the information given to them and are able to give their informed consent. This may necessitate the use of a professional interpreter and the translation of written information. A capacity assessment should be considered for those patients who are unable to consent to the procedure and reference should be made to the relevant Trust policy (refer to Consent and Capacity to Consent to Treatment Policy).
- 5.12.1 Vital signs and NEWS scoring will give an indication of the patients' condition. If the patient is deteriorating, a more comprehensive assessment is warranted.
- 5.12.2 The ABCDE model of assessment is recommended as it gives a rapid, initial assessment of the patient's condition:
- A = Airway
  - B = Breathing
  - C = Circulation
  - D = Disability
  - E = Environment
- 5.12.3 Basic guidance on ABCDE assessment can be found in the AIM manual for staff who have attended the course.
- 5.12.4 Help must be sought as soon as possible if any practitioner feels unable to adequately deal with the situation, or feels that the patient could deteriorate further.

## Seeking Help

- 5.13 Any concerns about the patient must be relayed immediately to the clinician responsible for the care of the patient, and recorded in the patients' records.
- 5.13.1 The following procedure is a guide to calling for help:
- 5.13.2 Before calling a clinician, make sure you have all the information you need to hand.
- 5.13.3 Always use the Situation, Background, Assessment and Recommendations (**SBAR**) system to communicate.

### Situation

State your name, position and where you are located

State the patients name, age and diagnosis

State why you are calling – the current problem, giving observation and assessment findings

### Background

State any relevant events leading up to this event providing further details of the patient. For example, diagnosis, resuscitation category, team responsible for care and any other reasons for concern.

### Assessment

State what you have assessed the situation to be – for example, I believe the patient has developed pneumonia.

### Recommendation

Be clear about what you are expecting the clinician to do – for example, attend immediately, attend within one hour and so on.

Do not hesitate to call 999 if the patient is rapidly deteriorating or you have any major concerns.

## Immediate Measures for a Deteriorating Patient

- 5.14 Simple early measures can often prevent further deterioration of the patient and avoid the need to admit to an acute hospital.
- 5.14.1 Interventions will depend on the patients' vital signs and initial assessment but may include some of the following:
- Appropriate positioning of the patient
  - Checking that the optimum amount of oxygen is being delivered
  - Checking that vital medications have been given
  - Giving appropriate 'as required' medications
  - Checking that infusions are running to time
  - Simple physiotherapy

If you are in any doubt about what to do, or your competency to do it .....call for help (see 5.13 Seeking Help).

## **6. TRAINING REQUIREMENTS**

- 6.1 The Trust will work towards all staff being appropriately trained in line with the organisation's Staff Mandatory Training Matrix (training needs analysis), further detail can be found in the Learning Development and Mandatory Training Policy and the Training Prospectus. All training documents referred to in this policy are accessible to staff within the Learning and Development Section of the Trust Intranet.
- 6.2 All staff working under this policy must be aware of the Procedure for Measuring Physiological Observations (Appendix G) and the NEWS Score Guidance (Appendix A). All new staff must be made aware of this in their induction.
- 6.3 All clinical staff working under this policy must undertake resuscitation training as outlined in the Resuscitation Policy.
- 6.4 All non-registered health care professionals and registered professionals whose basic training does not include measurement of physiological observations and who take observations as part of their role, must be trained and assessed as competent in taking observations. Please see the Competency Assessment for Physiological Observations (Appendix G)
- 6.5 It is recommended that all registered nurses in community hospital and mental health inpatient settings attend the Recognition and Rescue of the Deteriorating Patient training.

## **7. INFECTION CONTROL**

- 7.1 All procedures and patient contacts should be carried out in accordance with Somerset Partnership NHS Foundation Trust's Infection Control Policy.

## **8. MAINTENANCE OF EQUIPMENT**

- 8.1 Equipment must be maintained and used in accordance with Somerset Partnership NHS Foundation Trust's Medical Devices Policy and Resuscitation Policy. Mandatory training must be undertaken as specified in the staff training matrix (training needs analysis).
- 8.2 Equipment must be used in accordance with the manufacturer's instructions.
- 8.3 Equipment must always be decontaminated after use in accordance with Somerset Partnership NHS Foundation Trust's Decontamination of Equipment policy. This includes cleaning the equipment thoroughly with detergent wipes between each patient and before storing.

- 8.4 The screen of the temporal scanner (device to measure temperature via the ear canal) should be cleaned with an alcohol wipe at least twice weekly, to ensure accurate readings.
- 8.5 The electronic sphygmomanometer should be stored plugged into the mains supply for charging ready for immediate use.
- 8.6 The blood pressure cuff and pulse oximeter should be stored tidily on the machine ready for use. Cables and leads should be stored carefully and without tangling, as this piece of equipment may be needed in an emergency.

**9. MONITORING COMPLIANCE AND EFFECTIVENESS**

- 9.1 To monitor compliance, an annual audit will be conducted on physiological observations. This is part of the Trust Audit Plan. Results and the action plan will be discussed at the appropriate Best Practice Groups and progress reported to the Quality Assurance Group on a 6 monthly basis. Any non-compliance and learning needs identified will be addressed and monitored by the Local Managers or Matrons for that area.
- 9.2 The Clinical Practice Team monitor all unplanned transfers to acute hospitals and investigate incidents where appropriate actions, such as physiological observations or calling for help, haven't been taken. Clinical staff will complete a DATIX for all unplanned transfers. Any non-compliance and learning needs identified are addressed and monitored by the Local Managers or Matrons for that area. Any themes are discussed at the Incident Review Group. The team maintain the Deteriorating Patient Improvement Action Plan, and this is reported on a quarterly basis to the Clinical Governance Group.

**10. REFERENCES, ACKNOWLEDGEMENTS AND ASSOCIATED DOCUMENTS**

**10.1 References**

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### **Relevant National Requirements**

National Institute for Clinical Excellence guidelines (NICE) 'Acutely ill Patients in Hospital;

National Patient Safety Agency (NPSA) 'Recognising and responding appropriately to early signs of deterioration in hospitalised patients (2007)

Patient Safety First 'The how to guide' for reducing harm from deterioration (2008).

NHSLA Risk Management Standards 2012-2013 for NHS Trusts providing Acute, Community, or Mental Health and Learning Disability Services and Non-NHS Providers of NHS Care

### **Cross reference to other procedural documents**

Admission, Transfer and Discharge Policy (CH)

Blood and Blood Components Transfusion Policy

Cleaning and the Decontamination of Equipment Policy

Consent and Capacity to Consent to Examination or Treatment Policy  
Hand Hygiene Policy  
Health & Safety Policy  
Infection Prevention and Control Policy  
Learning Development and Mandatory Training Policy  
Medical Device Policy  
Medicines Policy  
Physical Assessment & Examination of Service Users Guidelines  
Rapid Tranquillisation Guidelines  
Integrated Care Planning Approach (ICPA) Policy  
Record Keeping and Records Management Policy  
Resuscitation Policy  
Safer Moving and Handling Policy  
Serious Incident Requiring Investigation (SIRI) Policy  
Somerset Treatment Escalation Plan (STEP) and Resuscitation Decision  
Treatment for Anaphylaxis Guidelines  
Untoward Event Reporting Policy  
Verification of Death Policy

All current policies and procedures are accessible in the policy section of the public website (on the home page, click on 'Policies and Procedures'). Trust Guidance is accessible to staff on the Trust Intranet.

## **11 APPENDICES**

11.1 For the avoidance of any doubt the appendices in this policy are to constitute part of the body of this policy and shall be treated as such.

APPENDIX A: NEWS - A Guide to Scoring  
APPENDIX B: Procedure for Community Health Inpatients  
APPENDIX C: Procedure for Mental Health inpatient settings and Wessex House  
APPENDIX D: Admission Checklist – Mental Health Directorate and Wessex House  
APPENDIX E: Procedure for Minor Injury Units  
APPENDIX F: Observation chart for Minor Injury Units  
APPENDIX G: Guidance for measuring physiological Observations  
APPENDIX H: Competency Assessment for Physiological Observations



## National Early Warning Score (NEWS) – A Guide to Scoring

Prevention of critical events and early detection of organ failure leads to improved outcome and shorter hospital stays for patients. This table provides an aid to assist in the early identification of patients at risk of deterioration.

Is your patient’s clinical condition causing concern? If “yes”, score your patient from the table below (< means ‘lesser than’, > means ‘greater than’)

Physiological Parameters	3	2	1	0	1	2	3
Respiratory Rate	<8		9-11	12-20		21-24	>25
Oxygen Saturations	≤91%	92-93%	94-95%	≥96%			
Any Supplemental oxygen		YES		NO			
Temperature	≤35.0		35.1-36.0	36.1-38.0	38.1-39.0	≥39.1	
Systolic BP	≤90	91-100	101-110	111-219			≥220
Heart Rate	≤40		41-50	51-90	91-110	111-130	≥131
Level of consciousness				A			V, P or U

The score is obtained by adding the scores obtained for each abnormal physiological observation – the total will assist in making a decision about the appropriate response – see table below:

NEWS SCORE	FREQUENCY OF MONITORING	CLINICAL RESPONSE
0	Minimum 12 hourly	<ul style="list-style-type: none"> <li>Continue routine NEWS monitoring with every set of observations</li> </ul>
1 to 4	Minimum 4-6 hourly	<ul style="list-style-type: none"> <li>Inform registered nurse who must assess the patient</li> <li>Registered nurse to decide if increased frequency of monitoring and / or escalation of clinical care is required</li> </ul>
5 or more, or 3 in one parameter	Increased frequency to a minimum of 1 hourly	<ul style="list-style-type: none"> <li>Registered nurse to <b>urgently</b> call the Dr</li> <li>Urgent assessment by a doctor <b>or</b> call 999 for an emergency ambulance if Dr not available</li> </ul>
7 or more	Continuous monitoring of vital signs	<ul style="list-style-type: none"> <li>Registered nurse to <b>immediately</b> call 999 for an emergency ambulance</li> </ul>

**PROCEDURE FOR COMMUNITY HEALTH DIRECTORATE INPATIENTS**

- 1 Community Health Directorate staff must record all observations on RiO in the End of Bed Observation section
- 2 All patients should have a NEWS score attributed to every set of observations.
- 3 If possible the patients' normal observations should be noted for comparison, especially if they suffer from chronic illnesses.
- 4 All patients must have their weight recorded on admission.
- 5 If the patient needs to be transferred to an acute Trust, the observation chart must be printed off from RiO and go with the patient.
- 6 All patients should have a set of observations recorded at least every 12 hours, or as per NEWS score requirements below.

**7 Frequency of Observations**

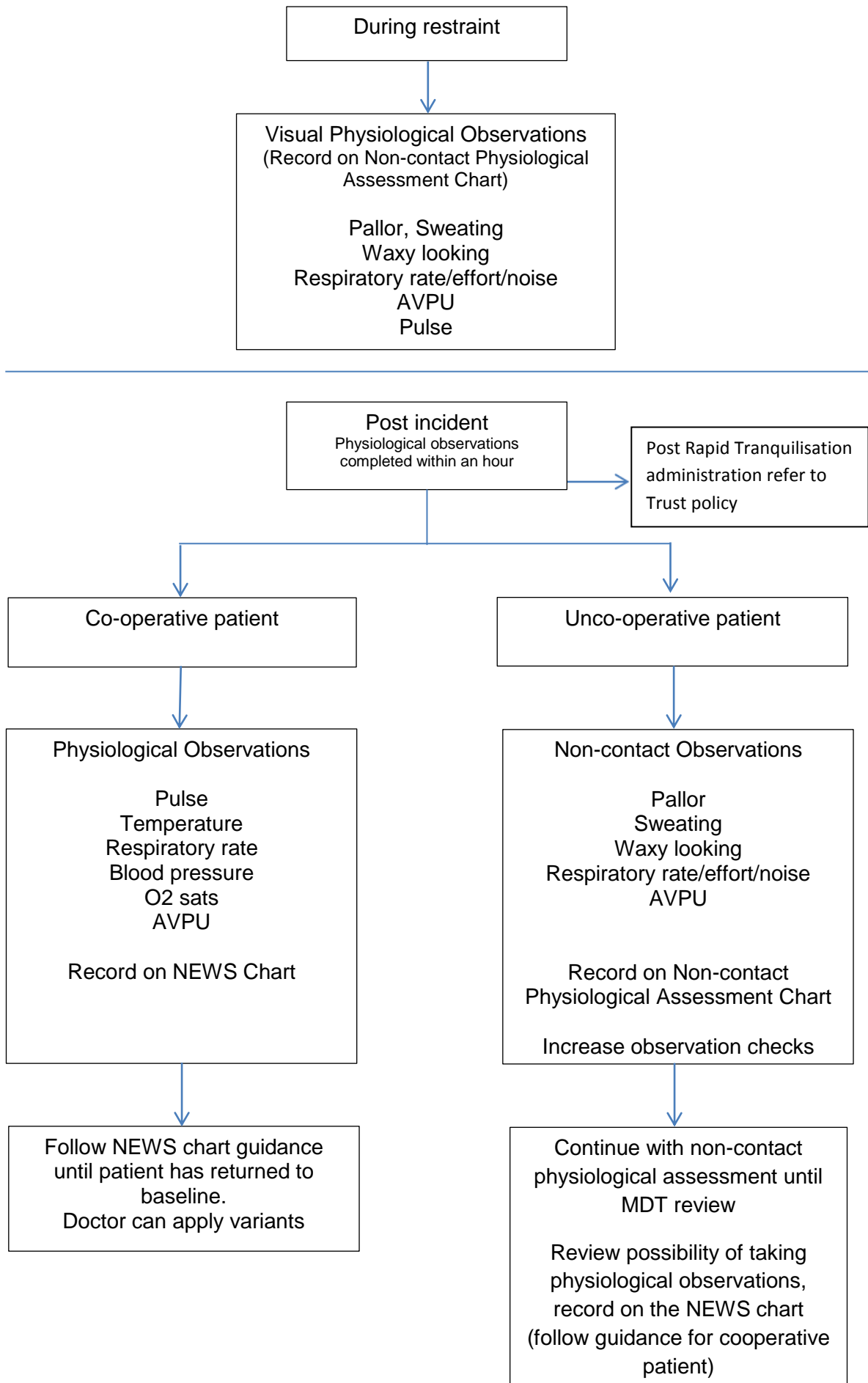
<b>NEWS SCORE</b>	<b>FREQUENCY OF MONITORING</b>
0	Minimum 12 hourly
1 to 4	Minimum 4-6 hourly
5 or more, or 3 in one parameter	Increased frequency to a minimum of 1 hourly
7 or more	Continuous monitoring of vital signs

Additional observations at the discretion of the Senior Nurse/Doctor  
See Also AVPU guidance paragraph 5.9

**PROCEDURE FOR MENTAL HEALTH INPATIENT SETTINGS, INCLUDING  
WESSEX HOUSE**

- 1 Patients must have a set of physiological observations recorded:
  - a. Once within 24 hours of admission, using the admission checklist (Appendix D), and repeated when clinically indicated
  - b. At any point where their condition gives rise to the suspicion of potential or actual deterioration
  - c. Following all episodes of tertiary restraint (see Appendix D, Hierarchy of Holds in Proactive Care Policy); Or following any level of restrictive physical intervention (including seated de-escalation) where the patient's physical condition gives rise to the suspicion of potential or actual deterioration.
  - d. During and following any incidences of seclusion.
  - e. Following rapid tranquilisation (RT) administration. Please refer to the Rapid Tranquilisation policy.
- 2 If possible the patients' normal observations should be noted for comparison, especially if they suffer from chronic illnesses.
- 3 All patients should have their weight recorded on admission.
- 4 A manual pulse must be taken on admission. If the pulse rate is >90 b/min or <50 b/min, and/or is irregular or weak, medical advice must be sought.
- 5 All routine patient observations should be recorded in RIO, in the End of Bed Observations section.
- 6 If there is any change in a patient's physical condition, or when clinical judgement gives rise to the suspicion of potential, or actual deterioration, then staff should immediately seek medical advice. Physiological observations should be taken. Conscious level should be assessed using AVPU, and capillary blood sugar should also be measured. An ECG may be requested following medical assessment.
- 7 If it is not possible to measure physiological observations due to the patient's refusal or agitation, non-contact observations must be undertaken and recorded on a Non-Contact Physiological Assessment Chart and any concerns escalated appropriately.

## Physiological Observations During & Post Restraint



**Admission Checklist (please refer to the Trust’s intranet for up to date version – Trust intranet>forms>Inpatient forms)**

Patient’s name:	
Date/time* of admission:	
Admitting Nurse and Doctor:	

(\* admission starts at the point the ward accepts clinical responsibility for the patient)

(✓ indicates usual responsibility; initial and date appropriate box when completed)

Procedure	Time	Admin	Nursing	Doctor
Welcome, provide drink on arrival, explanation of procedure and guided tour of ward.	On arrival	✓	✓	
Record admission on RiO	2 hours	✓	✓	
Allocate and record key worker/named nurse on RiO	2 hours	✓	✓	
Print and apply wristband (Older Persons only)	2 hours		✓	
Write on bed board and fire list	2 hours	✓	✓	
Provide information to patient: ➤ Name of key worker/named nurse ➤ Reason for admission ➤ Advocacy leaflet ➤ Information booklet ➤ PALS/Complaints procedure ➤ Record in progress notes	2 hours		✓	
Explain ward policy on: ➤ Prohibited items (e.g. Razors, knives) ➤ Drugs and alcohol ➤ Mobile phones and camera use ➤ Belongings and tidiness of personal area ➤ Visiting times ➤ Programme	2 hours		✓	
If detained under Mental Health Act ➤ Explain reason for detention ➤ Explain rights of appeal, treatment, PALS and complaints procedure, independent advocacy ➤ Record discussion on MHA form and in progress notes ➤ Check paperwork ➤ Form 14 ➤ Record/check Nearest relative on RiO	2 hours		✓	
Record/check Demographic information on RiO ➤ NHS Number ➤ Marital status ➤ Ethnic origin ➤ Religion ➤ Permanent address / Correspondence address ➤ Telephone number(s) ➤ Registered GP ➤ Aliases/Other names	2 hours		✓	
Record/check Personal Contact information on RiO ➤ Next of kin (Name, address, telephone number) ➤ Others?	4 hours		✓	
Family and Carer Liaison ➤ Contact patient’s family and arrange to meet within 7	24 hours		✓	

days; record on Family and Carer Liaison form on RiO ➤ Record outcomes of Family Liaison meeting on Family and Carer Liaison form on RiO	1 week		✓	
Patient property ➤ List property ➤ Provide/offer locker key ➤ Secure valuables ➤ Record money in cash book ➤ Record and store medication ➤ Complete Liability Form	2 hours		✓	
Conduct patient search (if appropriate)	2 hours		✓	
Record/check Confidentiality status	24 hours			✓
Record/check Alerts ➤ Violence ➤ Vulnerability ➤ Allergies	4 hours 4 hours 24 hours		✓ ✓	✓
Risk Assessment: ➤ Risk Screening ➤ Risk Information (if any risk factor scored $\geq 2$ on risk screening) ➤ Fall Risk (all older adults and others identified through Risk screening) ➤ Waterlow (repeat weekly if score $\geq 10$ ) ➤ Moving and Handling ➤ Self Harm/Suicide Risk in Adults & Older People (if applicable) ➤ PATHOS & Self Harm Risk Assessment (if applicable)	24 hours 24 hours 24 hours 6 hours 24 hours 24 hours 24 hours		✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓    ✓ ✓
Initial Assessment – Phase 1: ➤ Presenting problems ➤ Mental State ➤ Consent and Capacity (if applicable) ➤ Initial carers assessment	24 hours 24 hours 24 hours 24 hours		✓	✓ ✓ ✓
Physical Health and Medication: ➤ Medication (and confirm within 72 hrs) ➤ Physical Health/Examination (repeat at least 6 monthly) – including identification of those at increased risk of VTE ➤ Infection Control risk Assessment (accessed via Physical Health/Examination) ➤ TPR and BP ➤ Identify any dietary needs ➤ Weight and Height (BMI) (repeat weekly if clinical concern) ➤ Smoking/Physical Activity ➤ Malnutrition Universal Screening Tool (MUST)	6 hours 24 hours 48 hours 24 hours 24 hours 48 hours 48 hours 48 hours		✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓     ✓
Clinical Investigations: ➤ Urinalysis (record in Physical health/examination) ➤ Urine drug screen (Ash only) ➤ Request phlebotomist to undertake routine blood tests and ECG ➤ Completion of routine bloods and ECG	24 hours 24 hours 24 hours 72 hours		✓	✓ ✓ ✓
Discuss DNAR issues with patient/ family/ carers, including existence of any Advance Decisions (Older Persons only)	24 hours		✓	
Care Planning: ➤ Interim care plan developed on RiO ➤ Record Observational level ➤ Record leave arrangements ➤ DNAR decisions (older persons only) ➤ Full care plan on RiO (including therapeutic and recreational activity programme) ➤ Set CPA review date	4 hours 4 hours 24 hours 24 hours 72 hours 72 hours		✓ ✓ ✓ ✓ ✓ ✓	

Inform Care coordinator or request allocation of care coordinator by CMHT within 72 hours (including completion of Notification 2 if older person)	24 hours		✓	
Fax GP	24 hours	✓		
Missing persons details ➤ Eyes, hair, distinguishing marks tattoos etc.	24 hours	✓		
Record provisional clinical diagnosis	48 hours			✓
Initial Assessment – Phase 2: ➤ Family/Personal History ➤ Support and Relationships ➤ Accommodation (* see below) ➤ Employment Status ➤ Personal Living Skills/Needs ➤ Personalisation ➤ Cultural and Spiritual needs ➤ Psychiatric/Care History ➤ Alcohol/Substance Misuse History (incl. dual diagnosis) ➤ Summary/Formulation/Opinion ➤ HoNOS (aged >=18) ➤ HoNOSCA (aged <18)	72 hours		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓
<b>* Accommodation problems (if exist):</b>  If patient needs help with finding or securing accommodation, refer to the NOVAS assessment team (providing no one under 16 in household): East: 01458 259619 West: 01458 253068. If patient is homeless or at risk of losing accommodation and has housing related support / care needs, refer to the Placement Support team: 01278 720220.	72 hours		✓	
Multidisciplinary CPA review meeting (teleconferencing may be used if Care Coordinator at a distance from ward)	1 week		✓	✓

***On completion, scan document and save in RiOUpload folder for future reference within the Documents View of the client's record. (Document code: IPD)***

**PROCEDURE FOR MINOR INJURY UNITS**

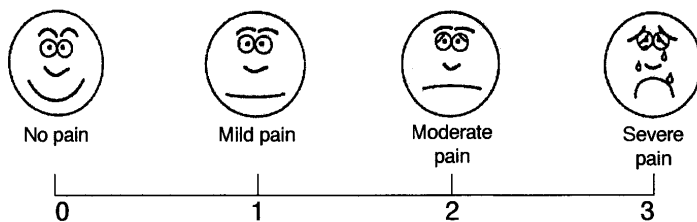
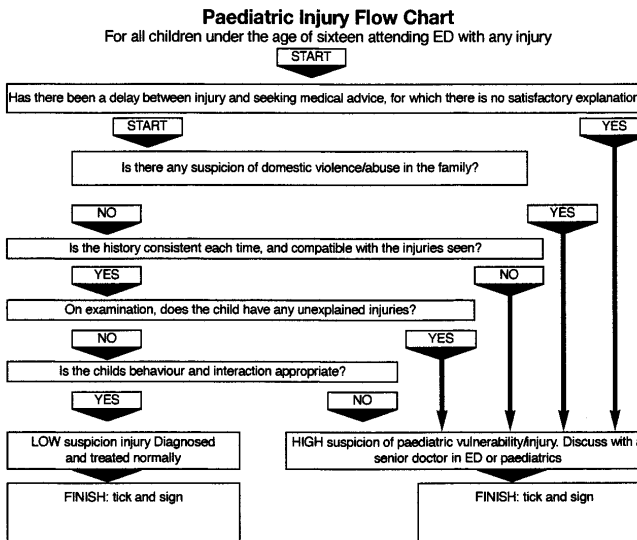
- 1 Vital signs (physiological observations) will be recorded on individual patients when deemed clinically appropriate to the presenting complaint; they may be 'one off' recordings or in cases of potentially unstable patients sequential.
- 2 Where vital signs are sequential they will be recorded on the vital signs chart produced on page two of the MIU clinical card, this chart incorporates the NEWS score.
- 3 Vital signs will be utilised to inform clinical decision making and reaching a diagnosis, or at least a provisional diagnosis.
- 4 Patients presenting with a 'collapse query cause' will routinely have at least one full set of vital signs which will include evaluation of capillary blood sugar and a 12 lead ECG.
- 5 Patients presenting with chest pain (traumatic and non traumatic) will have an assessment of their vital signs. Where clinically indicated a 12 lead ECG will be obtained and reviewed.
- 6 In patients with a potential cardiac cause of chest pain a 12 lead ECG will be obtained within 15 minutes of arrival and a complete set of vital signs will be recorded. Further vital sign monitoring will be continued as clinically indicated.
- 7 A low threshold for assessing vital signs in patients with pre-existing co-morbidities will be maintained, this will include recording capillary blood sugar in known diabetics who are systemically unwell or have an associated infection. This will include diabetic patients who have sustained significant injury.
- 8 Patients with an identified or suspected infection will have temperature recorded along with a capillary blood sugar and urinalysis. If identified as systemically unwell at least one comprehensive set of vital signs will be obtained.
- 9 The Glasgow Coma Score (GCS) will be used in the assessment of all head injury patients and all patients who have an altered level of consciousness, this will include patients who have suffered a 'collapse query cause'. In addition to the GCS further vital signs will be obtained where deemed clinically appropriate.
- 10 As part of the clinical assessment of asthmatic patients a comprehensive set of vital signs will be obtained, this will include pulse oximetry and peak expiratory flow rate (PEFR) measurements. The PEFR measurements will be recorded both before treatment (if possible) and used to assess effectiveness of treatment, for example after nebulisers.



Vulnerable Adults	
SOCIAL HISTORY	
LIVES ALONE	<input type="checkbox"/>
MAIN CARER	<input type="checkbox"/>
INJURY AFFECTS NORMAL MOBILITY	<input type="checkbox"/>
SUSPICION OF ABUSE	<input type="checkbox"/>
NORMAL MOBILITY	
INDEPENDENT	YES/NO
WALKS WITH STICK	<input type="checkbox"/>
WALKS WITH ZIMMER	<input type="checkbox"/>
WHEELCHAIR/BED BOUND	<input type="checkbox"/>
ATTENDANCE CAUSED BY FALL	<input type="checkbox"/>
IF TWO SOLID BOXES ARE TICKED REFER TO ELDERLY AND VULNERABLE ADULT DISCHARGE PLAN	
FALLS	
FALL IN LAST YEAR	YES NO
IF YES FALLS REFERRAL	YES NO
REASON IF NO .....	
GCS / AVPU:	

WZK3216 CSP Ltd. 11/11

PLEASE ATTACH AN ADDRESSOGRAPH LABEL



Pain Score On Arrival:	/ 3
Pain Score after 20 Mins:	/ 3
Analgesia Given:	Yes / No
Declined:	Yes / No

<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> </ul>	240	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr> <th>V/A</th> <th>LEFT</th> <th>RIGHT</th> </tr> <tr> <td colspan="2">PEAKFLOW PRE NEB</td> <td></td> </tr> <tr> <td colspan="2">PEAKFLOW POST NEB</td> <td></td> </tr> <tr> <td colspan="2">CBG</td> <td></td> </tr> <tr> <td colspan="3">Smoking Cessation ref Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td colspan="3">WATERLOW SCORE for adult pts <input type="checkbox"/></td> </tr> <tr> <td colspan="3"><b>VERBAL ADVICE GIVEN</b> <input type="checkbox"/></td> </tr> <tr> <td colspan="3"><b>WRITTEN ADVICE GIVEN</b> <input type="checkbox"/></td> </tr> <tr> <td colspan="3"><b>VERBAL CONSENT OBTAINED FOR TREATMENT</b> <input type="checkbox"/></td> </tr> <tr> <td colspan="3">Practitioner Name .....</td> </tr> <tr> <td colspan="3">Signature .....</td> </tr> <tr> <td colspan="3">Date .....</td> </tr> </table>				V/A	LEFT	RIGHT	PEAKFLOW PRE NEB			PEAKFLOW POST NEB			CBG			Smoking Cessation ref Yes <input type="checkbox"/> No <input type="checkbox"/>			WATERLOW SCORE for adult pts <input type="checkbox"/>			<b>VERBAL ADVICE GIVEN</b> <input type="checkbox"/>			<b>WRITTEN ADVICE GIVEN</b> <input type="checkbox"/>			<b>VERBAL CONSENT OBTAINED FOR TREATMENT</b> <input type="checkbox"/>			Practitioner Name .....			Signature .....			Date .....			230	40
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PAR Score	3	2	1	0	1	2	3
CNS response				Alert	Drowsy	Confused	Pain only
Resps/min		<8	9-14	15-20	21-30	30	
Pulse rate		<40	40-50	51-100	100-110	111-130	>130
BP systolic	<70	71-80	81-100	101-199		>200	
Urine over 24 hrs(mls)	0	<250	250-500	>500			

## GUIDANCE FOR MEASURING PHYSIOLOGICAL OBSERVATIONS

## 1. Equipment required;

- Vital Signs monitor
- Manual Sphygmomanometer
- Temporal/Tympanic temperature scanner
- Detergent wipes
- Watch or Clock with Second Hand
- Hand decontamination facilities
- Manufacturer's instructions for equipment
- Alcohol wipes (for twice weekly cleaning of temporal scanner screen)

## 2. Obtaining a manual and automated blood pressure

**Automated blood pressure**

(please note, patients in Atrial Fibrillation must always have a manual blood pressure recorded)

	<b>Action</b>	<b>Rationale</b>
1	Hands should be cleaned in accordance with Somerset Partnership NHS Foundation Trust's Hand Hygiene policy.	To prevent cross infection and comply with policy
2	Ensure that the patient has been sitting or lying down for at least five minutes and is comfortably relaxed.	To allow blood pressure to stabilise (Jevon, 2007).
3	Explain the procedure to the patient and obtain consent which may also be implied consent.	The patient must give consent for all procedures as per policy
4	Ask the patient to remove any tight or thick clothing from around his or her arm.	Thick or tight clothing may distort the reading. The cuff should not be applied to the arm on the side of a mastectomy, lymphectomy or fistula, or if the arm is injured, swollen or painful (Jevon, 2007).
5	Ensure the patients arm is supported at the level of his or her heart.	Failure to do this can cause inaccurate readings (Jevon, 2007).
6	Select an appropriately sized cuff: the bladder of it should encircle at least 80% of the arm but no more than 100%.	Errors can occur from using an incorrectly sized cuff. If it is too small, blood pressure will be overestimated and if it is too big, the blood pressure will be underestimated (Jevon, 2007).
7	Place the cuff snugly onto the patient's arm 2cm above the antecubital fossa, with the centre of the bladder over the brachial artery- some cuffs have a 'brachial artery	Correct positioning is essential to obtain an accurate reading (Jevon, 2007).

	indicator', an arrow which needs to be aligned to the brachial artery.	
8	Ask the patient to refrain from talking or eating during the procedure.	This can result in an inaccurate higher blood pressure (Jevon, 2007).
9	Explain to the patient that you are about to inflate the cuff and that this will feel tight around their arm.	To prevent any sudden movement and discomfort.
10	Switch on the vital signs monitor and press start to record the blood pressure following manufacturer's instructions.	To begin measuring the blood pressure.
11	Document the systolic and diastolic blood pressures in RiO.	The top blood pressure figure is known as the systolic blood pressure and the bottom figure is the diastolic (Jevon, 2007).
12	Switch off the device and remove the cuff.	Ensure appropriate use and maintenance of the machine as per policy.
13	Document the blood pressure correctly using approved symbols. Compare trends and previous blood pressure measurements. If the blood pressure is abnormal notify the nurse in charge or doctor.	Accurate documentation and prompt recognition of abnormal blood pressure or changes in blood pressure are required to recognise and manage the potentially deteriorating patient (NICE, 2007).
14	Clean the device in accordance with the Somerset Partnership NHS Foundation Trust Decontamination of Equipment Policy and the manufacturer's instructions. Return to the storage point and plug the device in to recharge the battery.	Ensure appropriate care and maintenance of equipment (Somerset Partnership NHS Foundation Trust Medical Devices Policy).

### Manual blood pressure (British Hypertension Society)

	Action	Rationale
1	Provide explanation of the procedure and gain implied or informed consent.	Explanation is required for informed consent. All procedures require consent as per policy.
2	Allow the patient to sit or lie down for at least five minutes.	To allow the blood pressure to stabilise (Jevon, 2007).
3	Clean hands.	To prevent cross infection and comply with policy.
4	Ask the patient to remove any tight or thick clothing from around his or her arm.	Thick or tight clothing may distort the reading. The cuff should not be applied to the arm on the side of a mastectomy, lymphectomy, or if the arm is injured, swollen, painful etc (Jevon, 2007).
5	Select an appropriately sized cuff: the bladder of it should encircle at least 80% of the arm but no more than 100%.	Errors can occur from using an incorrectly sized cuff. If it is too small, blood pressure will be overestimated and if it is too big, the blood pressure will be underestimated (British Hypertension

		Society).
<b>6</b>	Place the cuff snugly onto the patient's arm, 2cm above the antecubital fossa, with the centre of the bladder over the brachial artery- some cuffs have a 'brachial artery indicator', an arrow which needs to be aligned to the brachial artery.	Correct positioning is essential to obtain an accurate reading (British Hypertension Society).
<b>7</b>	Ask the patient to refrain from talking or eating during the procedure.	This can result in an inaccurate higher blood pressure (British Hypertension Society).
<b>8</b>	Palpate the brachial artery. Inflate cuff until pulsation disappears and deflate cuff. Estimate systolic pressure.	To prevent over-inflation of cuff (British Hypertension Society).
<b>9</b>	Inflate cuff to 30mmHg above the estimated systolic level needed to occlude the pulse. Place the stethoscope over the brachial artery and deflate at a rate of 2-3mm/sec until you hear regular tapping sounds. Measure systolic (1 <sup>st</sup> sound) and diastolic pressures (sound disappears) to the nearest 2mmHg.	Reduces the need to over inflate the cuff causing unnecessary discomfort (British Hypertension Society).  The drum of the stethoscope needs to be placed correctly in order to accurately hear the phases of Korotkoff sounds. (British Hypertension Society).  Over or underestimating blood pressure readings could mask a potentially deteriorating patient. (British Hypertension Society).
<b>10</b>	Document the systolic and diastolic blood pressures on RiO.	Correct documentation is essential for ease of reading measurements and early recognition and management of a deteriorating patient (NICE, 2007).
<b>11</b>	Remove cuff and ensure the patient is sitting or lying comfortably.	To ensure patient safety.
<b>12</b>	Document the blood pressure correctly using approved symbols. Compare trends and previous blood pressure measurements. If the blood pressure is abnormal notify the nurse in charge or doctor.	Accurate documentation and prompt recognition of abnormal blood pressure or changes in blood pressure are required to recognise and manage the potentially deteriorating patient (NICE, 2007).
<b>13</b>	Clean the device with detergent wipes. Coil all cables safely. Return to the storage point.	To comply with the Somerset Partnership NHS Foundation Trust Decontamination of Equipment Policy and the manufacturer's instructions. To ensure device is ready for immediate use.

### 3. Obtaining a temporal or tympanic temperature

	Action	Rationale
1	Gain consent from the patient. This may be either informed or implied consent.	Informed consent is required for all procedures as per policy.
2	Clean hands as per Somerset Partnership NHS Foundation Trust's Hand Hygiene Policy.	To prevent cross infection and comply with policy.
3	If using a temporal scanner, press and hold the button before lightly stroking the probe across the patient's forehead and immediately touching the probe behind the base of the patient's ear (there is an indentation here). Release the button to read the result.	Ensure accurate non-invasive method to measure core body temperature and avoiding the probe coming into contact with mucus membranes (GE Health Care 2010).
4	Dispose of the cover if appropriate and clean the scanner/thermometer in accordance with the policy for decontamination of equipment and the manufacturer's instructions.	To ensure adherence to infection control procedures (GE Healthcare 2010).
5	Document the method and temperature reading on RiO. Report any changes or concerns to the nurse in charge.	Prompt recognition and management of a potentially deteriorating patient (NICE 2007).

#### 4. Obtaining a lying and standing (postural) blood pressure

	<b>Action</b>	<b>Rationale</b>
1	Ensure the patient has been lying down for at least five minutes and is relaxed.	To allow blood pressure to stabilise (Jevon and Holmes, 2007).
2	Explain procedure and gain consent. This may be either implied or informed consent.	Consent is required for all procedures as per policy.
3	Clean hands as per Trust policy.	To prevent cross infection and comply with policy.
4	Ask the patient to remove any tight or thick clothing from their arm.	Thick and tight clothing can distort the reading causing constriction of the blood vessels (Jevon and Holmes, 2007).
5	Ensure the arm is supported at the level of the heart.	To increase the accuracy of the reading (Jevon and Holmes, 2007).
6	Select an appropriately sized cuff.	Failure to select the correct size of cuff can result in inaccurate readings being recorded (Jevon and Holmes, 2007)
7	Place the cuff snugly onto the patient's arm, 2cm above the antecubital fossa area, with the centre of the bladder over the brachial artery.	Most cuffs have an artery indicator arrow. Correct positioning will ensure an accurate reading (British Hypertension Society).
8	Switch on the device and press start	As per manufactures guidelines.
9	Document the systolic and diastolic blood pressure in RiO and label 'lying'.	As per Somerset Partnership NHS Foundation Trust Physiological Observations of Inpatients and MIU Policy.
10	Leave the cuff in place and ask the patient to stand, ensuring their safety.	To allow accurate cuff placement.
11	Allow the patient to stand for one minute	To allow blood pressure to react to new position (Jevon and Holmes, 2007).
12	Press start.	As per manufactures guidelines.
13	Assist the patient to sit or lie down when reading is complete	To ensure patient safety.
14	Document the new reading using a red pen and label "standing".	To allow the pairs of lying/standing blood pressures to be easily located (Jevon and Holmes, 2007).
15	Switch off the device and clean as per policy	To prevent cross infection.
16	Compare the two readings and inform the nurse in charge as necessary.	A difference of 20mmHg is thought to be significant and can contribute to falls (Jevon and Holmes, 2007).

## 5. Obtaining oxygen saturation levels using a pulse oximeter

	Action	Rationale
1	Explain the procedure.	Needed in order to gain consent
2	Obtain Informed or implied consent.	Consent is required for all procedures as per policy.
3	Clean hand as per Trust policy.	To prevent cross infection and comply with policy.
4	Select a suitable probe application site, apply and allow 5 seconds for the monitor to measure an accurate oxygen saturation. Ensure that the pulse rate displayed on the pulse oximeter matches that of the patient's pulse rate at that time.	Note any factors that may affect accuracy (e.g. nail varnish, dirt). The probe may fail to read if circulation to the hand is very poor and/or the hand is very cold. Observation of a pulse rate that does not match may indicate inaccurate oxygen saturation readings. An accurate reading will be delayed if the blood pressure cuff is simultaneously inflated on the same arm (Higgins, 2005).
5	Record oxygen saturation on RiO	Using the correct method of documentation ensures patient safety and prompt recognition and management of the potentially deteriorating patient (Patient Safety First, 2008).
6	Record whether the patient is using oxygen (O <sub>2</sub> ) or just breathing air (A) on RiO. If the patient is using oxygen, note the percentage or rate of oxygen flow.	Patient's oxygen saturation levels on air should be at least 90% in order to ensure adequate tissue perfusion (Luton and Dunstable Hospital NHS Foundation Trust, cited in Patient Safety First, 2008)
7	Remove the probe and clean as per the decontamination of equipment policy and store appropriately.	To ensure correct maintenance of equipment and prevention of infection.

## 6. OBTAINING A RESPIRATORY RATE

	Action	Rationale
1	Ensure consent has been gained from the patient.	Consent must be obtained for all procedures as per policy.
2	Ensure the patient is comfortable and relaxed and respirations are assessed after taking the pulse rate.	Distress can increase the respiration rate. Recording the respiration rate immediately after taking the pulse, will aid a more accurate recording, as the patient will not be aware that you are observing their respirations. Awareness that respirations are being counted can make people alter their breathing (Mooney, 2007).
3	Count the patient's respirations for one full minute.	To ensure an accurate respiratory rate (Mooney, 2007).
4	Observe the rise and fall of the chest (inspiration and expiration) - this counts as one breath.	Each rise and fall should be taken with relative ease and should have symmetry. Note any use of ancillary muscles to aid chest expansion – i.e. deep abdomen breathing, expansion neck muscles (Mooney, 2007).
5	Note the pattern of breathing and the depth of the breaths	During normal respiration the chest should rise and fall equally, regularly and have good depth with minimal effort. Report any concerns to the nurse in charge.
6	Document your respiration rate on RiO.	Note any changes and report to the nurse in charge as necessary. Changes to respiration rate can indicate a change in condition (NICE, 2007).
7	Indicate in RiO whether the patient is breathing air (A) or oxygen. If oxygen is being used, note the rate (e.g. 2 litres) or percentage (e.g. 28%) in the appropriate space on RiO	Using correct method of documentation ensures patient safety and prompt recognition and management of the potentially deteriorating patient (Patient Safety First, 2008).



## Obtaining a pulse

### 6.1 Obtaining a manual radial pulse

	Action	Rationale
1	Explain to the patient that you are about to take their pulse and gain informed or implied consent.	Consent is required in accordance with Policy.
2	Clean hands.	To prevent cross infection in accordance with Policy.
3	Ensure the patient is as relaxed as possible.	Distress may elevate the pulse (Mooney, 2007).
4	Locate the radial pulse. Apply light pressure with your first and second fingers until you feel the pulse. If you are unable to locate the pulse on that side, try the other side, if still unable report to the nurse in charge.	The wrist is the most commonly used to take the pulse. This is the radial pulse. This can be found on the underside of the wrist, just below the thumb joint over the artery (Mooney, 2007). There are occasions where radial pulses are unable to be palpated – during these situations a further assessment is required by a senior clinician.
5	Count the pulse for a full minute in order to detect any abnormal rhythms. Note whether it feels regular (a steady beat, evenly spaced) or irregular (unevenly spaced beats) and the quality of the pulse.	A pulse should be strong and easily palpated- If is bounding or weak and thready, this can be an indication of a problem such as hypovolaemia of shock. Early detection of new irregularities can prevent serious health consequences such as stroke (Mooney, 2007).
6	Record the pulse rate on RiO, using the approved symbols, and indicate whether the pulse is regular by writing 'reg' (regular) or 'irreg' (irregular).	Using correct method of documentation ensures patient safety and prompt recognition and management of the potentially deteriorating patient (Patient Safety First, 2008).
7	Report any changes or irregularities to the nurse in charge.	Ensures patient safety and prompt recognition and management of the potentially deteriorating patient (Patient Safety First, 2008).

### 6.2 Obtaining a pulse rate from an electronic monitoring system

- when taking a blood pressure or using the pulse oximeter on an automated device, the pulse rate will automatically be recorded and shown on the screen
- If a patient has an irregular heart rhythm, such atrial fibulation, this reading may sometimes be inaccurate. Manual pulse recordings are more accurate (Mooney, 2007) and must be obtained at all times.

**7. Central nervous system assessment using AVPU (Alert, Voice, Pain Unresponsive)**

AVPU is a simple method of communicating how alert a patient is

<b>A</b>	The patient is awake and responding normally.	The patient acknowledges the presence or approach of another person.	
<b>V</b>	The patient only responds when actively spoken to	This can also be described as lethargy.	<b>If a patient does not respond to voice, contact the nurse in charge immediately.</b>
<b>P</b>	The patient will only respond to the stimulus of pain. e.g. Trapezius pinch or squeeze - "Using the thumb and forefinger take hold of approximately 5cm of the trapezius muscle and twist" (Mooney and Comerford, 2003)	This can also be described as stupor	<b>This is a medical emergency and the nurse in charge should be alerted immediately, if necessary by using the emergency call bell.</b>
<b>U</b>	The patient is unconscious and does not respond to either voice or pain.	This can also be described as coma.	<b>This is a medical emergency and the nurse in charge should be alerted by using the emergency call bell</b>

**8. Fluid balance - urine output**

- measuring urine output using scales for recording on fluid chart (Rigby and Gray, 2005)

	<b>Action</b>	<b>Rationale</b>
<b>1</b>	The patient must be provided with a urinal, bedpan, commode or urine collection shell if using the toilet.	Each volume of urine passed must be recorded on the fluid chart. To indicate “out to toilet” is not adequate as accurate volumes are required to correctly treat the patient’s condition (Rigby and Gray).
<b>2</b>	The urine should be weighed on the scales provided. If the patient has urinary incontinence the pad or incontinence sheet must be weighed instead.	When measuring urine output, correct volumes are required (Rigby and Gray, 2005).
<b>3</b>	Place clean pad, incontinence sheet, bed pan shell or urinal on the scales. Press the zero (tare) button. Remove the clean product and replace with used product, to give urine measurement in mls.	Use in accordance with the manufacturer’s instructions. If the scales have no zero capacity, weigh the clean product (figure A) then weight the used product plus its contents (figure B). Subtract figure A from figure B to get the amount of urine passed.
<b>4</b>	Recorded the result immediately on the fluid chart.	Accurate recording is required to determine the correct fluid balance of the patient.
<b>5</b>	Inform the nurse in charge if a patient is not passing urine or is passing small volumes of urine.	Urine output is an important indicator of the patient’s condition. as medical intervention may be required .As a guide a 70kg adult will produce 35-70 mls of urine per hour Urine output will fall as the patient’s temperature rises above normal and as a patient becomes dehydrated.

## COMPETENCY ASSESSMENT FOR PHYSIOLOGICAL OBSERVATIONS

The competencies are to be used in conjunction with: -

Somerset Partnership NHS Foundation Trust

- Physiological Observations of Inpatients and MIU Policy
- Cleaning and Decontamination of Equipment Policy
- Hand Hygiene Policy.
- Assessing Competency in Clinical Practice Policy
- Record Keeping and Records Management Policy
- Consent and Capacity to Consent to Examination or Treatment Policy

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Date: 29 March 2012

Reviewed: 10 November 2015

## ASSESSMENT OF COMPETENCE FOR PHYSIOLOGICAL OBSERVATIONS

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I confirm that I have self-assessed as competent to practice physiological observations as below:

Practitioner Name:.....

Practitioner Qualification: .....

Practitioner Signature:..... Date: .....

**I confirm that I have assessed the named practitioner above as competent to perform the above skill.**

Name & Title: .....

Signature:..... Date: .....

**A record of your competency will be kept on your electronic staff record**

Upon successful completion of your assessment of competency please give a copy to your line manager.

Knowledge and Skills for Physiological observations		Self Assessment	Formal Assessment	
		Date & Comments	Signature	Date & Comments
1	Understand the importance of informed consent and demonstrate obtaining consent prior to examination.			
2	Demonstrate appropriate infection control measures and hand washing throughout the procedures with each patient.			
3	Obtain an accurate respiratory rate. Describe the normal range for respirations and when/how to report concerns.			
4	Obtain an accurate manual radial pulse rate and one from an electronic monitoring system (if being used). Describe normal range for pulse rate, regularity and volume and when/how to report concerns, including regular and irregular pulse rates.			

Knowledge and Skills for Physiological Observations		Self Assessment	Formal Assessment	
		Date & Comments	Signature	Date & Comments
5	Accurately obtain a manual blood pressure using the correct cuff size selection and appropriate use of sphygmomanometer and stethoscope.			
6	Describe the normal range for blood pressure and when/how to report concerns. Be able to recognise a systolic and diastolic blood pressure.			
7	Understand how to use a vital signs monitor, select appropriate sized cuff. Understand which part of the screen relates to which reading.			

Knowledge and Skills for Physiological Observations		Self Assessment	Formal Assessment	
		Date & Comments	Signature	Date & Comments
8	Understand the reason for NEWS scoring. Demonstrate how to work out and record NEWS scores, knowing when and how to seek advice.			
9	Understand how to take and record a lying and standing (postural) blood pressure.			
10	Demonstrate how to record readings accurately, RiO, and the frequency of measurement required.			
11	Describe how to maintain and clean equipment between patients and when not in use.			



Knowledge and Skills for Physiological Observations		Self Assessment	Formal Assessment	
		Date & Comments	Signature	Date & Comments
12	Have general understanding of level of consciousness and be able to perform the “Alert, Voice, Pain, Unresponsive” (AVPU) assessment correctly.			
13	Be able to enter fluid input and out-put correctly on fluid balance chart and know when to report concerns.			
14	Correctly obtain oxygen saturation levels using pulse oximetry. Describe normal and abnormal oxygen saturation level; recognise levels on air or with supplementary oxygen and when/how to report concerns.			
15	Obtain accurate temperature using a temporal/tympanic thermometer (delete as appropriate). Describe normal and abnormal temperature levels and when/how to report concerns.			