

**BARTS HEALTH TRUST CORPORATE POLICY
OBSERVATION AND ESCALATION POLICY - ADULT PATIENTS
[Excluding Pregnant Women]**

APPROVING COMMITTEE(S)	Trust Policies Committee	Date approved:	13 December 2018
EFFECTIVE FROM	Date of approval		
DISTRIBUTION	Policy Liaison Officers for distribution to all Clinical Staff		
RELATED DOCUMENTS	<p>Adverse Incident Policy</p> <p>BH Critical Care Transfer Guidelines.</p> <p>Communicating With Doctors Out Of Hours (Bleep Filtering)</p> <p>Duty of candour following adverse events</p> <p>Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) Policy</p> <p>End Of Life Care Delivery</p> <p>Mandatory Training - Acute Care Skills</p> <p>Neurological Observation Policy</p> <p>Oxygen Delivery Policy</p> <p>High Flow Oxygen Policy</p> <p>PCA / Epidural Pain Management Policy</p> <p>Resuscitation / Resuscitation Training</p> <p>Safeguarding vulnerable adults</p> <p>Sepsis Policy</p> <p>Tracheostomy Guidelines</p> <p>Treatment Escalation Plans</p>		
STANDARDS	<p>National Patient Safety Agency [2007] Recognising and responding appropriately to the early signs of deterioration in hospitalised patients.</p> <p>NICE [2007] Clinical Guideline 50 - Acutely Ill Patients in Hospital</p> <p>National Early Warning Score: Standardising the assessment of acute-illness severity in the NHS [2012]</p> <p>Care Quality Commission Report 2015 for NUH; WXUH and RLH</p> <p>National Early Warning Score [NEWS] 2: Standardising the assessment of acute-illness severity in the NHS [2017]</p> <p>NHS England [2018] Patient Safety Alert – Resources to Support the safe adoption of the revised National Early Warning Score [NEWS2].</p>		

OWNER	We Prevent Group
AUTHOR/FURTHER INFORMATION	Nurse Consultant Critical Care Outreach Critical Care Outreach Service Practice Facilitators Critical Care Outreach
SUPERCEDED DOCUMENTS	All previous existing Observation and Escalation Policies in Adult Care
REVIEW DUE	3 years after approval
KEYWORDS	Early warning score; escalation pathway; trigger threshold; sepsis; Acute Kidney Injury [AKI]; NEWS 2

INTRANET LOCATION(S)	
CONSULTATION	<p><i>Barts Health</i></p> <p>Critical Care [Adult patients] We Prevent Group Accident and Emergency Department Neurosurgeons Pain Service Learning Difficulties Nurse Specialist Risk Management Unit / Healthcare Governance Clinical Standards Committee</p>
SCOPE OF APPLICATION AND EXEMPTIONS	<p>Included in policy: <i>For the groups listed below, failure to follow the policy may result in investigation and management action which may include formal action in line with the Trust's disciplinary or capability procedures for Trust employees, and other action in relation to organisations contracted to the Trust, which may result in the termination of a contract, assignment, placement, secondment or honorary arrangement.</i></p> <p>All Trust staff, working in adult areas excluding Maternity Services</p> <p>Excluded from the policy: Patients under 16 years old [national guidance]</p> <p>NB Local Guidance - Adolescents who are placed on non-paediatric wards e.g. Trauma Ward can with the agreement of their Paediatric Team use NEWS2 if deemed appropriate</p> <p>Pregnant women [> 17 weeks gestation] Patients who are receiving end of life care Caution if high spinal cord patients are assessed with NEWS 2</p>

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TITLE: OBSERVATION AND ESCALATION POLICY – ADULT PATIENTS

1 INTRODUCTION

Definitions

ACCU	Adult Critical Care Unit
AKI	Acute Kidney Injury
Autonomic Dysreflexia	Is a potentially life threatening complication that can occur in spinal cord injured patients [usually T6 and above] where there is unopposed sympathetic outflow to a noxious stimulus. Uncontrolled hypertension, bradycardia, headache and facial flushing are common signs of the condition.
Cauda Equina Syndrome [CES]	Cauda equina syndrome is a rare disorder where there is compression of the bundle of nerve roots at the lumbar end of the spinal cord. It is a surgical emergency.
CREWS	Chronic Respiratory Early Warning Score
COPD	Chronic Obstructive Pulmonary Disease
CRT	Capillary Refill Time - A rapid clinical test for assessing blood flow through peripheral tissues.
Critical Care Outreach Team	A team of critically care trained practitioners who are able to oversee the care and management of level 1 patients with the wider multi-professional team and assist in the management of level 2 [HDU patients] and level 3 [intensive care patients] with other ACCU staff during treatment escalation and admission to critical care.
CVAPU	A rapid initial way of assessing level of consciousness. Any patient who is not alert should have a formal GCS performed.
Cyanosis	The appearance of blue/purple colouration in the skin or mucus membranes due to poor oxygenation of the tissues.
DVT	Deep vein thrombosis.
Early Warning Score [EWS]	Early Warning Score standardises the assessment of acute illness whilst determining the overall patient acuity from normal bedside observations.
ECG	Electrocardiogram – trace of the heart rhythm
Escalation	The process of highlighting a concern and engaging other senior clinicians in the process of reviewing and treating a patient
FAST	FAST is a mnemonic used to identify and respond to stroke victims - F acial drooping, A rm weakness, S peech difficulties and T ime to seek urgent medical help.
GCS	Glasgow Coma Scale assesses conscious level in response to a defined stimulus.
HDU / Level 2	High Dependency Unit is a specialised unit that admits patients with single organ failure
Hospital At Night Team	A team of senior practitioners who review sick/deteriorating patients or those patients relocating from ACCU
Hypercapnic Respiratory Failure	Hypercapnic Respiratory Failure (type 2 respiratory failure) is hypoxia with an arterial partial pressure of carbon dioxide (PaCO ₂) of >6.5kPa on room air at sea level.
ICU / Level 3	Intensive Care Unit is a specialised unit that admits patients requiring advanced respiratory support and or requiring multiple organ support.
Medical Outlier	A patient nursed outside the specialty area
NEWS	National Early Warning Score – aggregated score to determine patient acuity. NEWS2 is an amended version of the score which was published by the Royal College of Physicians in December 2017

NICE	National Institute for Clinical Excellence – provides national guidance and advice to improve health and social care.
NPSA	National Patient Safety Agency – a national forum that monitors patient safety incidents.
SBAR	SBAR is a structure communication tool that describes the S ituation; B ackground; A ssessment and makes R ecommendations on what should happen next.
SCI	Spinal Cord Injury
Sepsis	Sepsis is a life threatening organ dysfunction caused by a dysregulation host response to infection.
Sepsis Six	Care bundle delivered in caring for a septic patient to reduce morbidity and mortality.
SpO ₂	Measured using pulse oximetry and determines the peripheral capillary oxygen saturation
SpR	Special Practice Registrar – A senior doctor who is completing their specialty training.
TEP	Treatment Escalation Plan – This denotes ceilings of therapy where appropriate.

SUMMARY OF THE POLICY

The policy provides a framework for the safe clinical care of patients within the Trust. This includes type and frequency of physiological observations, use of National Early Warning Score 2 (NEWS2) [Table 1], escalation protocol and best practice advice on the movement of patients into and out of critical care areas [Intensive Care Unit (ICU) or High Dependency Care Unit (HDU)]. This policy particularly applies to patients that deteriorate and require escalation of their care in order to reduce the risk of morbidity and mortality.

1. PURPOSE

1.1 This policy outlines the minimum standard of care regarding physiological observations and escalation of care expected from clinical staff for adult patients [> 16 years] within the Trust excluding pregnant women 17 weeks gestation or more. The policy has been written in accordance with guidelines from the National Institute of Clinical Excellence (NICE) the Royal College of Physicians, the National Patient Safety Agency (NPSA) and the results from root cause analysis of serious incidents in the Trust.

1.2 The policy details:

- a. Physiological observations that should be measured
- b. Resetting trigger thresholds for patients with comorbid disease
- c. Determining the frequency of observations
- d. Establishing a monitoring plan.
- e. Responding to clinical deterioration.
- f. How to escalate the care of a patient for a senior review.
- g. Establish treatment limitations.
- h. How to make a referral to the critical care team
- i. Transferring to and from High Dependency Unit [HDU] and Intensive Care Unit [ICU]

NEWS2 is NOT SUITABLE FOR PATIENTS LESS THAN 16 YEARS OR PREGNANT WOMEN > 17 WEEKS GESTATION.

CAUTION WHEN EVALUATING HIGH SPINAL CORD INJURED PATIENTS WITH NEWS 2

THESE PATIENTS MAY DEVELOP AUTONOMIC DYSREFLEXIA

NB In Bart's Health NHS Trust Pregnant women and children have their own early warning scores [EWS] and escalation policies to address their clinical need for monitoring and escalation in care.

2. APPLICATION

- 2.1 This policy applies to all those working in the Trust in whatever capacity. A failure to follow the requirements of the policy may result in investigation and management action being taken as considered appropriate. This may include formal action in line with the Trust's disciplinary or capability procedures for Trust employees; and other action in relation to other workers, which may result in the termination of an assignment, placement, secondment or honorary arrangement.

3. THE POLICY

- 3.1 Adult patients in acute hospital settings, including patients in the Accident and Emergency Department for whom a clinical decision to admit has been made must have:
- Physiological observations** recorded at the time of their initial assessment or admission that **incorporates a NEWS2**.
 - All patients are admitted under SpO₂ Scale 1 **unless** documented by a competent clinical decision maker to commence Scale 2. Only patients with pre-existing or newly diagnosed with hypercapnic respiratory failure should use Scale 2 for SpO₂ monitoring [See Section 5]. The decision to commence Scale 2 must be reviewed by the patient's parent medical team SpR or Consultant within 24 hours.
 - A **clear written monitoring plan** that specifies which physiological observations must be recorded and how frequently. The patient's plan of care must take account of the patient's diagnosis and presence of co-morbidities.
- 3.2 **NB:** The team that is responsible for the patient's medical management should also be recorded on the front of the observation chart with the contact bleep number.

4. OBSERVATION MONITORING

- 4.1 As a minimum the following physiological observations must be recorded at the initial assessment of the patient and as part of routine monitoring:

Physiological parameters included in the NEWS

Respiration rate	
Oxygen saturation	
Systolic blood pressure	
Pulse rate	
Level of consciousness	
Temperature	

Figure 1: Physiological Parameters Recorded in NEWS2

- NB** [i] Oxygen saturation – the use of Scale 2 must be verified by the competent clinical decision maker caring for the patient
[ii] Supplemental oxygen - Add 2 NEWS points

- 4.2 The physiological observations listed above constitute a full set of basic observations [Appendix I]. These **observations must be RECORDED 12 HOURLY AS AN ABSOLUTE MINIMUM**, unless the nurse responsible for the patient has used their clinical judgment and has discussed this within the multidisciplinary team at senior level. Any additional elements that need to be included in each set of observations must be identified and agreed locally.
- 4.3 The NEWS2 must be used to monitor all adult patients except pregnant women over 17 week gestation and be performed as an integral part of each observation. Total the score for each component in accordance to the patient's observations. All seven parameters must be included in the calculation for accuracy.
- 4.4 Observation trends should be interpreted in line with the patient's normal baseline values. Any deviation should be escalated to the nurse in charge to allow a timely review.
- 4.5 If **systolic blood pressure (SBP) falls greater than 20mmHg from their normal baseline a repeat blood pressure is required in 30 minutes**. If a patient's **SBP falls greater than 40mmHg from their normal baseline this must be escalated** to medical staff for an immediate review, as this is a high risk marker for sepsis. A Sepsis Proforma should be completed to ensure that they are not septic. Staff should with-hold any antihypertensive medication until the patient is reviewed and 30 minute observations should be recorded.
- 4.6 For patient's not requiring close monitoring of their urinary output, staff must ascertain whether the patient has voided urine in the last 6 hours. Commence a fluid balance chart when clinically indicated and for those patients within medium and high risk score [see Section 6].
- 4.7 All responses other than alert now scores 3 in NEWS 2. Patients who have a chronically altered level of consciousness should have their baseline level of consciousness recorded on the front of the chart. Once verified this is the patient's normal state of alertness this should score 0. Any deviation from this should score 3 and be commenced on a GCS and a urgent medical review. NB new onset confusion now scores 3 in NEWS2.

Physiological parameter	Score						
	3	2	1	0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25
SpO ₂ Scale 1 (%)	≤91	92–93	94–95	≤96			
SpO ₂ Scale 2 (%)	≤83	84–85	86–87	88–92 ≤93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen
Air or oxygen?		Oxygen		Air			
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220
Pulse (per minute)	≤40		41–50	51–90	91–110	111–130	≥131
Consciousness				Alert			CVPU
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1	

Table 1: National Early Warning Score [NEWS]2

- 4.8 The front of the observation chart allows pre-assigned trigger thresholds to be changed in line with the patient's chronic abnormal physiology caused by their co-morbidities i.e. their physiological norm may be different from that pre-assigned values. The Parent Medical team who have a clear understanding of the patient's baseline physiology may complete this section of the chart. The patient's frequency of observations can also be documented on the front of the chart in conjunction with escalation parameters.
- 4.9 The general Trust observation chart will be used to monitor all patients **EXCEPT** patients who require additional monitoring of their Glasgow Coma Scale or who have patient controlled analgesia or epidural in situ. In this case the relevant chart is selected and NEWS2 is calculated and recorded on the appropriate chart.
- 4.10 The NEWS2 chart will be used [Appendix II]. This chart is arranged in an A – E format is colour coded to alert staff when the patient's observations are triggering on the NEWS2 parameters.

NEWS2 should aid clinical assessment but must NEVER REPLACE COMPETENT CLINICAL JUDGEMENT.

Some patients may exhibit RED FLAG SYMPTOMS but not trigger NEWS2. These patients are still at risk and need urgent attention and escalation in care:

Cardiac chest pain at rest lasting longer than 20 minutes

Headache of dramatically sudden onset

Palpitations associated with syncope

Cauda equina syndrome

Painful swollen calf

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4.11 **VULNERABLE ADULTS** and patients with learning difficulties should have their baseline function assessed using additional information from a carer or family member who knows them well and their Learning Disabilities Hospital Passport. When patients have difficulty in engaging with basic observations consider reasonable adjustments e.g. requesting the support from the carer to ensure the observations are being recorded and advise the Lead Nurse Learning Disabilities. Alterations in their behaviour e.g. increasing agitation or drowsiness should be seen as an adverse sign and the patient should be reviewed by medical staff to determine its significance. If a patient is refusing and unable to engage with basic observations consider the patients capacity to consent to treatment and best interest decision making. This guidance similarly applies to patients with dementia or mental health disorders.

4.12 Patients who may require more comprehensive and frequent observations include:

- New admissions
- Post procedure patients in the first 48 hours after their intervention
- Patients requiring additional monitoring secondary to specialist treatment or blood product transfusion
- Patients recently discharged from ICU or HDU care
- Patients who are giving cause for concern
- Patient who are septic
- Neutropenic patients

These patients will require more frequent observation as determined by the most senior qualified healthcare professional overseeing their management.

4.13 **MEDICAL OUTLIERS** [i.e. those patients who are nursed in a different specialist ward to their care needs] should be monitored closely with clearly documented parameters on when the team should be alerted regarding any physiological change. Such patient's must be reviewed daily by their medical teams [FY2 or above] and relocated to the specialist ward as soon as is practical. Higher acuity patients should be nursed in an appropriate ward where staff can meet their clinical needs.

4.14 Any decision to change the frequency of observations must have a clearly documented rationale recorded on the front of the patients' observation chart and/or in their healthcare record. **PATIENTS RECEIVING END OF LIFE CARE ARE EXEMPT FROM THIS POLICY.**

4.15 The frequency of monitoring must increase if abnormal physiology is detected as outlined in the section on graded response strategy [Section 6].

4.16 **Observations which show a significant change should be repeated immediately. Check blood pressure using a manual sphygmomanometer, reposition the cuff and ensure it is the correct size, take a manual pulse, count the respiratory rate and ask the patient how he/she feels.**

4.17 All communications between health professionals regarding patients at risk of deterioration should be carried out using the SBAR communication tool [Appendix IV and V].

Explain: The patients current **Situation**
 Relevant medical **Background**
 Your **Assessment** of the patient's condition

Figure 3: Oxygen Delivery Device Codes

Air or Oxygen?	A=Air								
	% / L/min O ₂								2
	Device								
	Flow (L/min)								

Figure 4: Recording of Supplemental Oxygen Delivery

6. GRADED RESPONSE STRATEGY

The response to patients at risk of clinical deterioration should consist of 4 levels as outlined below:

NEWS score	Clinical risk	Response
Aggregate score 0–4	Low	Ward-based response
Red score Score of 3 in any individual parameter	Low–medium	Urgent ward-based response*
Aggregate score 5–6	Medium	Key threshold for urgent response*
Aggregate score 7 or more	High	Urgent or emergency response**

Figure 5: NEWS2 thresholds and triggers

All healthcare staff recording data or responding to the NEWS2 should be trained in its use. The staff must understand the significance of the scores and trigger thresholds and escalate care timely and appropriately


Low – Medium Scores

Response by a Clinician or Clinical team who is competent in the assessment and treatment of acutely ill patient and determines if any escalation is required.

Medium – High Scores

The response team must include staff with critical care skills including airway management.

LOW RISK			
Score	Frequency of Observations	Patient Escalation	Clinical Response
0	Minimum 12 hourly	Registered Nurse [RN]	<ul style="list-style-type: none"> Continue routine NEWS2 monitoring Escalate patient if concerned about the patient's clinical condition irrespective of NEWS
1-4	Minimum 4 – 6 hourly	RN Nurse in Charge [NIC]	Any deterioration: <ul style="list-style-type: none"> Nurse in Charge to review patient Increase observation frequency Check for other adverse signs ENSURE NO PARAMETER SCORES 3

MEDIUM RISK			
Score	Frequency of Observations	Patient Escalation	Clinical Response
Single parameter scores 3	Minimum 1 hourly	Nurse in Charge [NIC] Parent Medical Team	<ul style="list-style-type: none"> Medical review and escalation plan
5-6 URGENT RESPONSE	Repeat observations within 30 minutes & then 1 Hourly minimum [until the patient is reviewed]	Nurse in Charge [NIC] Parent Medical Team CCOT/H@NT PATIENT MUST BE REVIEWED BY A CLINICIAN WITH COMPETENCIES TO ASSESS & TREAT ACUTELY ILL PATIENTS	<ul style="list-style-type: none"> Immediate review Commence Sepsis Proforma & fluid balance chart Ensure Senior Registrar or Consultant aware of patient's condition/treatment plan Consider Critical Care Review if appropriate  <p>NEW score of 5 or more? Think sepsis! COMPLETE SEPSIS PRO FORMA & PROVIDE SEPSIS 6</p>

'Sepsis is life-threatening organ dysfunction caused by a dysregulated host response to infection.'

CLARIFY THE ESCALATION PLAN OR LIMITATIONS OF THERAPY IF FURTHER DETERIORATION OCCURS

HIGH RISK

If the patient has a LIFE THREATENING CHANGE in their Airway [including tracheostomy/laryngectomy emergencies]

Breathing

Circulation

FAST +ve / Reduced Glasgow Coma Scale

Call the Cardiac Arrest Team 2222 and commence resuscitation

Score	Frequency of Observations	Patient Escalation	Clinical Response
>7 NOT LIFE THREATENING	Continuous Monitoring	Nurse in Charge [NIC] Registrar/Consultant Parent Medical Team CCOT/H@NT REVIEW BY A CLINICIAN WITH CRITICAL CARE COMPETENCIES WHICH INCLUDES ADVANCED AIRWAY SKILLS	<ul style="list-style-type: none"> ▪ Immediate review ▪ Ceilings of therapy clarified ▪ Consider transferring to Level 2 [HDU] or Level 3 [ICU]

If the patient fails to respond to initial therapy and/or continues to deteriorate call CCOT/H@NT or the ICU Registrar

ENSURE THE CONSULTANT RESPONSIBLE FOR THE PATIENT'S CARE IS AWARE OF THEIR CONDITION

IF THERE IS ANY DELAY IN DIAGNOSTIC WORK UP OF A DETERIORATING PATIENT INVOLVE THE CONSULTANT

For Medium to High Risk patients ascertain:

6.1 When patients trigger their NEWS2 and escalation is required this must be documented within the Escalation Log. The responding team needs to sign, date and time once the patient has been reviewed [Figure 6].

An appropriate medical response MUST occur. If there is no reply from the team member being contacted, contact the next most senior member of the team until advice/assistance is received e.g. If no response from SHO, contact SpR, if no response from SpR contact consultant. Contact the Site Manager for assistance if there are on-going problems getting medical advice or assistance.

Escalation Log								
Date	Time	NEWS	Escalated to Med/ CCOT/H@N/RN	Action Plan	Signature (RN/AHP/ HCSW)	Responding team Signature	Date	Time

Figure 6: Escalation Log Barts Health NHS Trust

- 6.2 Initiate appropriate interventions to address the patient's deterioration [Appendix III]
- 6.3 Ward staff must stay with the patient to **monitor** the patient's condition **continuously**, liaise with and assist other health professionals that have been called to review the patient.
- 6.4 Clarify and document overall treatment plan including treatment limitations where appropriate in the patient's healthcare record.
- 6.5 Outcomes of all referrals and reviews must be clearly documented in the patient's healthcare record.
- 6.6 The patient's fluid balance must be assessed and a fluid balance chart commenced.
- 6.7 Ensure that the nursing team are fully aware of any plan made and are able to action it.
- 6.8 Reassess the patient's response to therapy. If the patient fails to improve call other clinicians of an appropriate senior grade and specialty to assist.

7. ADMISSION TO CRITICAL CARE

- 7.1 If the team caring for the patient considers that admission to a critical care area is clinically indicated, the decision to admit the patient must involve both the Consultant caring for the patient on the ward and the Critical Care Consultant.
- 7.2 The patient should be moved to ICU or HDU as soon as possible after the decision to admit has been made. Acute interventions and monitoring instigated must be maintained whilst the patient awaits transfer to a higher level of care.
- 7.3 Where a delay is incurred the patient should be appropriately supervised and receive the **correct level of care irrespective of their geographic location**. A monitoring and escalation plan must be agreed between the parent medical team, outreach and critical care medical team.
- 7.4 Staff accompanying the patient to critical care should have the required competencies to care for a critically sick patient and adhere to the critical care transfer guidelines.

8. DISCHARGE FROM CRITICAL CARE

- 8.1 After the decision to transfer a patient from a critical care area to a ward has been made they should be transferred as early as possible.
- 8.2 Transfers from critical care areas to wards between 22:00hrs and 07:00hrs should be avoided whenever possible and should be documented as an adverse clinical incident if they occur.

9. CARE ON THE WARD FOLLOWING TRANSFER FROM CRITICAL CARE

- 9.1 The critical care team and the ward team must jointly ensure that:
- Continuity of care through a formal structured handover from critical care to ward staff (both medical and nursing).
 - There is a written plan of care post critical care discharge which covers the first 24-48 hours that includes details of on-going therapy and monitoring needs.
 - That the receiving ward can deliver the plan of care.
 - The physiological and emotional needs of the patients transferred from critical care must be considered as part of the care plan.
 - An agreed plan of care for high risk patients who may have a further clinical deterioration regarding further escalation in care is documented.
- 9.2 CCOT will provide early follow up of patients discharged from critical care and consideration will be given to their on-going healthcare and rehabilitation needs and rehabilitation will continue as guided by the patient's multidisciplinary team. Hospital at Night should be informed of out of hours follow up to ensure a smooth transition in care.

Appendix I - Observation Recording

Respiratory rate
<p>Must be counted and not estimated.</p> <p>Count for 1 minute.</p> <p>Note depth, pattern, equal chest expansion, increased work of breathing.</p>

Blood Pressure	
<p>Bladder of cuff must encircle at least 80% of arm</p> <p>Apply cuff to bare skin, not over clothing</p> <p>Use a manual sphygmomanometer in all medium (Amber) and high risk (Red) patients</p> <p>NB if SBP drops greater than 40mmHg from patient's baseline escalate patient for an immediate review and withhold anti-hypertensive[s] until patient reviewed.</p> <p>If SBP drops greater than 20mmHg from patients baseline repeat SBP in 30 minutes.</p> <p>Also screen the patient for Sepsis</p>	<p>Do NOT apply cuff to limb with:</p> <ul style="list-style-type: none"> • Dialysis fistula or shunt • Implants • Trauma, burn, fracture • Mastectomy on that side

Pulse
<p>Manually count pulse at radial artery for 1 minute – assess rate, rhythm and volume.</p> <p>If unable to palpate radially suspect hypotension, feel for brachial or carotid pulse.</p> <p>In addition, assess Capillary Refill Time by applying pressure at nail bed for 5 seconds. Once released the colour should return in < 2 seconds. Ensure arm is level with the patient's heart level.</p>

SpO ₂	
<p>Aim for ≥ 95% for patients with normal respiratory function.</p> <p>Competent clinical decision makers can select SpO₂ Scale 2 for patients with Hypercapnic Respiratory Failure - aim for saturations 88%-92%.</p> <p>Do not use Dynamap monitor to measure pulse – the pulse should be performed manually.</p> <p>Use assessment skills – examine for pale mucous membranes, peripheral and/or central cyanosis.</p> <p>SpO₂ does not monitor ventilation.</p> <p>DO NOT TAKE O₂ OFF WHEN TAKING A BLOOD GAS</p>	<p>Inaccurate readings are given due to:</p> <ul style="list-style-type: none"> • Poor perfusion (cold hands) • Nail varnish • Jaundice • Carbon monoxide poisoning • Faulty machine

Oxygen Delivery

Follow the British Thoracic Society Guidelines for Oxygen Delivery Devices [see Section 5].

Record:

[i] The amount of oxygen administered [oxygen percentage or litres per minute - depending on the device used]

[ii] For high flow oxygen delivery record percentage of oxygen administered and flow rate of the device

[iii] For Hypercapnic Respiratory Failure Patients will trigger NEWS2 and will indicate oxygen is to be weaned

Temperature

Normal levels between 36-37.4°C

To get an accurate reading, pull the ear up and back to straighten ear canal when using tympanic/ear thermometers.

Escalate immediately if temperature is un-recordable.

Neurology (CAVPU)

C: Confused Refers to new onset confusion - patient not orientated to one or more: person/place or time

A: Alert, appropriate, orientated to person, place and time

V: Responding to **Voice** only, drowsy

P: Responding to central **Pain** only, by localizing or flexion, obtunded

U: Unresponsive to painful stimuli

Check blood sugars, check pupils, protect and provide an airway for patients if **P** or **U** – consider putting the patient in recovery position – caution for trauma patients who have not had their C spine cleared. Call for help with any change in level of consciousness and commence Glasgow Coma Scale.

2222 if patient found unresponsive

Urine Output

Calculate according to patient's weight

Acceptable amount is between 0.5 mls to 3 mls/kg/hour for patients who have normal renal function

Consider Acute Kidney Injury (AKI) if urine output <0.5ml/kg/hr and Creatinine is elevated from patients baseline

Example: if patient weighs 80 kgs

Minimum urine output = 0.5 mls/kg/hour = 0.5 x 80 = **40 mls/hour**

Maximum urine output = 3mls/kg/hour = 3 x 80 = **240 mls/hour**

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Appendix II – NEWS2 Observation Chart

Year	DATE																			DATE		
Month	TIME																			TIME		
A + B Respirations Breaths/min	≥25																				≥25	
	21-24																					21-24
	18-20																					18-20
	15-17																					15-17
	12-14																					12-14
	9-11																					9-11
	≤8																				≤8	
Scale 1 SpO2 (%)	≥96																				≥96	
	94-95																					94-95
	92-93																					92-93
	≤91																					≤91
Scale 2 SpO2 88-92%	≥97 on O ₂																				≥97 on O ₂	
	96-95 on O ₂																					96-95 on O ₂
	93-94 on O ₂																					93-94 on O ₂
	≥93 on Air																					≥93 on Air
	88-92																					88-92
	86-87																					86-87
	84-85																					84-85
	≤83																				≤83	
Air or Oxygen?	A=Air																					A=Air
	% / L/min O ₂																					O ₂ L/min
	Device Flow (L/min)																					Device Flow (L/min)
C SBP mmHg SBP drops 20mmHg from baseline repeat BP after 30 minutes SBP drops 40mmHg from baseline Immediate Medical review L- Lying 123 S- Standing 75	≥220																				≥220	
	201-219																					201-219
	181-200																					181-200
	161-180																					161-180
	141-160																					141-160
	121-140																					121-140
	111-120																					111-120
	101-110																					101-110
	91-100																					91-100
	81-90																					81-90
	71-80																					71-80
61-70																					61-70	
51-60																					51-60	
41-50																					41-50	
31-40																					31-40	
	≤30																				≤30	
	MAPs																				MAPs	
Pulse Beats/min	≥131																				≥131	
	121-130																					121-130
	111-120																					111-120
	101-110																					101-110
	91-100																					91-100
	81-90																					81-90
	71-80																					71-80
	61-70																					61-70
51-60																					51-60	
41-50																					41-50	
31-40																					31-40	
	≤30																				≤30	
	Reg/Irreg																				Reg/Irreg	
D Consciousness <small>NEW onset confusion (no score if chronic)</small>	Alert																					Alert
	New Confusion																					New Confusion
	Verbal																					Verbal
	Pain																					Pain
	Unresponsive																					Unresponsive
E Temperature °C	≥39.1																					≥39.1
	38.1-39.0																					38.1-39.0
	36.1-38.0																					36.1-38.0
	35.1-36.0																					35.1-36.0
	≤35.0																					≤35.0
NEWS Total																						Total
Pain (0-10)** <small>0 = no pain 10 = worst pain imaginable</small>	At rest																					At Rest
	Movement																					Movement
Capillary Blood Glucose mmol/L																						cBG mmol/L
Monitoring frequency (hrly/mins)																						Frequency
Escalation of Care Y/N/NA																						Escalation
Contacted (RN/Med/CCOT/H@N)																						Contacted
Initials																						Initials

** Use PainAD for patients with communication impairment and/or dementia

Appendix III - The A-E of Managing a Deteriorating Patient

PATIENT ASSESSMENT	LOOK, LISTEN, FEEL & MEASURE	INTERVENTIONS
AIRWAY & O₂	<ul style="list-style-type: none"> ◆ Reduced GCS ◆ Increased facial / airway swelling ◆ Abnormal noises—Stridor, gurgling ◆ See-saw breathing <p>TRACHEOSTOMY/LARYNGECTOMY PROBLEMS</p>	<p>Call 2222</p> <ul style="list-style-type: none"> ◆ Positioning [head-tilt & chin lift or jaw-thrust] <p>CAUTION PATIENTS WITH SPINE CORD INJURY [SCI]</p> <ul style="list-style-type: none"> ◆ Airway adjunct / suctioning <p>AIRWAY EMERGENCY ALGORITHM FOR ARTIFICIAL AIRWAY</p>
BREATHING	<ul style="list-style-type: none"> ◆ Respiratory Rate, Depth, Pattern ◆ Symmetry and Work of Breathing ◆ SpO₂ ◆ Auscultation 	<p>Oxygen</p> <ul style="list-style-type: none"> ◆ Positioning ◆ Aid sputum clearance/Physiotherapy ◆ Nebulised therapy if prescribed
CIRCULATION (Compared to baseline)	<ul style="list-style-type: none"> ◆ Pulse [Rate, regularity, volume] ◆ Blood Pressure ◆ CRT / Extremities warmth / coolness ◆ Urine Output / AKI <p>CONSIDER SEPSIS</p>	<ul style="list-style-type: none"> ◆ IV access & Bloods ◆ Sepsis 6 [Proforma] ◆ AKI - Fluid Resus, Review Drug Chart, Bladder Scan ◆ Fluid Balance Chart / Urinary Catheter ◆ ECG
DISABILITY	<ul style="list-style-type: none"> ◆ CAVPU or GCS [If GCS <8 review airway] ◆ Pupil Reaction ◆ Capillary Blood Glucose ◆ Pain Assessment ◆ FAST Assessment 	<ul style="list-style-type: none"> ◆ Recovery position [except SCI patient] & GCS chart ◆ Treat hypoglycaemia ◆ Check Drug Chart / Analgesia / Pain Team Review <p>**[See Acute Pain Management Policy—PainAD]</p> <p>FAST +ve 2222 & immediate Medical SpR review</p>
EXPOSURE	<ul style="list-style-type: none"> ◆ Head-to-toe, Front and Back ◆ Rashes, Oedema, Bleeding, Trauma, Abdomen Distension, DVT & Wounds ◆ Temperature 	<ul style="list-style-type: none"> ◆ Maintain dignity during “exposure” ◆ Medical Devices ◆ Prevent and manage hypo / hyperthermia

SBAR Communication Tool

Before calling:

- Assess the patient yourself
- Have all the information to hand
- Know what you want to happen at the end of the phone call

When calling:

- Use SBAR
- Communicate exactly what is concerning you
- Agree a plan with a timeframe
- If you do not get the help you need continue to escalate until you do!

In a Medical Emergency call 2222

- Loss of airway
- Unconscious
- Un recordable BP
- Cardio Respiratory Arrest
- **FAST +ve**

Situation

Clearly state the purpose of your call **from the start**

Background

Know the patient's relevant medical history and current treatment

Have this information to hand

Assessment

Full set of recent observations
Calculate NEWS
Your assessment of the situation

Have the charts to hand

Recommendation

Discuss what needs to happen next

Confirm a **time frame** for any actions

Always document your call in the healthcare record

Appendix V - CALLING FOR HELP

If there is no reply from the team/team member being contacted, contact the next most senior member of the team until advice/assistance is received e.g. If no response from SHO, contact SpR, if no response from SpR contact Consultant. You should also contact the Site Manager for assistance if you continue to have problems getting medical advice or assistance. **WHEN USING THE BLEEP SYSTEM FOLLOW THE INSTRUCTIONS BEFORE YOU HANG UP.**

	RLH	SBH	NUH	WXUH
Site Manager	Bleep 1111 DEC 45678	Bleep 0287	Bleep 4339	Bleep 2131 or 2003
CCOT	Bleep 1294 Office 40339 7 days a week 08:00 – 20.30	Bleep 0264	Bleep 4118	CCOT 2673
Hospital At Night	Bleep 1572 or 1573 [Non urgent calls] Or DEC 45681 or 45682	Hospital at Night Team Bleep 1945	CSM Bleep 4339	Bleep 2003 CSM Or CCOT 2673
Adult Critical Care Unit	Bleep 1113 [ACCU SpR] DEC 45715	Bleep 0007	Bleep 4087 ITU SpR	Bleep 2018
Medical Registrar	Bleep 1112 DEC 45645	Cardiology SpR via Mobile on Switchboard QEII SHO Bleep 0034 <hr/> HAC Bleep Bleep 0358 /0359 <hr/> HaemOnc via Mobile on Switchboard	Bleep 4627	Bleep 2001 [Acute Take] Bleep 2111 Ward Cover OOH only
Surgical Registrar	Bleep 1676 SHO 1188	Cardiothoracic SpR via Mobile on Switchboard CT SHO Bleep: 0087 Day or Bleep: 0090 Night Haem Onc Bleep 0065 / 0158 Max Fax Bleep: 0267	Bleep 4634	Bleep 2938 [Night]

All communications between health professionals regarding patients at risk of deterioration should be carried out using the **SBAR** communication tool.

Appendix VI

1. DUTIES AND RESPONSIBILITIES

<p>All staff working in the Trust</p>	<p>CLINICAL STAFF must adhere to the policy. All staff should be able to calculate or interpret a NEWS2 and realise the significance for the patient.</p> <p>NURSING STAFF must accurately record the patient's observations as determined by their overall acuity or additional instructions from the medical team.</p> <p>MEDICAL STAFF must consider ceilings of therapy; determine what additional observation is required beyond the basic NEWS2 observations and respond appropriately and review deteriorating patients. Doctors should realise their limitations in practice and realise if they need to seek additional help from a more senior or specialised colleague e.g. Critical Care.</p> <p>If a patient is placed in an outlying area relevant to their clinical need the medical team must ensure that the patient is reviewed daily by a FY2 Doctor or above and clear guidance is given to the nursing team on how to detect early deterioration should it occur.</p>
<p>Managers</p>	<p>WARD MANAGERS must ensure their team [qualified and unqualified staff] are competent to undertake a set of observations; use the NEWS2 and escalate concerns. Ward Managers will also complete compliance audits on a monthly basis and upload the relevant information on the Quality Improvement Dashboard.</p> <p>CLINICAL SITE MANAGERS must ensure that patients are allocated an appropriate bed according to their acuity and clinical need. Sick Level 1 patients should be nursed within the specialty bed base.</p>
<p>Other posts</p>	<p>RESUSCITATION OFFICERS AND RISK MANAGERS must audit compliance with this policy and raise concerns if patients have deteriorated without due process being adhered to.</p> <p>CRITICAL CARE OUTREACH PRACTITIONERS/HOSPITAL AT NIGHT TEAM These practitioners should respond timely to ward based referrals from the multidisciplinary team and augment/assist in the care of deteriorating patients on the wards. Moreover these teams must share acute care skills with their ward based colleagues. CCOT/H@NT must escalate concerns to Adult Critical Care or other specialist services as appropriate.</p>
<p>Committees</p>	<p>GOVERNANCE MEETING & DETERIORATING PATIENT GROUP peer review moderate – serious incidents relating to the deteriorating patients and ensure that this policy remains fit for purpose and incorporates national guidance and or safety alerts.</p>

APPENDIX VII

MONITORING THE EFFECTIVENESS OF THIS POLICY

[See Appendix VI]

Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Completeness/accuracy of observations and escalation of sick patients	Audit	Ward Managers and Senior Nurses	Monthly	Patient Safety Forum Deteriorating Patient Group DON/ADON/ Senior Nurses
Adverse incidents relating to the deteriorating patient where the NEWS2 policy has not been used effectively	Case by case review	Clinical Risk Advisors/Managers	As the incidents occur Quarterly thematic analysis of the deteriorating patient incidents	Clinical Risk Managers CAG DON and Clinical Directors Senior Nurses Governance Review Meeting
Review of events leading up to cardiac arrest calls to determine if there were any missed opportunities to intervene earlier	Case by case review Resuscitation Audit	Resuscitation Officers	RCA of each CA call Monthly Audit	Resuscitation Officers Deteriorating Patient Group CAG DON and Clinical Directors Senior Nurses

[REF] Leave blank for completion centrally

Appendix VIII – Impact assessments

Equalities impact checklist - must be completed for all new policies

EQUALITIES IMPACT CHECKLIST

<p>Which groups All groups with the exception of children and pregnant women over 17 weeks gestation will be covered by this policy</p> <p>Other groups :</p>	
<ul style="list-style-type: none"> minority ethnic people (including gipsy/travellers, refugees & asylum seekers) women and men people in religious/faith groups disabled people older people, children & young people lesbian, gay, bisexual & transgender people 	<ul style="list-style-type: none"> people of low income people with mental health problems homeless people people involved in criminal justice system staff any other groups
<p>N.B. The word proposal is used below as shorthand for any policy, procedure, strategy or proposal that might be assessed.</p>	<p>What positive & negative impacts do you think there might be?</p> <p>Which groups will be affected by these impacts?</p>
<p>What impact will the proposal have on lifestyles? For example, will the changes affect:</p>	
<ul style="list-style-type: none"> Diet and nutrition? 	<p>Should not be affected by this policy for acute ward based patients</p>
<ul style="list-style-type: none"> Exercise and physical activity? 	<p>Patients requiring closer monitoring may be restricted to their bed area to allow this to occur. These patients are normally too sick to mobilise anyway.</p>
<ul style="list-style-type: none"> Substance use: tobacco, alcohol or drugs? 	<p>Discouraged particularly during acute illness. Each patient will be considered on an individual basis to determine that they do not require additional treatment to counteract any withdrawal symptoms.</p>
<ul style="list-style-type: none"> Risk taking behaviour? 	<p>Not applicable. All interventions with patients should be risk assessed and consent obtained prior to recording observations where possible.</p>
<ul style="list-style-type: none"> Education and learning or skills? 	<p>Staff will be trained on how to use the NEWS2 and escalate care. Ward Managers must ensure that all nursing staff in their ward/department can accurately record a set of observations and calculate NEWS2.</p>
<p>Will the proposal have any impact on the social environment? Things that might be affected include:</p>	
<ul style="list-style-type: none"> Social status 	<p>Not applicable</p>

[REF] Leave blank for completion centrally

<ul style="list-style-type: none"> • Employment (paid or unpaid) 	
<ul style="list-style-type: none"> • Social/family support 	
<ul style="list-style-type: none"> • Stress 	
<ul style="list-style-type: none"> • Income 	
Will the proposal have any impact on:	
<ul style="list-style-type: none"> • Discrimination? 	Not applicable.
<ul style="list-style-type: none"> • Equality of opportunity? 	
<ul style="list-style-type: none"> • Relations between groups? 	
Will the proposal have any impact on the physical environment? For example, will there be impacts on:	
<ul style="list-style-type: none"> • Living conditions? 	Patients may be hospitalised or in outpatient departments or A&E during observation recording.
<ul style="list-style-type: none"> • Working conditions? 	Staff from across BH will be realigned to using the NEWS2 and this will replace all legacy warning scores for adult patients excluding midwifery.
<ul style="list-style-type: none"> • Pollution or climate change? 	Not applicable
<ul style="list-style-type: none"> • Accidental injuries or public safety? 	The use of the NEWS2 should allow earlier recognition and escalation of sick and deteriorating patients and therefore promote patient safety.
<ul style="list-style-type: none"> • Transmission of infectious disease? 	Dynamaps; pulse oximeters and tympanic thermometers need to be adequately decontaminated between patients.
Will the proposal affect access to and experience of services? For example:	
<ul style="list-style-type: none"> • Health care 	Not applicable
<ul style="list-style-type: none"> • Transport 	
<ul style="list-style-type: none"> • Social Services 	
<ul style="list-style-type: none"> • Housing services 	
<ul style="list-style-type: none"> • Education 	
Equalities Impact Checklist: Summary Sheet	
<p>1. Positive Impacts (Note the groups affected)</p> <p>Earlier recognition and treatment of deteriorating patients. NEWS2 will allow common language to be used across healthcare when discussing the overall score</p>	<p>2. Negative Impacts (Note the groups affected)</p> <p>The scoring system has its limitations and is sensitive and will be easily triggered. Trigger fatigue is a real risk but trigger thresholds can be revised for individual patients where chronic disease triggers the NEWS2 erroneously.</p> <p>Moreover some patients may not trigger NEWS2 but may need an urgent review e.g. a patient with chest pain.</p> <p>SCI patients at risk of autonomic dysreflexia should be monitored with caution if NEWS2 used</p>
<p>Race Equality Does the policy take account of race equality legislation and the Trust's Race Equality</p>	<p>See: Race Equality Scheme, Equal Opportunities Policy</p>

[REF] Leave blank for completion centrally

Scheme?

Not applicable

Disability discrimination

Does the policy take account of DDA legislation?

See: Equal Opportunities Policy, Employment of People with Disabilities Policy

Considers how to assess patients with learning disabilities or poor historians when assessing a patient

Age discrimination

Not for under 16 year old patients.

Does the policy take account of relevant legislation?

See: Equal Opportunities Policy, Working beyond Retirement Age Policy

Gender discrimination

Does the policy take account of relevant legislation?

See: Equal Opportunities Policy

Yes

3. Additional Information and Evidence Required

Royal College of Physicians published the NEWS2 [December 2017] to develop a common language when discussing patient acuity across all of healthcare including the acute Trust. This allows other healthcare providers to understand the condition of the patient in the same way that the Glasgow Coma Scale talks a universal language with head injured patients or patients with an altered level of consciousness.

NHS England has mandated that the NEWS2 is adopted by all acute Trusts by March 2019.

4. Recommendations

5. From the outcome of the Equalities Impact Assessment, have negative impacts been identified for race or other equality groups? Has a full EQIA process been recommended? If not, why not?

Manager's Signature:

Date:

Appendix IV : Organisational Impact Assessment

Name of policy	OBSERVATION AND ESCALATION POLICY – ADULT PATIENTS [Excluding Pregnant Women]				
Date of impact assessment	18/10/18	Completed by:	A McGinley	Position	Nurse Consultant

Area for consideration	Description of issue	Trust contact	Policy author description of how issue has been taken into account in the policy/guideline
Financial impact on Trust	Does the policy impose an additional direct or indirect financial cost on the Trust and how will this be managed?	Potentially	Identifying patients who require an escalation in care and admission to L2 or L3 critical care – including potential inter-hospital transfers
Impact on PFI Service Providers: <ul style="list-style-type: none"> • Carillion • Synergy • SFS • Other (s5q530) 	How will the policy impact on the volume/cost of services provided by the Trust's PFI partner and how has this been addressed?	TBC	NA
Impact on other partner organisations	How will the policy impact on other partners?	TBC	May identify patients who require a specialist service and transfer of care.

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