



## CLINICAL GUIDELINE

# National Early Warning Score (NEWS2) - Standardising Assessment

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

<b>Version Number:</b>	2
<b>Does this version include changes to clinical advice:</b>	No
<b>Date Approved:</b>	15 <sup>th</sup> September 2022
<b>Date of Next Review:</b>	31 <sup>st</sup> May 2024
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### Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

### **Acknowledgement of NEWS2 update**

NEWS2 is the latest version of the national early warning score (NEWS) being updated in 2017. There are no copyright restrictions for using NEWS2 (Royal College of Physicians, 2017) and the NHSGGC NEWS2 chart has been reproduced from: Royal College of Physicians. *National Early Warning Score (NEWS) 2: Standardising the assessment of acute-illness severity in the NHS*. Updated report of a working party. London: RCP, 2017.

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## Introduction

The National Early Warning Score (NEWS) was developed to improve the detection of and response to clinical deterioration in adult patients with acute illness. NEWS is a recognised and validated tool. The original NEWS was published by the Royal College of Physicians (RCP) in 2012, with an updated version (NEWS2) being released in 2017.

## Scope

This guideline is relevant for all NHS Greater Glasgow and Clyde (NHSGGC) health care staff caring for **adult** patients (age 16 years and above), with the exception of obstetric and spinal injury patients. In obstetrics, the Maternity Early Warning Chart (MEWS) should be used. It is expected in spinal injuries, a tested and validated system is in place and that NEWS2 be used when communicating patient acuity to clinicians in other (non-specialty) areas.

## Roles and responsibilities

All healthcare practitioners recording data or responding to the NEWS2 should be appropriately trained in its use. **To enable a comprehensive patient assessment and to detect clinical deterioration all components of the NEWS2 chart must be fully completed and total aggregate score obtained. The triggers and threshold for escalating a clinical response should not be altered.**

All practitioners using the NEWS2 should understand the significance of the scores with regard to local policies/guidelines for responding to the NEWS2 triggers and the nature of the clinical response required. If a practitioner deems it appropriate to deviate from / adapt the escalation guidance, this must be justified by robust clinical decision making and documented appropriately.

In some clinical areas, some unregistered practitioners are trained to complete NEWS/NEWS2 charts. These practitioners should have undergone a competency assessed programme. It remains the responsibility of the registered practitioner to

ensure the NEWS2 has been accurately completed, and to escalate and communicate any concerns appropriately.

There are clinical situations where it is necessary to increase frequency of monitoring regardless of the NEWS2 score. Standard operating procedures apply to certain clinical circumstances e.g. post-operative/procedure patients and patients receiving a blood transfusion. NEWS2 should not replace sound clinical judgement. Any concerns regarding the patients' conditions should be appropriately escalated.

### **What is NEWS2?**

NEWS2 is a simple aggregate scoring system in which a score is allocated to physiological measurements. Six physiological parameters are measured:

- Respiration rate
- Oxygen saturation
- Systolic blood pressure
- Pulse rate
- Level of consciousness or new confusion
- Temperature

A score from 0 – 3 is allocated to each parameter, with an increasing score reflecting how extreme that parameter varies from the norm. The aggregate (total) score (0 – 20) is considered, with the allocation an additional 2 points to uplift the score for patients requiring supplemental oxygen to maintain their recommended oxygen saturation.

**NEWS2** was updated following feedback on the original NEWS tool.

A copy of the NHSGGC NEWS2 chart can be found in Appendix 1.

## **NEWS2 update**

The RCP (2017) recommended that the following factors be incorporated in to the NEWS2 chart:

- The physiological parameters be reordered to align with the Resuscitation Council (UK) ABCDE approach to assessment
- The ranges for the boundaries of each parameter are now shown in the chart
- The chart has a dedicated section (SpO<sub>2</sub> Scale 2) for use in patients with hypercapnic respiratory failure (usually due to Chronic Obstructive Pulmonary Disease (COPD)) who have clinically recommended oxygen saturation of 88-92%. The decision to use SpO<sub>2</sub> scale 2 must be made by a competent doctor or advanced nurse practitioner.
- The chart has a dedicated section for recording the rate of supplementary oxygen (L/min) and method/device used.
- The importance of considering sepsis in patients with known or suspected infection, or at risk of infection, is emphasised. A **new** score of 5 or more, is the key trigger threshold for urgent clinical review and action. A single red score (indicating 3 in one parameter) is unusual and should prompt a review by a clinician.
- The addition of 'new confusion' (which includes disorientation, delirium or any new alteration to mentation to the AVPU score), which becomes ACVPU (where c = new confusion).
- The chart has a new colour scheme, reflecting the original red-amber-green colour scheme was not suited to staff with red/green colour blindness.

## **Key considerations using NEWS2**

- NEWS2 assists but **does not** replace clinical judgement
- The trend in the observations and NEWS2 over time is very important (track and trigger)

- Reliable response and escalation of NEWS2 is equally important
- The frequency of observations and review/escalation is based on the aggregate (total) NEWS2 score – this should be increased/escalated if there is concern
- NEWS2 should not be used as a sole criterion for prioritisation of patients
- Consideration of the response to treatment is crucial in managing the deteriorating patient
- The recording of a baseline NEWS2 and observations (particularly oxygen saturations in those with respiratory disease) are extremely useful in helping interpret the significance of the current score

### **Using NEWS2**

NEWS2 should be used as an initial assessment of illness severity and for continuous monitoring of patients wellbeing throughout the care journey. By recording the NEWS2 on a regular basis as per Royal College of Physicians recommendations, trends in the patient's clinical response can be tracked providing early warning of clinical deterioration and the need for more intensive treatment. The NEWS2 trends will also provide information on the patient's improvement/recovery facilitating a reduction on the frequency and intensity of clinical monitoring and transfer to lower dependency areas, towards patients discharge from hospital.

When recording physiological observations on the NEWS2 chart the appropriate symbols should be used. This will allow for a clear representation of physiological trends of deterioration. See appendix 2 for further detail.

### Identification of SpO2 scale

Page 1 of the NHSGGC NEWS2 chart, has a section to be completed on admission indicating which SpO2 scale should be used.

**SpO2 scale 2 should only be used for patients with confirmed chronic hypercapnic respiratory failure** on blood gas analysis on either prior, or on their current, hospital admission. The decision to use the SpO2 scale 2 must be made by a competent doctor or advanced nurse practitioner, at the point of admission, and recorded on page 1 of the NEWS2 chart. In all other circumstances, the regular SpO2 scoring scale (Scale 1) should be used. The SpO2 scoring scale not being used should be clearly crossed out across the chart on pages 2 & 3.

<b>SpO2 Scale 1</b> Target >96%	<b>SpO2 Scale 2</b> Target 88-92%
Signature:	Signature:
Print Name:	Print Name:
Dr/ANP initials ONLY:	Dr/ANP initials ONLY:
Date:	Date:

In some clinical circumstances, patients will be required to be given supplementary oxygen. This should be prescribed in the medicine prescription form:

Oral and Other Drugs: Regular Prescription					DATE	2
					MONTH	10
BEFORE ADMISSION <input type="checkbox"/>	H	DRUG <i>Oxygen</i>			Other time	
		DOSE <i>As per SpO<sub>2</sub></i>	ROUTE <i>Inh</i>	DATE <i>2/10/18</i>	0700-0900	NL
NEW DOSE <input type="checkbox"/>	PRESCRIBER (PRINT & SIGN) <i>C Simpson</i>			STOPPED DATE: INITIALS:	1200-1400	NL
NEW MEDICATION <input type="checkbox"/>	ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY				1600-1800	NL
					2200-2400	NL
					Other time	

If a patient's length of stay requires a second NEWS2 chart, the information on Page 1 can be transcribed onto the new/subsequent NEWS2 chart. The completed NEWS2 chart should be retained and filed as normal.



## NEWS2 thresholds and triggers

A **new** aggregate score of 5 or more is a key threshold that should trigger an urgent clinical review; a **new** aggregate score of 7 or more should trigger a high-level clinical response, e.g. an emergency clinical review.

A single **red score** (indicating 3 in one parameter) is unusual and should prompt a review by a clinician to determine the cause and decide whether an escalation of care is required and the frequency of subsequent monitoring.

**The triggers and thresholds for escalating a clinical response should not be altered.** Any deviations from the escalation response guidance should be clearly communicated in the NEWS2 chart with a documented plan of care in nursing notes.

## Clinical response/competency

The aggregate NEWS2 score should be used to determine the urgency and competence of clinical response.

The NHSGGC escalation response guidance template, which is incorporated onto the front page of the NEWS2 chart should be referred to.

NEWS 0	NEWS 1-4	NEWS 5-6 or 3 in one parameter	NEWS 7 or more
	Low Clinical Risk	Medium Clinical Risk	High Clinical Risk
Min 12 hourly observations	Min 4 Hourly Observation	Min Hourly Observations	Continuous Monitoring
	Inform Registered Nurse	Urgent Assessment by Medical Team	Urgent Assessment by Senior Medical Team
	Agree Frequency of observation Required	ACE Response in Medical Notes	ACE Response in Medical Notes
		Think Sepsis if Suspicion of Infection	Consider 2222

Any deviations from the escalation response guidance should be clearly communicated in the NEWS2 chart with a documented plan of care in nursing notes.

The NEWS2 score should be used to inform the frequency of clinical monitoring, which should be appropriately recorded on the NEWS2 chart. Any concern about a patient's

clinical condition should always override the NEWS2 score if the healthcare practitioner considers it necessary to escalate a clinical response. The clinical response to the aggregate NEWS2 score should be clearly documented in the patient's notes. This will provide a continuous record of actions taken in response to variations in the NEWS2 and act as a prompt to escalate care if necessary. The NEWS2 should be used to aid decision making with regard to the most appropriate clinical setting for ongoing care. A NEWS2 score should be completed as a minimum of 12hourly. There may be some clinical circumstances that this level of frequency can be safely further reduced within appropriate clinical governance guidance. This should be appropriately guided by local Standard Operating Procedure (SOP), discussed with the Multi-Disciplinary Team (MDT) and final decisions of frequency clearly documented. If patient's show any signs of clinical deterioration, NEWS2 frequency should be increased.

When healthcare practitioners decide that the routine recording of data for the NEWS2 is not appropriate and should be discontinued, e.g. for patients on end of life care pathway, these decisions should be documented on page 1 of the NEWS2 chart.

Discontinuation of NEWS
Following MDT discussion, it has been agreed that this patient no longer has a requirement for observations
Signed.....
Medical: .....
Date: .....

The NEWS2 score should be used to guide clinical decision making in relation to level of care including:

- Access to facilities for more frequent or continuous monitoring
- Timely access to staff trained in critical care e.g. airway management and resuscitation
- Timely access to specialist acute care e.g. Non-invasive ventilation (NIV) or renal support

Effective communication is a vital factor in patient safety and the provision of care; as a failure in communication in the healthcare environment could lead to serious adverse

events. The continuity of patient care can be achieved by the transfer of information in a clear and concise manner using the situation, background, assessment and recommendation (SBAR) communication tool. Action, Communicate and Escalate (ACE) is included as a prompt within the NEWS2 chart.

Think ACE	
<b>A</b>	Action: Working diagnosis (consider SEPSIS). Consider frequency of observations. Management plan. Set review time. Document.
<b>C</b>	Communicate: Inform nurse of plan. Inform senior medic if necessary. Document the discussion.
<b>E</b>	Escalate: Document the treatment escalation plan. Should include need for next level of care & consideration of resuscitation status.

Further information on ACE can be found in Appendix 3. Any concerns about a patients' clinical condition should be communicated effectively to a clinically competent healthcare practitioner.

It is the accountability and responsibility of healthcare practitioners to communicate clinical deterioration in a patient's condition and any concerns to the patient themselves, their family and carers.

## Appendix 1

### NHSGG&C NEWS – National Early Warning Score



<b>Affix Patient ID</b> <hr/> <hr/>
--

	Date	Ward	Time
Admitted			
Transferred			
Transferred			
Transferred			
Transferred			

<b>SpO2 Scale 1</b> Target >96%	<b>SpO2 Scale 2</b> Target 88-92%	Patient on home oxygen Y <input type="checkbox"/> N <input type="checkbox"/>
Signature:	Signature:	If yes, add details of oxygen therapy
Print Name:	Print Name:	
Dr/ANP initials ONLY:	Dr/ANP initials ONLY:	
Date:	Date:	

**Document all actions and interventions**

NEWS 0	NEWS 1-4	NEWS 5-6 or 3 in one parameter	NEWS 7 or more
<b>Min 12 hourly observations</b>	Low Clinical Risk  Min 4 Hourly Observation  Inform Registered Nurse  Agree Frequency of observation Required	Medium Clinical Risk  Min Hourly Observations  Urgent Assessment by Medical Team  ACE Response in Medical Notes  Think Sepsis if Suspicion of Infection	High Clinical Risk  Continuous Monitoring  Urgent Assessment by Senior Medical Team  ACE Response in Medical Notes  Consider 2222

**NEWS should not replace sound clinical judgement. Any concerns regarding the patient's condition should be appropriately escalated and documented in the Nursing Notes**

<b>Discontinuation of NEWS</b>  Following MDT discussion, it has been agreed that this patient no longer has a requirement for observations  Signed.....  Medical: .....  Date: .....
---

NEWS 2 Key		1	2	3
Date	5/11			
Time	11:00			
<b>A + B</b> Respirations Breaths/min	*			
		>25	3	
		21-24	2	
		12-20	0	
		9-11	1	
		<8	3	
<b>A + B</b> SpO2 Scale 1 Oxygen saturation (%)	87			
		>96	0	
		94-95	1	
		92-93	2	
		<91	3	
<b>SpO2 Scale 2</b> Oxygen saturation (%) Use Scale 2 if target range is 88-92% e.g. in chronic hypercapnic respiratory failure. Only use scale 2 under direction of qualified clinician				
		>97 on O2	3	
		93-96 on O2	2	
		91-94 on O2	1	
		>91 on air	0	
		88-90	0	
		86-87	1	
		84-85	2	
		<83	3	
<b>Air or oxygen?</b>	A			
		Air (0) =	0	
		O2 L/min 2	2	
<b>C</b> Blood Pressure mmHg (Score uses systolic BP only)				
		>220	3	
		201-210	0	
		181-200	0	
		161-180	0	
		141-160	0	
		121-140	0	
		111-120	0	
		101-110	1	
		91-100	2	
		81-90	3	
		71-80	3	
		61-70	3	
		51-60	3	
		<50	3	
<b>C</b> Pulse beats / min	*			
		>133	3	
		121-130	2	
		111-120	2	
		101-110	1	
		91-100	1	
		81-90	0	
		71-80	0	
		61-70	0	
		51-60	0	
		41-50	1	
		31-40	3	
		<30	3	
<b>D</b>	*			
Any changes in neuro response. See GCS. Immediate medical review. Check Blood Glucose Think Delirium		A Alert	0	
		C New Confusion	3	
		V Verbal	3	
		P Pressure	3	
		U Urinary	3	
<b>E</b> Temperature	*			
		≥39	2	
		38.3-39.0	1	
		37.3-38.0	0	
		36.3-37.0	0	
		35.3-36.0	1	
		<35.0	3	
<b>NEWS Total</b>	0			
Blood Glucose	7.0			
Pain / function score	04			
Time Pt last passed urine	10:20			
Fluid chart indicated Y/N	N			
GCS indicated Y/N	N			
Time NEWS due	23:00			
Location of Care	Y / N			
Initials	AG			

Affix Patient ID

Abbreviations for recording oxygen device

A Room Air

N Nasal Cannula

SM Simple Mask

V Venturi Mask and % eg. V24

NIIV Non Invasive ventilation

IV Invasive ventilation

T Tracheostomy

CP CPAP Mask

HTN High flow nasal oxygen

NEB Nebuliser

**RM** Reservoir Mask  
Emergency use only

Affix Patient ID

**ELEVATED NEWS > 4 THINK SEPSIS**  
**Apply SEPSIS 6 within 1 hour**

1. Give oxygen to target saturation >94% (COPD 88-92%)
2. IV fluids up to 20ml/kg
3. Take blood cultures
4. Measure lactate and /OR
5. Give IV antibiotics
6. Monitor urine output and fluid balance chart

**Think ACE**

**A Action:** Working diagnosis (consider SEPSIS). Management plan. Set review time & document the above.

**C Communicate:** Inform nurse of plan. Inform senior medic if necessary. Document the discussion.

**E Escalate:** Document the treatment escalation plan. Should include need for next level of care & consideration of resuscitation status.

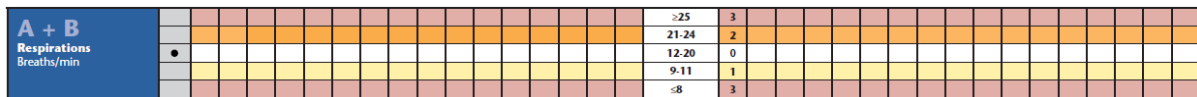


## Appendix 2 - Completion of NEWS2

The sequence of recording physiological parameters has been reordered on the NEWS2 chart to reflect the Airway, Breathing, Circulation, Disability Exposure (ABCDE) sequence used to assess the acutely ill patient.

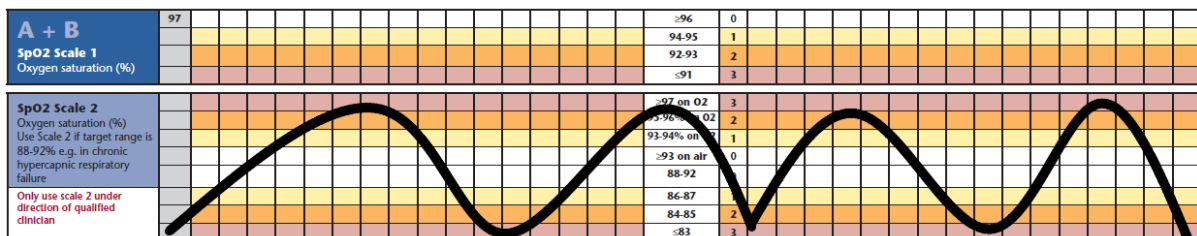
### Respiratory rate

An elevated respiratory rate is a useful indicator of acute illness and distress. It may be elevated as a consequence of generalised pain, sepsis (remote from the lungs), central nervous system (CNS) and metabolic disturbances. A reduced respiration rate can be an indicator of CNS depression and narcosis. A respiratory rate should be measured for a period of one minute, and recorded on the NEWS2 chart as a dot (●).



### Oxygen saturation scale

Oxygen saturation is a useful tool for the integrated assessment of pulmonary and cardiac function. A competent doctor or advanced nurse practitioner should decide which scale on NEWS2 should be used and document appropriately at the time of admission on Page 1 of the chart. Scale 1 is the usual scale for patients with a normal oxygen saturation target range between 94 – 98%. Scale 2 is for patients with chronic hypercapnic respiratory failure with a recommended target oxygen saturation between 88 – 92%. The scale not in use should be clearly crossed out to avoid confusion. The SpO2 should be recorded on the NEWS2 chart as a number.



## Supplementary oxygen

Patients requiring supplementary oxygen are at greater clinical risk. A weighting of an additional 2 points for patients requiring supplementary oxygen to maintain oxygen saturations is added to the aggregate score. Supplementary oxygen may be delivered by mask or nasal cannula. A legend is incorporated within the NEWS2 chart to indicate the oxygen delivery device being used. This should be noted on the appropriate part of the NEWS2 chart.

Air or oxygen?	A																	Air (A) or O2 device	0																	
																		O2 L/min 2	2																	

Abbreviations for recording oxygen device	
A	Room Air
N	Nasal Cannulae
SM	Simple Mask
V	Venturi Mask and % eg. V24
NIV	Non invasive ventilation
IV	invasive ventilation
T	Tracheostomy
CP	CPAP Mask
HFN	High flow nasal oxygen
NEB	Nebuliser
<b>RM</b>	<b>Reservoir Mask (Emergency use only)</b>



## Guidance on oxygen therapy


Reservoir masks (trauma masks) are for short term emergency use only. This oxygen delivery device is not for prolonged use on wards and should be weaned appropriately, titrating to target oxygen saturations. Patients who have an ongoing requirement for a reservoir mask should be moved to a critical care area unless there is a hospital anticipatory care pathway stating that this is not appropriate e.g. palliative care patients. Practitioners should continually assess a patient's NEWS2 score, oxygen requirements and response to current treatment. **Practitioners should be cognisant that an un-changing NEWS2 score and an increasing requirement for oxygen constitutes a deteriorating patient and should be escalated appropriately.**

Device		Flow Rate	% oxygen delivered (approx)
Nasal Cannula		1 L/min	24%
		2 L/min	28%
		4 L/min	36%
Venturi valve and mask	Blue	2 l/min	24%
	White	4 L/min	28%
	Yellow	8 L/min	35%
	Red	10 L/min	40%
	Green	15 L/min	60%
Reservoir mask (trauma mask) (Emergency use only)		15 L/min	85%

Oxygen can be humidified to reduce dryness in the upper airway. An appropriate humidification system should be used.

## Blood pressure

Although an elevated blood pressure (hypertension) is an important risk factor for cardiovascular disease, a low or falling **systolic** blood pressure (hypotension) that is most significant in the assessment of acute illness. Hypotension may indicate circulatory compromise or depletion.

Blood pressure should be indicated on the NEWS2 chart with arrows 

## Diastolic blood pressure

This does not form part of the NEWS2 aggregate score but it should be routinely added to the NEWS2 chart using arrows.



<b>C</b> Blood Pressure mmHg (Score uses systolic BP only)											>220	3										
											201-219	0										
											181-200	0										
											161-180	0										
											141-160	0										
											121-140	0										
											111-120	0										
											101-110	1										
											91-100	2										
											81-90	3										
											71-80	3										
										61-70	3											
										51-60	3											
										<50	3											

### Pulse rate

The measurement of the heart rate is an important indicator of a patient's clinical condition. Tachycardia may be indicative of circulatory compromise, arrhythmia and metabolic disturbance.

Bradycardia is also an important physiological indicator. A low heart rate may be normal with physical conditioning or medication. However, it can also be an indicator for hypothermia, central nervous system depression, hypothyroidism or heartblock.

A pulse should be palpated manually and counted for one minute. Note should be taken to the regularity (regular/irregular), depth and strength of the pulse. The pulse rate should be recorded on the NEWS2 chart as a dot (●).

<b>C</b> Pulse Beats / min											>131	3										
											121-130	2										
											111-120	2										
											101-110	1										
											91-100	1										
											81-90	0										
											71-80	0										
											61-70	0										
											51-60	0										
											41-50	1										
											31-40	3										
										<30	3											

## **Level of consciousness**

A change in the level of consciousness is an important factor of acute illness severity. The updated ACVPU assessment facilitates a quick assessment allowing five possible outcomes to measure and record a patient's level of consciousness. The assessment is completed in sequence and only one outcome is recorded. For example, if the patient responds to voice, there is no need to assess the response to pressure.

**Alert:** a fully awake patient with spontaneous opening of the eyes will respond to voice and will have motor function.

**New Confusion:** A patient that may be alert but confused or disorientated. It is not always possible to determine if the confusion is new when a patient presents acutely unwell. It should be considered new until it can be confirmed as being previously present. New onset or worsening confusion should always prompt concern about potentially serious underlying causes and warrants urgent clinical assessment. Consideration should be given to the cause of new or worsening confusion such as delirium or sepsis. A 4AT assessment and TIME bundle should be undertaken.

**Voice:** The patient makes some kind of response when you talk to them. This may be the eyes opening when being asked, a grunt, moan or slight movement of a limb.

**Pressure:** The patient makes a response when stimulated with a pressure stimulus. A patient who is not alert and who has not responded to voice is likely to exhibit withdrawal from pressure, or even involuntary flexion or extension of the limbs from the pressure stimulus. Care should be exercised when using a pressure stimulus.

**Unresponsive:** This is commonly referred to as 'unconscious'. This outcome is recorded if the patient makes no eye, voice or motor response to a voice or pressure stimulus.

Any deterioration in a patient's neurological condition should warrant a full neurological assessment using the Glasgow Coma Scale (GCS) and a blood glucose obtained.



**Row 1: Blood Glucose**

Consideration should be made as to whether the patient requires a blood glucose to be measured. If required, the result should be noted here.

**Row 2: Pain Score/Function Score**

Patients should be asked if they are experiencing pain and a number representing this and how this affects their ability to function is noted. The scores can be found on the back page (P4) of the NEWS2 chart. If the patient is unable to communicate using a numerical score, an alternative score chart should be used.

The pain function score in combination with a numerical score allows the context of the patient reported pain levels to be assessed. When completing this row, a combined number and letter is used e.g. 0A indicating no pain with no limitations on ability to function.

Pain Score											Pain Function Score	
Ask the patient to rate his/her pain by using numerical scale 0 to 10. Use the chart below to assist the patient. If the patient is unable to communicate, use alternative pain scoring tools.											A	No limitations, activity unrestricted by pain or settles quickly
											B	Mild limitations, mild activity restrictions
											C	Moderate limitations, attempts but reluctant to continue because of pain <b>Seek Advice</b>
											D	Severe limitations, unable to or refuse to perform because of pain <b>Urgent Review Required</b>
No Pain	Mild Pain			Moderate Pain			Severe Pain					
0	1	2	3	4	5	6	7	8	9	10		

**Row 3: Time patient last passed urine**

The monitoring of urine output is important in many clinical situations. Frequently with clinical deterioration, there is a decline in renal function. Documenting the time when a patient last passed urine will enable the practitioner to assess if a fluid balance chart is required to allow for a holistic assessment of patients hydration status. The time should be recorded in 24hr format e.g. 10.20

**Row 4: Fluid balance chart indicated Y/N**

Urine output monitoring is essential for acutely unwell patients. Using a fluid balance chart, enables a more comprehensive assessment of overall haemodynamic status. An accurate representation of patient's input and output should be clearly documented. If the patient has a urinary catheter present, hourly urine volumes should be considered. Indicate if a fluid balance chart is being used by noting Y or N appropriately.

**Row 5: GCS indicated Y/N**

The Glasgow Coma Scale is the most common scoring system used to describe the level of consciousness. The ACVPU is incorporated into NEWS2 score. If a patient exhibits a neurological deficit or injury and more comprehensive GCS must be undertaken. Indicate if a GCS is indicated by noting Y or N appropriately. The GCS chart is on the back page (P4) of the NEWS2 chart.

**Row 6: Blank**

This is for staff to add consideration for patient specific aspects. Examples may be sedation score, Colour/Sensation/Movement (CSM) check or drain/nasogastric tube output.

**Row 7: Time NEWS2 due?**

The time the patient should next have the NEWS2 measured should be noted here using 24hr format e.g. 23:00. Reference should be made to the clinical escalation and response section on page 1.

**Row 8: Escalation of Care Y/N**

Does the patient require a review by either the nurse in charge or medical staff? If this is completed as yes (Y), the action taken and escalation plan should be clearly documented in the patient's notes.

**Row 9: Initials**

The staff member completing the NEWS2 should initial here. This initial must be legible. Student nurses should have this countersigned by an appropriately qualified staff member.

**Glasgow Coma Scale (GCS)**

The Glasgow Coma Scale allows a practical method for assessment for impaired conscious level. The GCS on NEWS2 aligns to the updated GCS@40 recommendations. Further information on this can be found [here](#).

A GCS should be undertaken in response to any deterioration in a patient's conscious (ACVPU) level.

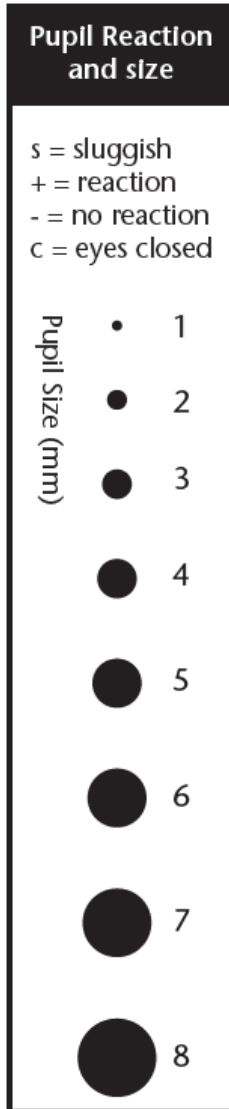
GCS score consists of an assessment of a patient’s eye, verbal and motor response to defined stimuli. The pupil and limb power (arms and legs) assessment should also be undertaken.

An assessment should be made to the best fitting description for the patient’s current condition and this noted appropriately on the GCS section of NEWS2 chart using a dot (●).

<b>Glasgow Coma Scale</b>									
Date:	11/1								
Time:	11.00								
Eyes closed by swelling = NT E Y E S	●							Spontaneously	4
								To sound	3
								To pressure	2
								None	1
								Non Testable	NT
Endotracheal tube or tracheostomy = NT V E R B A L	●							Orientated	5
								Confused	4
								Words	3
								Sounds	2
								None	1
								Non Testable	NT
Always record the best response M O T O R	●							Obeys Command	6
								Localising Pressure	5
								Normal Flexion	4
								Abnormal flexion	3
								Extension	2
								None	1
						Non Testable	NT		
<b>TOTAL</b>	<b>15</b>								
Right size:	P	-4							
Right reaction:	P	+							
Left Size:	I	4							
Left reaction:	L	+							
Record right (R) and left (L) separately if there is a difference between the two sides A R M S	●							Normal power	
								Mild weakness	
								Severe weakness	
								Spastic flexion	
								Extension	
								No response	
Record right (R) and left (L) separately if there is a difference between the two sides L E G S	●							Normal power	
								Mild Weakness	
								Severe weakness	
								Spastic flexion	
								Extension	
								No response	

**Pupil Assessment:**

When assessing the pupil size and reaction, the area on the right hand side of the chart should be referred to and appropriate size and reaction recorded for each eye.





### Appendix 3 – ACE

When there is a deterioration in a patient's clinical condition (when the aggregate NEWS2 score is increasing) think ACE! This stands for Action, Communicate and Escalate:

#### Action

Working diagnosis (consider SEPSIS). (A prompt for SEPSIS triggers is included on Page 3 of the NEWS2 chart.)

Management plan.

Set review time & document the above.

#### Communicate

Inform nurse of plan.

Inform senior medic if necessary.

Document the discussion.

#### Escalate

Document the treatment escalation plan.

Should include need for next level of care

& consideration of resuscitation status.

All components should be clearly documented in the patient's notes. This assists all Multi-disciplinary Team (MDT) members reviewing patients to have appropriate information immediately available.

Think ACE	
<b>A</b>	Action: Working diagnosis (consider SEPSIS). Consider frequency of observations. Management plan. Set review time. Document.
<b>C</b>	Communicate: Inform nurse of plan. Inform senior medic if necessary. Document the discussion.
<b>E</b>	Escalate: Document the treatment escalation plan. Should include need for next level of care & consideration of resuscitation status.

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