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NEWS2

National Early Warning Score

Changes in NEWS2

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- For patients > 16 years old
- **NOT** for pregnant women over 20 weeks gestation - > 17 weeks in Barts Health Trust
- Colour change to ensure colour blind individuals can use the chart reliably
- Score of 3 in a single parameter now mandates a less urgent review
- A NEWS > 5 requires the patient to complete the Sepsis Proforma
- Unreliable for patients with high SCI
- A-E Layout – align to UK Resuscitation Council
- Scale 2 for documented Hypercapnic Respiratory Failure
- New onset confusion now scores **3**

Physiological parameters included in the NEWS

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

+

2 Points if supplemental oxygen used

High NEWS = High Mortality

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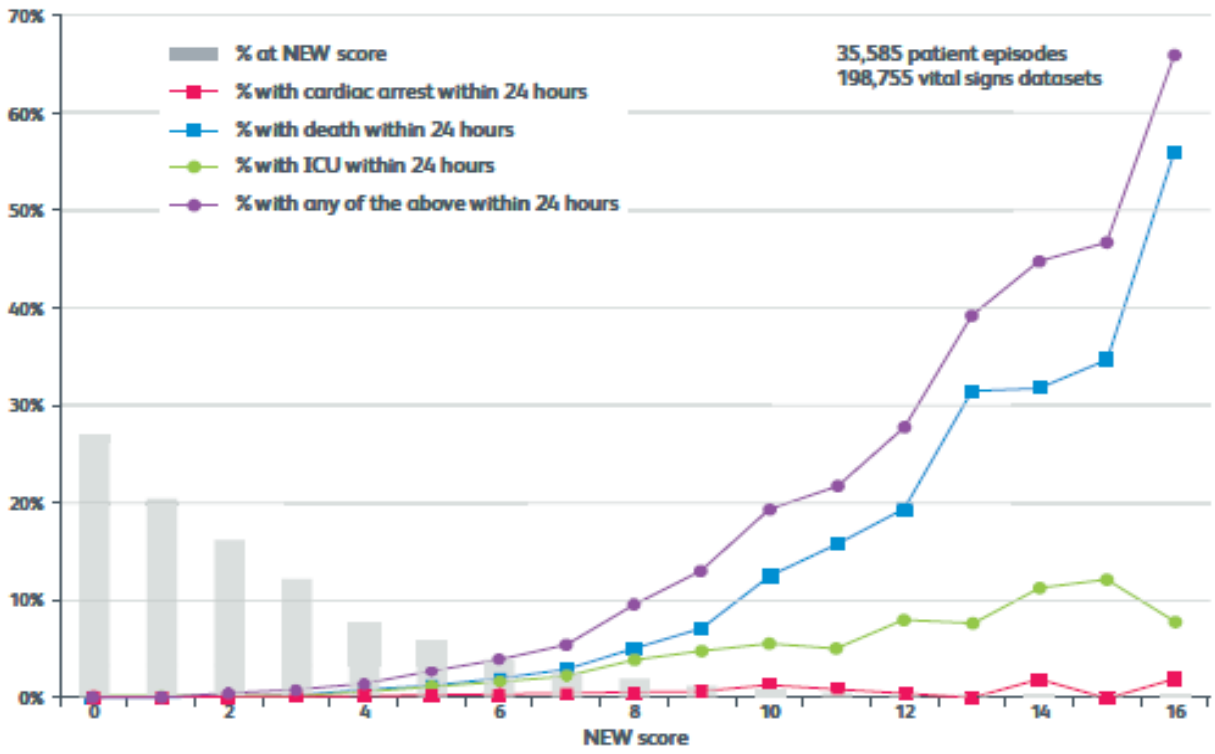
Figure 2: The distribution of NEW scores and their relationship to each of the four outcomes studied. Reprinted from Smith *et al*,[13] copyright 2013, with permission from Elsevier



Score 1-4 Low Score (except if one parameter scores **3**)

- Reviewed by competent Nurse
- Score 3 in single parameter mandates a review by Medical Parent Team

Score 5-6 Medium Score

- Potential for serious acute clinical deteriorating
- Review by Medical Parent Team or CCOT
- Possible escalation in care

Score >7 High Score

- Review by CCOT and usually escalation
- Continuous monitoring

Staff concern should always override NEWS 2 irrespective of scores

O2 Saturation: Scale 1 vs Scale 2

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All patients are commenced on Scale 1 **(SCALE 2 CROSSED OUT) unless;**

Hypercapnic Respiratory Failure patients are identified/documented by an **Competent clinical decision maker** on the front of the Chart **(SCALE 1 CROSS OUT)**

Scale 1 SpO2 (%)	≥96	
	94-95	1
	92-93	2
	≤91	3
Scale 2 SpO_2 88-92% Scale 2 under the direction of Medical Team	≥97 on O_2	3
	96-95 on O_2	2
	93-94 on O_2	1
	≥93 on Air	
	88-92	
	86-87	1
	84-85	2
	≤83	3

All patient are admitted on Scale 1 unless documented by competent clinical decision maker to commence Scale 2		
	Date	**Signature and Grade**
Scale 2 Target Saturations 88-92% - Cross off Scale 1 Hypercapnic Respiratory Failure		
Reviewed by SpR / Consultant within 24 hours		

NEWS 2 Scoring System

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PHYSIOLOGICAL	3	2	1	0	1	2	3
Respiratory Rate (/min)	≤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 O_2	95-96 on O_2	≥97 on O_2
Air or O_2?		O_2		Air			
Systolic blood pressure (SBP) mmHg	≤90	91-100	101-110	111-219			≥220
Pulse (/min)	≤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	

- Scale 2 – New Scoring parameters
- Consciousness – CVPU (confusion, voice, pain, unresponsive) all score 3 and require a GCS chart to be commenced
- NEWS of 0 is not necessarily normal e.g NEWS will not trigger unless SBP >219mmHg
- Use your clinical judgement!

NEWS 2 Scoring System

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NEWS	Frequency of Monitoring	Patient Escalation	Clinical Response
0	Minimum 12 hourly	Staff Nurse	• Continue routine NEWS monitoring • Escalate patient if concerned about patient's clinical condition irrespective of NEWS
Total: 1- 4 (NB If 1 parameter Scores 3 see below)	Minimum 4-6 hourly	Staff Nurse Nurse in Charge (NIC)	• Assess patient and decide if increased frequency of monitoring and/or escalation of care is required • Check for other adverse signs e.g. New onset confusion, new or worsening pain, oliguria, change in colour • Consider need for fluid balance chart
3 in single parameter	Minimum 1 hourly	Staff Nurse, NIC & Medical Team	• Medical review and escalation plan
Total: 5 or more Urgent response threshold	Minimum 1 hourly	Staff Nurse NIC Medical Team CCOT/H@N	Immediate review • RLH: Bleep CCOT (1294) / Hospital at Night (1572/1573) • Barts: Bleep CCOT (0264) • Mile End: Call medical team • Newham: Bleep CCOT (4118) • Whipps Cross: Bleep CCOT (2075) Commence Sepsis Performa & Fluid Balance Chart Consider Critical Care Review
Total: 7 or more Emergency response threshold	Continuous monitoring of vital signs	NIC, SpR Medical Team CCOT /H@N	• Immediately inform patient's medical team, at least at Registrar level and CCOT/H@N • Consider transfer level 2 (HDU) or 3 (ITU) clinicall care

- NEWS≥5: Think Sepsis! Sepsis Proforma should be completed
- Scoring NEWS 3 in single parameter: Parent medical team review and escalation plan

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Um
The element of
CONFUSION

New onset Confusion

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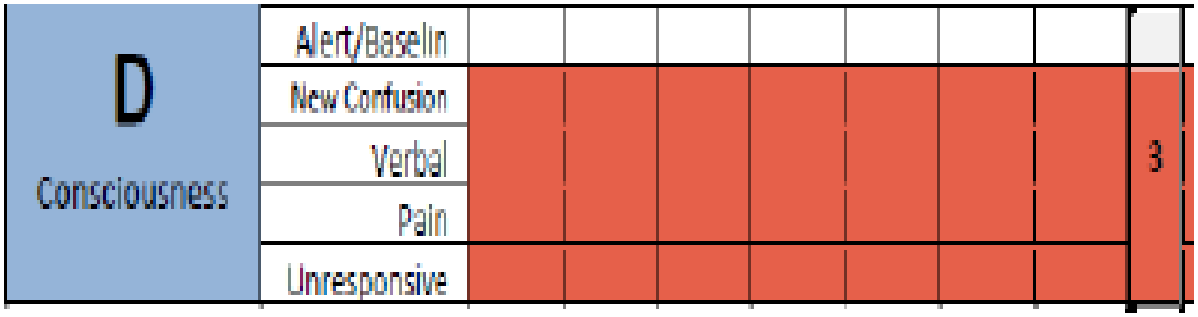

- Confused patients (previously alert and orientated) will answer incorrectly to one or more of the following: **time, place & person**.
- **New onset** Confusion is an early sign of deterioration and scores 3 on NEWS2
- Patients with longstanding confusion should have their baseline identified on the front of the chart. Document these patients as Alert/Baseline on the NEWS chart **NOT** confused.
- If level of consciousness is reduced to CVPU escalate for a immediate review and commence GCS chart

Call 2222

Cardio Respiratory Arrest

Loss/Compromised Airway

FAST +ve/Stroke

Unconscious

Unrecordable BP

Oxygen Devices

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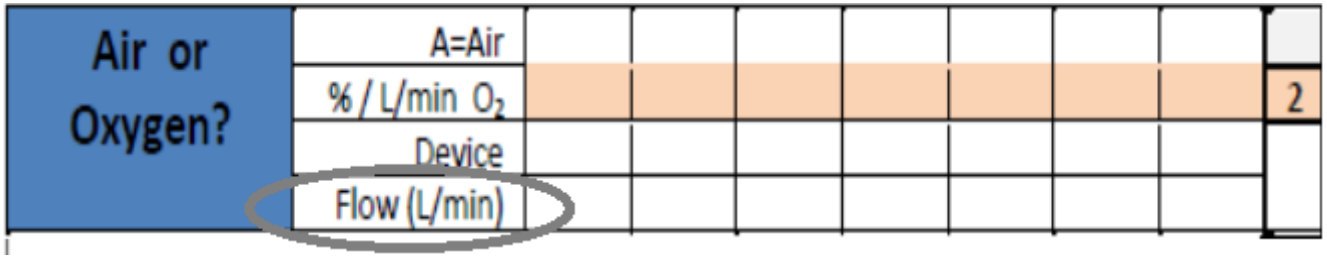
Codes for recording oxygen delivery on the NEWS2 observations chart	
A—AIR	RM—Reservoir mask
N— Nasal Cannula	TM—Tracheostomy mask
SM— Simple Face Mask	CP—Continuous positive airway pressure
V—Venturi mask and percentage (eg V24, V28, V35, V40, V60)	NIV— Non-invasive ventilation
H—Humidified oxygen and percentage (H28, H35, H40, H60)	OTH— Other, specify……
HFO—High-flow humidified oxygen via nasal cannulae/tracheostomy	



Flow (L/min) only for High flow Oxygen (HFO) devices

Document the device the patient is using as per the NEWS 2 guidelines / British Thoracic codes provided on the observation chart.

NEWS≥5 or patient looks unwell – THINK SEPSIS

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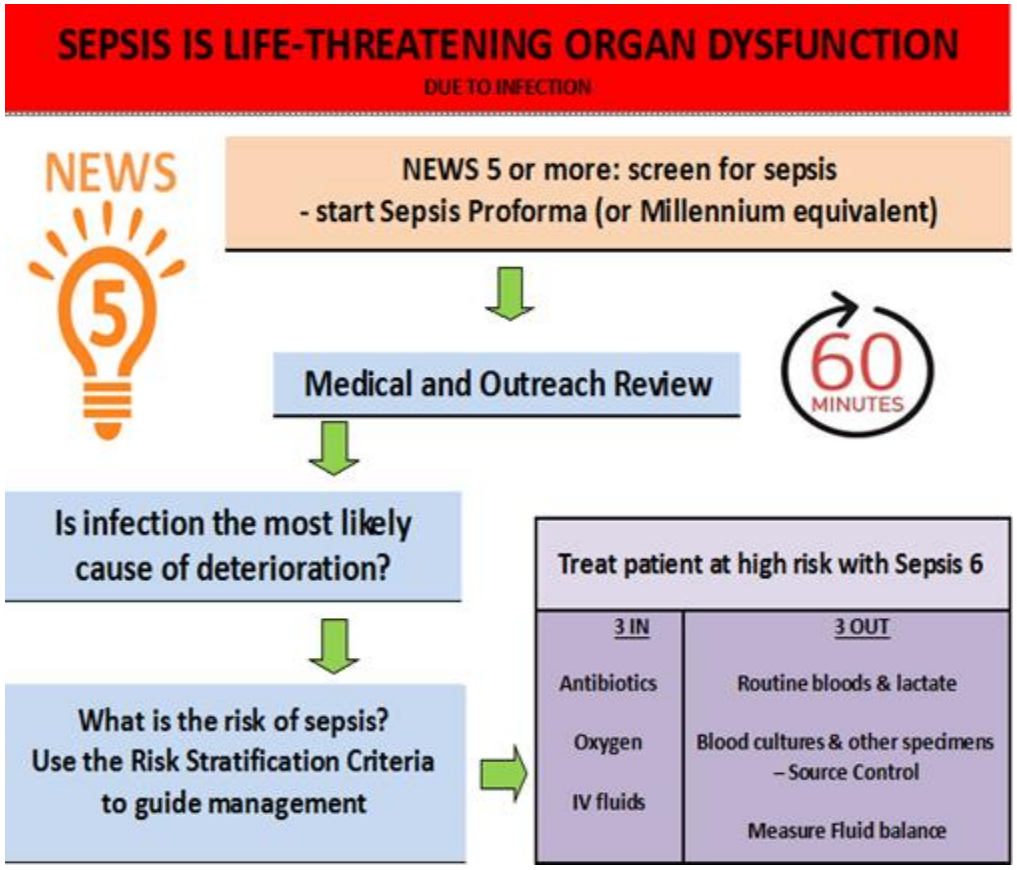
- Sepsis Proforma should be completed
- Medical team and CCOT/H@N should review patient
- Sepsis 6 commenced
- May require Critical Care Review



Systolic Blood Pressure (SBP) drop from baseline

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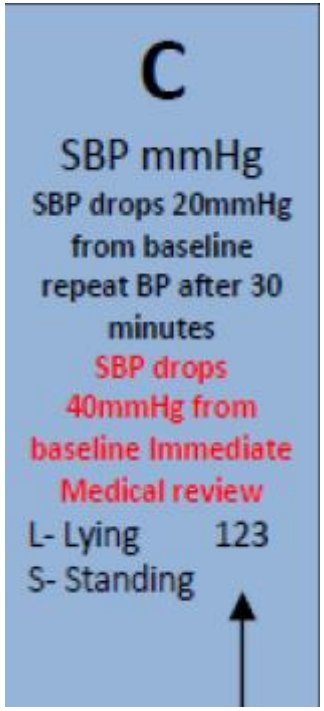
SBP ≥20 mmHg from baseline repeat BP after 30 minutes

or if

SBP ≥40mmHg from baseline, patient requires immediate medical review.



Change in Pain Scale

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Pain (0-10)**	At rest
0 = no pain 10 = worst pain imaginable	Movement

- **NEW** Pain Scale 0-10
- PainAD (Pain Assessment in Advanced Dementia Scale) – Acute Pain Management Policy
- Patient with communication impairment or severe dementia.

A – E Assessment

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PATIENT ASSESSMENT	LOOK, LISTEN, FEEL & MEASURE	INTERVENTIONS
AIRWAY & O_2	◆ Reduced GCS ◆ Increased facial / airway swelling ◆ Abnormal noises—Stridor, gurgling ◆ See-saw breathing TRACHEOSTOMY/LARYNGECTOMY PROBLEMS	Call 2222 ◆ Positioning (head-tilt & chin lift or jaw-thrust) CAUTION PATIENTS WITH C SPINE INJURY ◆ Airway adjunct / suctioning AIRWAY EMERGENCY ALGORITHM FOR ARTIFICAL AIRWAY
BREATHING	◆ Respiratory Rate, Depth, Pattern ◆ Symmetry and Work of Breathing ◆ SpO_2 ◆ Auscultation	Oxygen ◆ Positioning ◆ Aid sputum clearance/Physiotherapy ◆ Nebulised therapy if prescribed
CIRCULATION **(Compared to baseline)**	◆ Pulse [Rate, regularity, volume] ◆ Blood Pressure ◆ CRT / Extremities warmth / coolness ◆ Urine Output / AKI CONSIDER SEPSIS	IV access & Bloods Sepsis 6 (Proforma) AKI - Fluid Resus, Drug chart (Review Toxins), Bladder Scan Fluid Balance Chart / Urinary Catheter ECG
DISABILITY	◆ Assess CAVPU or GCS [If GCS <8 review airway] ◆ Pupil Reaction ◆ Capillary Blood Glucose ◆ Pain Assessment ◆ FAST Assessment	◆ Recovery position [except SCI patient] & GCS chart ◆ Treat hypoglycaemia ◆ Check Drug Chart / Analgesia [See Acute Pain Management Policy—PainAD] FAST +ve 2222 & immediate Medical SpR review
EXPOSURE	◆ Head-to toe, Front and Back ◆ Rashes, Oedema, Bleeding, Trauma, ◆ Abdomen Distension, DVT & Wounds ◆ Temperature	◆ Maintain dignity during "exposure" ◆ Medical Devices ◆ Prevent and manage hypo / hyperthermia

SBAR

Situation/Background/Assessment/Recommendations

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	SITUATION	BACKGROUND	ASSESSMENT	RECOMMENDATION
S B A R	Identify yourself and ward State patient details [Name; Age; MRN] Simply outline your concern	Reason for admission Comorbid disease Recent key interventions	Current observations Other clinical signs—e.g. pain, abdominal distension; N&V State your clinical impression	Explain what you need Agree the time frame What interventions you can do? Document outcome