

NEWS2 update: A standardised common language for sickness across all healthcare settings

@mattinadakim Matt Inada-Kim, National Clinical Advisor, Clinical Lead for Sepsis/Deterioration- Wessex PSC

A single warning score used across all healthcare settings brings with it the prospect of a unified language and way of describing and communicating the physiological risk of sick patients.

<http://blogs.bmj.com/bmj/2018/02/08/news-2-an-opportunity-to-standardise-the-management-of-deterioration-and-sepsis/>

Poor communication has a profound impact on patient care and is a leading cause of adverse events in healthcare. When the message about how ill a patient is gets lost, it can lead to serious problems, complications, and death.

The NCEPOD report: Just Say Sepsis! Found there was a lot of room for improvement in the documentation and communication of vital signs in patients later found to have sepsis.

NCEPOD Sepsis cases: Out-of-Hospitals observations				
Vital signs recorded	GP (n = 129)	%	Paramedic (n=163)	%
Temperature	34	26.4	146	89.6
Blood pressure	32	24.8	157	96.3
Heart Rate	40	31.0	163	100
Respiratory	8	6.2	159	97.5
AVPU	8	6.2	144	88.3

“An early warning score, such as the National Early Warning Score (NEWS) should be used in both primary care and secondary care for patients where sepsis is suspected. This will aid the recognition of the severity of sepsis and can be used to prioritise urgency of care”

NCEPOD 2015

A standardised language of sickness is critical in ensuring that sick patients across the whole healthcare pathway are urgently assessed, reviewed, transported, appropriately placed and escalated.

The National Early Warning Score (NEWS) is recommended for the assessment, management, escalation and communication of all hospital and ambulance patients and community healthcare professionals and organisations are also strongly encouraged to consider its implementation.

NEWS2 update: A standardised common language for sickness across all healthcare settings

@mattinadakim Matt Inada-Kim, National Clinical Advisor, Clinical Lead for Sepsis/Deterioration- Wessex PSC

National Early Warning Score (NEWS)

Validated tool widely used in acute care comprising six biological measurements that are scored then added up to give an aggregate (or total)

- Respiration Rate
- Oxygen Saturations
- Temperature
- Systolic Blood Pressure
- Heart Rate
- Level of Consciousness (defined by AVPU)

NEWS can be used for both initial assessment of acute-illness severity and as a track-and-trigger to identify acute clinical deterioration and response



NEWS was developed from comparing the observations of emergency admission survivors and non-survivors, and as infection is the most common reason for acute admission, it is unsurprising that NEWS2 is at the heart of the national cross-system Sepsis programme.

NEWS has recently been updated to NEWS2. The major updates include the addition of:

1. An oxygen saturation sub chart for those at risk of hypercapnic respiratory failure (where oxygen saturations of 88-92% are accepted as normal) to better tailor escalation to baseline oxygen levels in those with chronic respiratory disease.
2. The addition of New Confusion (or delirium) to the level of consciousness score.
3. The reinforcement of the value of aggregate scores versus single parameter extreme recordings.

<https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news-2>

NHS England's Sepsis Implementation Guidance

Sepsis can affect anybody and in all settings. Everybody needs to be aware: the public, carers, community staff, GPs and practice teams, ambulances and hospital staff. 1.8 million patients are acutely admitted with bacterial infection (termed those with suspicion of sepsis) to English NHS hospitals per year. Of these, an estimated 123,000 have sepsis and 37,000 of these die, with survivors often left with long term health problems. The sooner patients with sepsis are identified,

NEWS2 update: A standardised common language for sickness across all healthcare settings

@mattinadakim Matt Inada-Kim, National Clinical Advisor, Clinical Lead for Sepsis/Deterioration- Wessex PSC

ADULT NEWS Escalation Chart for the physically deteriorating patient					NEWS- everybody is speaking the same language		
	3	2	1	0	1	2	3
Respiratory Rate	≤8		9-11	12-20		21-24	≥25
O ₂ Sats NORMAL	≤91	92-93	94-95	≥96			
O ₂ Sats CHRONIC HYPOXIA	≤83	84-85	86-87	88-92			
Suppl O ₂		Yes		No			
Temp	≤35.0		35.1 - 36.0	36.1-38.0	38.1 - 39.0	≥39.1	
Systolic BP	≤90	91-100	101-110	111-219			≥220
Heart Rate	≤40		41-50	51-90	91-110	111-130	≥131
Level of consciousness				ALERT			CVPU

NEWS helps decision making, but doesn't replace **CLINICAL JUDGEMENT**. Most importantly it means the whole pathway is aware of how unwell the patient is.

Add up the Total NEWS (aggregate)-the Higher the Score the higher the mortality risk

Try to establish Baseline NEWS / obs in those with chronic illness& communicate this in referrals

A NEWS total of 5 identifies a sick patient who requires urgent review (single Red observations e.g. Respiratory Rate ≥25 or a Heart rate of 140 also demand escalation)

There are two O₂ Sats charts to cater for those with Chronic hypoxia.

C in Level of Consciousness relates to **NEW Confusion**

If referring patients on, please communicate the NEWS. Ambulances, hospitals and care homes are all implementing NEWS across their services.

Consider SEPSIS, if Infection and NEWS ≥ 5. Blue light if NEWS ≥ 7. Use SCAS hotline 0300 1239806 if an ambulance is required & Communicate the NEWS

Wessex Regional All Cause Deterioration (including Sepsis) Guidance For Adult (≥ 16) non-pregnant patients in Care Home settings

Wessex
Patient Safety Collaborative

NEWS 0-2

NEWS 0-2 This score indicates the Patient is at LOW RISK

Follow organisational NEWS protocol. Consider:

- if the patient is safe to be left at home and/or
- safe to be reviewed in 4-12 hrs with safety netting
- Or if clinically appropriate, referral

NEWS 3-4 This score indicates the Patient is at LOW RISK BUT may require secondary care assessment

Follow organisational NEWS protocol. Consider:

- Early repeat observations until NEWS improves
- Prompt Clinical review & based on judgement:
 - Hospital admission **or**
 - Planned review in 4-12 hours with open self-referral if deterioration.

*NB. knowledge of previous observations (within last 6 mths) is very important as some patients normally 'run' a low BP or hypoxia.

NEWS ≥ 5 Patient is at MEDIUM RISK
Pt's physiological parameters indicates systemic distress & organ dysfunction
OR Concerning clinical features are present (see box)

- It is likely that **Urgent (1hr)** hospital assessment will be required based on Clinical judgement
- Consider any existing **End of Life Care Plan / Advanced Directive**

NEWS ≥ 7 Patient is at HIGH RISK
Severe systemic distress likely

999 escalation with continuous monitoring until transfer

Any concerning clinical features?

- High Risk Patient (*see box)
- New Confusion
- Worry (Dr/Nurse/Pt/Carer)
- Significant Pain
- Single NEWS parameter of 3
- Mottled / ashen / cyanosis / new rash
- Not passed urine in 8 hrs
- Feeling short of breath

***High Risk Patient**

- Age ≥ 75 years
- Immunosuppressed
- Chemotherapy
- IV Drug Abuse
- Surgery / Trauma <6/52
- Broken Skin
- Indwelling line / catheter in-situ
- Current / recent antibiotics

A NEWS 5 or more in the presence of suspected infection should prompt the clinician to THINK SEPSIS!

WACDG v1 - 11th May 2018

treated with antibiotics and reviewed by senior clinicians, the better their chances of surviving without harm.

The operational NHS England Sepsis Implementation Guidance was developed by an expert consensus group in October 2017 to standardise the national operational sepsis definition. It states that an aggregate **NEWS ≥ 5 or more identifies adult hospital patients who are severely ill** with likely organ dysfunction and who require **urgent assessment by a senior clinical decision-maker**. Where aggregate NEWS ≥ 5 is accompanied by suspicion of sepsis this should prompt the senior clinical decision-maker, **using clinical judgment**, to start appropriate treatment, as indicated, within an hour of the risk being recognised.

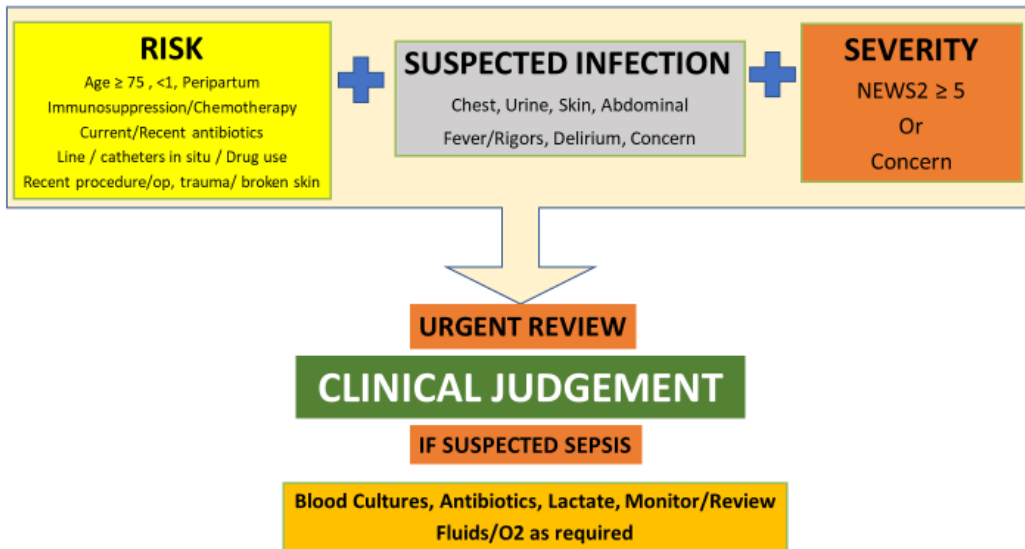
NEWS2 update: A standardised common language for sickness across all healthcare settings

@mattinadakim Matt Inada-Kim, National Clinical Advisor, Clinical Lead for Sepsis/Deterioration- Wessex PSC

(Patients with a NEWS < 5 might also have or develop sepsis. Clinicians assessing patients with a NEWS score of less than 5 should still be aware of the risk of sepsis and should specifically look for: a single NEWS parameter of 3; non-blanching rash/mottled/ashen/cyanotic skin; responds only to voice or pain, or unresponsive; not passed urine in last 18 hours/urine output<0.5 ml/kg/hr; lactate 2+ as any of these indicators suggest the possibility of underlying infection and sepsis)

<https://www.england.nhs.uk/wp-content/uploads/2017/09/sepsis-guidance-implementation-advice-for-adults.pdf>

A NEWS & Clinical Judgement based approach to Sepsis



Wessex PSC & WestHants CCG are committed to assisting the implementation of NEWS2 across the whole region. (Care home NEWS2 Chart)

RESTORE2
Recognise early soft-signs, Take observations, Respond, Escalate

The diagram shows a circular process for sepsis recognition:

- Recognise Soft Signs:** A central box with human figures and a yellow diamond containing the text "Look for the signs in the yellow diamond".
- Take Observations:** A box containing a grid for recording observations, with columns for A+B, C, and D.
- Calculate NEWS:** A box containing a grid for calculating the NEWS score, with columns for A+B, C, and D.
- Get the right help early:** A box titled "NEWS2 Escalation (get the right help early)" with a table showing NEWS scores and corresponding actions.
- Get your message across:** A box containing a "SBAR" form for communication.

NEWS2 Escalation (get the right help early)

NEWS2 Score	Recommended Action (Escalate to the next level of care)	Observations
0	None. No escalation required.	At least 15 hourly and no observations
1	None. No escalation required.	At least 4 hourly
2	None. No escalation required.	At least 2 hourly
3-4	None. No escalation required. NEWS 3 & 4 are not sepsis. NEWS 3 & 4 are not sepsis. NEWS 3 & 4 are not sepsis.	At least every 30 minutes
5-6	Escalate to the next level of care. NEWS 5 & 6 are sepsis. NEWS 5 & 6 are sepsis. NEWS 5 & 6 are sepsis.	Every 15 minutes
7+	Escalate to the next level of care. NEWS 7+ are sepsis. NEWS 7+ are sepsis. NEWS 7+ are sepsis.	Continuous monitoring and