

Additional supplemental material**Table 1:** Parameters included in each score:

Table 1: Parameters included in score							
	RR	SpO2	HR	BP	AVPU	GCS	T
NEWS	✓	✓	✓	✓	✓		✓
NEWS2	✓	✓	✓	✓	✓		✓
MEWS	✓		✓	✓	✓	✓	✓
qSOFA	✓			✓		✓	

Abbreviations: RR respiratory rate, SpO2 oxygen saturation, HR heart rate, BP blood pressure, AVPU A alert, C confused, V responds to voice, P responds to pain, U unresponsive, GCS Glasgow Coma Score, T temperature.

Table 2: Early Warning Score parameters:

Physiological variable	Score						
	3	2	1	0	1	2	3
a) NEWS/NEWS2							
Respiration rate (per min)	≤8		9-11	12-20		21-24	≥25
SpO2 Scale 1 (%)	≤91	92-93	94-95	≥96			
SpO2 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 BP (mmHg)	≤90	91-100	101-110	111-219			≥220
Pulse (per min)	≤40		41-50	51-90	91-110	111-130	≥131
Consciousness (ACVPU)				A			CVPU
Temperature (°C)	≤35		35.1-36	36.1-38	38.1-39	≥39.1	
b) MEWS							
Systolic BP (mmHg)	≤70	71-80	81-100	101-199		≥200	
Pulse (per min)		≤40	41-50	51-100	101-110	111-129	≥130
Respiratory rate (per min)		≤9		9-14	15-20	21-29	≥30
Temperature (°C)		≤35		35-38.4		≥38.5	
AVPU				A	V	P	U
Glasgow Coma Scale				14-15	10-13	4-9	3

Table 2: Early warning score parameters

a) NEWS/NEWS2 scoring system: NEWS2 updates are highlighted blue (a second oxygen scale for use in patients with hypercapnic respiratory failure, and consciousness to include new confusion to the AVPU scale.)

b) MEWS scoring system.

Abbreviations: BP blood pressure, ACVPU: A alert, C Confused, V responds to voice, P responds to pain, U unresponsive.

Table 3: Study Characteristics

Author, year,	Country	Study design	Study aims
Goulden et al., 2018 ¹⁹	UK	Retrospective single-centre cohort study	Prognostic accuracy of qSOFA, SIRS and NEWS for predicting in-hospital mortality (primary outcome) and ICU admission (secondary outcome) in emergency admissions.
Churpek et al., 2017 ²⁰	US	Retrospective single-centre observational study	Compare qSOFA with other early warning scores (MEWS and NEWS) to predicting in-hospital mortality (primary outcome) and composite of in-hospital mortality or ICU stay (secondary outcome).
Usman et al., 2018 ²¹	US	Retrospective single-centre observational study	Evaluation of NEWS as a predictor of severe sepsis and septic shock in ED triage compared with SIRS and qSOFA. Secondary endpoint looked at sepsis-related in-hospital mortality.
Szakmany et al., 2018 ²²	UK	Prospective multi-centre observational study	Determine the ability of the SEPSIS-1 definition using SIRS criteria, the SEPSIS-3 definition using SOFA, qSOFA, and NEWS to predict 30-day mortality (primary outcome), and organ dysfunction or severe sepsis (secondary outcomes).
Samsudin et al., 2018 ²³	Singapore	Retrospective single-centre observational study	To develop a new risk assessment tool by looking at heart rate variability in predicting 30-day in-hospital mortality (primary outcome) in sepsis compared to NEWS, MEWS, and qSOFA. Secondary outcome was a composite of mortality, intubation or admission to ICU.
de Groot et al., 2017 ²⁴	The Netherlands	Prospective multi-centre observational study	Assess the prognostic and discriminative performance of 5 scoring systems (including qSOFA and NEWS/MEWS) for risk stratification of older ED patients compared to younger patients. Looked at in-hospital mortality (primary outcome) and ICU/MCU admission or transfer (secondary outcomes).
Redfern et al., 2018 ²⁵	UK	Retrospective single-centre cohort study	Prognostic performance of NEWS and qSOFA for in-hospital mortality (primary outcome) for non-ICU patients with and without an infection. One of the secondary outcomes looked at included in-hospital death or ICU admission.
Redondo-González et al., 2018 ²⁶	Spain	Retrospective single-centre observational study	Predicting in-hospital mortality among septic patients attending ED using 4 scoring methods including qSOFA and EWS (NEWS).
Innocenti et al., 2017 ²⁷	Italy	Retrospective single-centre observational study	Evaluating the prognostic performance of seven scoring systems commonly used scores in septic patients managed in ED-HDU (including qSOFA and MEWS). Primary outcome was 28-day mortality. Secondary outcome included need for ICU admission.
Martino et al., 2018 ²⁸	Italy	Retrospective single-centre observational study	Evaluate the prognostic performance of qSOFA compared with three other scores (including MEWS) for in-hospital mortality and ICU admission in an ED.
Liu and Hu 2018 ²⁹	China	Retrospective single-centre observational study	Comparing the prognostic performance of six commonly used scored including qSOFA and MEWS for predicting mortality in severe sepsis.
van der Woude et al., 2018 ³⁰	The Netherlands	Retrospective single-centre observational study	To determine the effect of four scoring systems (including qSOFA and MEWS) on the classification of patients with an infection as having sepsis. Also looked at prognostic performance of these tests at predicting in-hospital mortality.
Brink et al., 2019 ³¹	The Netherlands	Retrospective single-centre cohort study	Determine the prognostic value of qSOFA in predicting mortality in comparison to SIRS and NEWS in patients presenting to the ED with suspected sepsis.

Abbreviations: qSOFA Quick Sequential [Sepsis-related] Organ Failure Assessment, SIRS Systemic inflammatory response syndrome, NEWS National Early Warning Score, ICU Intensive care unit, EWS Early Warning Score, MEWS Modified Early Warning Score, NICE National Institute of Clinical Excellence, ED Emergency Department, SOFA Sequential [Sepsis-related] Organ Failure Assessment, MCU Medium care unit, ED-HDU Emergency Department High Dependency Unit, N/A not applicable.