Implementation of the NEWS2 Early Warning Score for Early Intervention and Reduction of Patient Deterioration

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BACKGROUND

Early identification of patient deterioration is critical in improving patient outcomes and preventing adverse events. The National Early Warning Score 2 (NEWS2) is a standardized tool developed by the Royal College of Physicians to detect clinical deterioration by tracking physiological parameters. Timely recognition using NEWS2 promotes early intervention and escalation of care, especially in high-risk areas such as Critical Care and step-down units.

PURPOSE

To evaluate the effectiveness of implementing NEWS2 in improving early recognition of deteriorating patients and enhancing timely clinical response in inpatient settings

METHODS

Setting: Adult inpatient medical –surgical and intermediate care units.
Implementation:
>Staff education and training on NEWS2 scoring system
>Integration of NEWS2 into electronic health record (EHR) for real time alerts.
>Escalation protocols standardized across departments
Data Collection:
>Pre and Post implementation Audits
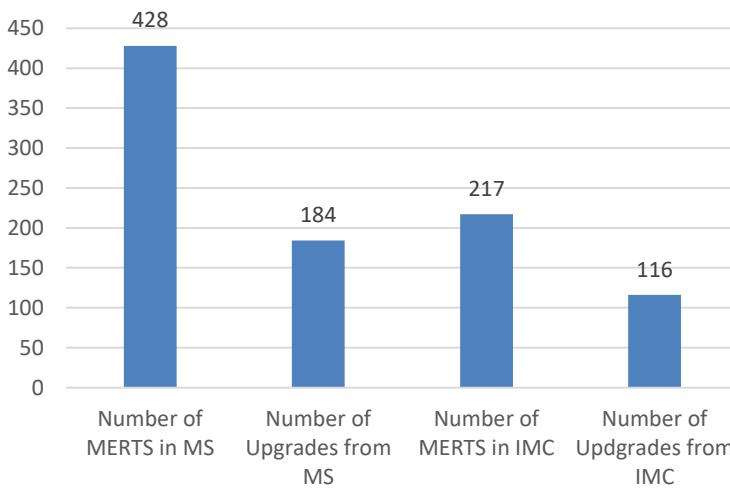>Tracking of response times and MERT activation
>Staff feedback survey

National Early Warning System 2 (NEWS2)

Chart 1: The NEWS scoring system

Physiological parameter	Score						
	3	2	1	0	1	2	3
Respiration rate (per minute)	≤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 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	

MERT Data April-June 2025

Bar chart values:
- Number of MERTS in MS: 428
- Number of Upgrades from MS: 184
- Number of MERTS in IMC: 217
- Number of Updgrades from IMC: 116

RESULTS

Once the pilot program is implemented, the following metrics will be evaluated:

➢ **Increased Accuracy**: How accurately was the NEWS2 documented by bedside nurses
➢ **Improved Response**: Is there an improved clinical response?
➢ **Outcome metrics**:
. Is there a reduction in unplanned upgrades?
.Is there a reduction in in-hospital cardiac arrest?
➢ **Staff Satisfaction**:
How many nurses reported increased confidence in recognizing patient deterioration?

CONCLUSIONS

The Implementation of NEWS@ would hopefully improved early identification of deteriorating patients and enhanced clinical response times, ultimately contributing to improved patient safety outcomes.

REFERENCES

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2. Smith,G.B.,et al. (2013).The ability of the National Early Warning Score(NEWS) to discriminate patients at risk of early cardiac arrest ,unanticipated ICU admission and death.Resuscitation 84(4), 465-470

PATHWAY DESIGNATED