



Pediatric Early Warning Score (PEWS)

Introduction: The Pediatric Early Warning Score (PEWS) identifies pediatric patients at risk for clinical deterioration and can help less-experienced providers get a sense of which patients may need escalation of care.

Points & Pearls

- The Pediatric Early Warning Score (PEWS) was originally developed to provide a practical and objective method to identify pediatric inpatients at risk for cardiac arrest.
- It can be used by staff and providers at all levels to escalate care for sick patients, including junior physicians and nursing staff.

Evidence Appraisal

The PEWS was developed by expert consensus by a multidisciplinary group at Brighton and Sussex University Hospitals National Health Service Trust in the United Kingdom, in order for nurses and junior medical staff to identify pediatric patients who are at risk for clinical deterioration. It was intended to serve as a pediatric-specific version of the National Early Warning System (NEWS) Score, which was developed in an effort to standardize the approach to detecting clinical deterioration in acutely ill adult patients in the United Kingdom.

Triggers were identified by polling a multidisciplinary group at all levels of patient care on which clinical features they considered concerning, including appearance and vital signs. The criteria were revised based on a pilot that identified patients who deteriorated but were not identified by the original score.

Several studies have validated the PEWS, including one by Duncan et al in 2006 that found an

Why to Use

The PEWS provides an objective measurement for patients who "look sick." It can help less-experienced providers get a sense of which patients may need escalation of care. It can be used in pediatric patients of all ages.

When to Use

Use in pediatric patients admitted to the hospital.

Next Steps

Consider escalation of care in patients with high PEWS (≥ 3), including endorsing to senior staff, increasing frequency of vital signs measurements and clinical assessments, and/or consultation to an intensive care unit.

AUROC (area under the receiver operating characteristic curve) of 0.90, with 78% sensitivity and 95% specificity at a score of 5.

The PEWS has been adapted for use in multiple settings, including academic centers and community hospitals.

Calculator Creator

Alan Monaghan, MSc
[Click here to read more about Mr. Monaghan.](#)

Use the Calculator Now

[Click here to access the calculator.](#)

References

Original/Primary Reference

- Monaghan A. [Detecting and managing deterioration in children.](#) *Paediatr Nurs.* 2005;17:32–35.

CALCULATOR REVIEW AUTHOR

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