

This clearly conveys your findings, your management plan and when you should be called again.

Early Warning Systems

The Audit Commission (1999) recommended the use of early warning scoring systems (EWS) to help ward based staff to recognise signs of deterioration and identify when to call for help.

Most NHS hospitals now have EWS in place, sometimes modified to take into account the patient casemix within a particular hospital (MEWS).

EWS or MEWS scoring uses standard observations that are regularly taken and attaches a score to the individual observation. The further the patient observation varies from normal, the greater the score.

Once a given score is reached, medical review of the patient should take place with initiation of appropriate clinical treatment.

It is hoped that with early recognition and treatment major deterioration will be prevented, or the patient will be admitted at an appropriate time to a high dependency or intensive care facility.

EWS scoring has been shown to be effective in detecting developing critical illness in post-operative patients (McArthur-Rouse 2001), although its use for medical patients needs further study. An example of a MEWS chart in use at Aintree Hospitals is given below:

| Score | 3 | 2 | 1 | 0 | 1 | 2 | 3 |
|-------------------------------------|--------------|--------------------------|----------------------|-----------|-----------------------------|-------------|--------------|
| Pulse (bpm) | | < 40 | 41 - 50 | 51 - 100 | 101 - 110 | 111 - 130 | >130 |
| RR (bpm) | | ≤ 8 | | 9 - 20 | | 21 - 29 | ≥ 30 |
| Temperature | | ≤ 35.0 | 35.1 - 36 | 36.1 - 38 | 38.1 - 38.5 | ≥ 38.6 | |
| CNS level Patient responds to... | Unresponsive | Pain | Voice | Alert | New agitation or confusion | | |
| Or GCS | | | | 15 | 14 | 9 - 13 | ≤ 8 |
| Urine Output | < 10 ml/h | < 20ml /hr for ≥ 2 hours | < 30ml/hr for > 2hrs | | Receiving renal replacement | Not PU 8hrs | Not PU 12hrs |
| Systolic BP | < 70 | 71 - 80 | 81 - 100 | 101 - 199 | | > 200 | |

MEWS Score

Criteria for medical review within 30 minutes if:

- The patient scores 4 or more
- The patient score deteriorates by 2 or more
- The GCS drops by 2 points or more regardless of other observations

For example, patient observations - Pulse 105/min, RR 28 breaths/min, Temperature 37.4, AVPU = A, Urine Output < 20 ml/hr for last 2 hours, Systolic BP 88mmhg.

The MEWS score would be 6 and the patient would require review.