Numerous errors can occur in the ED, including missing signs and symptoms of deteriorating patient condition. Vital signs assessment serves as an early warning of a change in patient condition, playing an important role in assisting the healthcare professional to prevent adverse events. That’s why it’s necessary to ensure that vital signs are reassessed accordingly after triage.

There are no published standards or guidance regarding how often vital signs should be monitored in the ED, although this is one of the most commonly performed tasks in EDs around the country. In addition, it hasn’t been determined what personal, social, and environmental factors may affect the frequency of monitoring vital signs. Vital signs assessment is based on nursing judgment or physician order; some nurses base the frequency of reassessment on patient acuity. The limited research on vital sign reassessment has led to zero guidance for local hospitals to establish a policy based on evidence-based practice.

A proactive approach is crucial to ensure a patient’s condition doesn’t deteriorate; most conditions can be addressed by reassessing vital signs. Unfortunately, research has shown that vital signs aren’t consistently assessed, recorded, or interpreted, which interferes with appropriate and timely interventions for deteriorating patients.

Lack of guidelines
In one exploratory study reviewing over 43,232 patient visits to 94 different EDs, the median time between documentation of BP in the ED was every 2.3 hours for all patients. In a retrospective chart review of 202 randomly selected adult ED patients, it was concluded that a greater time between vital signs assessment can lead to errors by not detecting changes in patient condition.

A review of the Agency for Healthcare Research and Quality’s Emergency Severity Index (ESI) showed that there’s no mention of the frequency of vital signs reassessment. On the contrary, vital signs assessment in triage is only required for patients who meet Level 3 criteria (patients who are predicted to require two or more resources). The ESI consists of a five-level triage algorithm designed for EDs that places patients into five groups from ESI 1 (most urgent) to ESI 5 (least urgent) on the basis of acuity and the amount of resources required. A review of the Emergency Nurses Association guidelines showed that they don’t directly provide a recommendation for reassessing vital signs.

Thus, it’s up to the facility to determine the frequency of vital signs reassessment based on the cliental served. Vital signs reassessment policies were reviewed from various facilities and all varied.

There have been multiple studies regarding the relationship between adverse patient outcomes and vital signs; however, no evidence could be found regarding the optimal frequency of vital signs reassessment. The same can be said for studies regarding vital signs reassessment in the ED setting. With this in mind, one simple recommendation is to perform vital signs reassessment every 2 hours for monitored patients and every...
4 hours for patients who aren’t on a cardiac monitor. The concern with this practice is that once the vital signs reassessment frequency is made a policy, the facility is held to the standard and may be liable if vital signs assessment is missed or late.

Another aspect to consider is vital signs documentation. The best practice is to record all vital signs in the vital signs section of the cover sheet or designated location based on the type of electronic health record (EHR) system being used. The vital signs section of the EHR was developed to allow healthcare providers quick access to the information. In some EHR systems, if the nurse doesn’t sign the note, then the physician won’t have access to the information, which can create a delay in patient treatment. One study found inconsistencies regarding documentation of ED patients’ vital signs in the appropriate EHR fields.1

**Guidance for managers**

The following is a recommendation to assist ED nurse managers with establishing a vital signs reassessment policy. The recommendation is based on the authors’ working observations over the past 20 years, along with current workplace concerns regarding lack of vital sign reassessment. This guidance can be modified as necessary.

- **ESI Level 1:** Every 5 to 15 minutes as needed based on clinical presentation and no less frequently than every hour for the first 4 hours, then every 2 hours if clinically stable.
- **ESI Level 2:** As with ESI Level 1, vital signs should be reassessed no less frequently than every hour for the first 4 hours, then every 2 hours if clinically stable.
- **ESI Level 3:** Patients with normal vital signs should be reassessed at the discretion of the nurse, but no less frequently than every 4 hours. Patients with abnormal vital signs should be reassessed no less frequently than every 2 hours for the first 4 hours, then every 4 hours if clinically stable.
- **ESI Level 4:** Vital signs should be reassessed per acuity and clinical assessment, but no less frequently than every 4 hours.
- **ESI Level 5:** Upon discharge.
- **Patients being discharged:** Vital signs assessment should be current, within 30 minutes of discharge.
- **Patients with a mental health diagnosis:** Vital signs assessment should be determined by the patient’s presentation and once medically cleared should be reassessed at a minimum of every 8 hours.
- **Patients triaged in the waiting room:** Vital signs, as well as condition status, should be reassessed at a minimum of every 2 hours until brought back into the ED.

**Safety is paramount**

For patient safety, it’s imperative that ED managers review their policy or guidance regarding how often vital signs should be reassessed. Research has shown that there are predictors of unexpected death, which include abnormal vital signs in the ED.7 Failure to reassess vital signs throughout patients’ ED stay may result in delayed discharge, as well as adverse events. NM

**REFERENCES**


At Northern Arizona VA Healthcare System in Prescott, Ariz., Timothy L. McGhee and Stacie Solo are clinical nurses, Paul Weaver is an ED nurse manager, and Melissa Hobbs is the associate chief nurse for operations.

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