

Exploring future directions in triage practices to limit access block and emergency department crowding: A systematic review.

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Background:

Emergency Department (ED) crowding is a complex issue faced by many healthcare facilities. ED crowding is a phenomena reported nationally and internationally with increasing frequency. Many factors, including reduced availability of hospital beds, contribute to crowding. Various models of care are now utilised to address this.

Methods: A systematic review of the literature was conducted to investigate the effectiveness of various models of care which are designed to expedite patient throughput in the ED whilst maintaining patient safety. Articles published in English between 1980 to 2014 were eligible for inclusion in the review. Databases used to conduct the search were: CINHAL, Medline, Pubmed, Scopus and Australian Government databases. Key word search included: ED congestion, patient flow and ED models of care.

Results: This systematic review identified three main models of care to expedite flow through the ED while maintaining patient safety. These were physician-assisted-triage (PAT), expanded nursing roles and medical assessment units (MAU). The effectiveness of each model of care was commonly measured within the literature using decreased length of stay (LOS), decreased did-not-wait (DNW) numbers, re-presentation rates, decreased left-without-being-seen (LWOBS) rates, improved time to see physician and disposition. Studies showed that both MAU and PAT decreased ED wait times. Facility cost savings were also reported using MAU, as a result of decreased patient hospital LOS.

Conclusions: Improved patient flow is achievable despite reduced inpatient bed availability and cuts to hospital funding. The model of care implemented in various EDs to reduce access block and ED crowding needs to take into consideration factors such as: patient acuity, ED operational requirements and staffing models. Further research is required to continue to evaluate the efficacy of these models of care as the health service delivery demands change to meet the needs of the community and health facilities