



KEY POINT SUMMARY

OBJECTIVES

This study expands the traditional notion of triage through the use of a rapid assessment clinic (RAC) to identify not only a triage level for urgency but the capacity for the patient to be managed quickly. The study was conducted to determine if this would reduce the waiting times and times in the department for all patients.

Effect of a Rapid Assessment Clinic on the Waiting Time to Be Seen by a Doctor and the Time Spent in the Department, for Patients Presenting to an Urban Emergency Department: A Controlled Prospective Trial

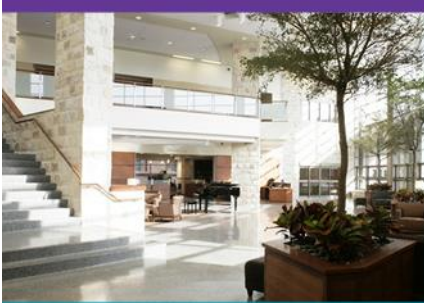
Ardagh, M. W. , Wells, J.E., Cooper, K., Lyons, R., Patterson, R., O'Donovan, P.
2002 / *The New Zealand Medical Journal*
Volume 115, Issue 1157, Pages 1-7

Key Concepts/Context

Overcrowding in emergency departments is common in most healthcare organizations. Barriers to efficient patient flow in emergency departments (EDs) create bottlenecks through the system. Upon entry to an ED, the triage process determines how quickly someone might be seen, but this process does not take into account how quickly a patient's condition might be managed, but rather the urgency for care. By addressing an additional component of triage, it was hypothesized that ED throughput could be better managed, reducing wait times for all patients, and better utilizing limited ED resources.

Methods

The study was conducted over a period of 10 weeks. On the odd weeks, an additional nurse and ED registrar ran a RAC and on even weeks, they joined the other staff and managed patients in the usual way. During the odd weeks, the triage nurse would identify patients who could be managed in the RAC – those where interventions could be undertaken quickly and where lengthy investigations or assessments were not necessary. While many of the patients seen in the RAC were a lower triage level, no triage category was exempt. After the 10-week study period, data were analyzed and compared, using the week as the unit of analysis and compared for total patient presentations to the ED, the waiting time to be seen by a



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doctor, and the length of time in the department. Data was not analyzed on an individual basis, but for all patients in the department, as the purpose of the study to determine if the RAC improved patient flow for the department as a whole. For each week, the mean and median times were calculated producing five replicates for the RAC period and five for the non-RAC period. The raw data were extracted from the ED module of the Patient Management System used at hospital and analysis was completed using SAS.

Findings

During the five weeks of the RAC clinic a total of 2263 patients attended the ED, and 361 of these were referred to the RAC clinic. During the five control weeks a total of 2204 patients attended the ED. (During the five control weeks, a retrospective analysis concluded 349 patients would most likely have been triaged to the RAC, had it been operational.) There was no significant difference in the distribution across triage categories between the RAC and non-RAC periods. The waiting times to be seen by a doctor show no difference at Triage 2 and 3 and a difference of eight to 11 minutes for Triage categories 4 ($p=0.004$) and 5 ($p=0.02$). The overall time patients spent in the ED also show no difference for Triage 2 and 3 and 19-27 minutes less for RAC-week patients in Triage categories 4 ($p=0.03$) and 5 ($p=0.06$).

Limitations

Several limitations were identified by the authors including:

1. Outlier data which may have been a result of recording data subsequent to discharge
2. Missing data due to patients leaving without being seen (LWBS)
3. A study period during the least busy time of the ED, resulting in a smaller portion of potential RAC patients, as well as fewer barriers to flow in the ED

Design Implications

The RAC is similar to what is often termed "Fast Track" in EDs, but there may be a subtle difference from an operational perspective with respect to triage level versus "quickness" of potential care. However, in either operational scenario, the design implication is to provide appropriate space to "stream" patients with less serious symptoms (in this study, two cubicles) to provide better use of both staff and space resources, along with better flow for all patients in the ED.