

Triage in accident and emergency departments

We need to consider what kind of errors we can afford

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Triage practices in accident and emergency departments evolved from the military procedure of giving priority for medical care to those who were expected to benefit the most. The focus of triage in many accident and emergency departments today, however, is less on discriminating among the sickest patients and more on identifying patients who may not need emergency care at all. The high cost of care in an accident and emergency department and long waiting times, which result in substantial numbers of patients leaving without being seen, have led to increased scrutiny of this clinical department.¹ In the United States the growth in the use of accident and emergency departments has been attributed largely to the increase in the number of people without a regular source of primary care.² In the United Kingdom the problem is not so much a lack of primary care providers but that these providers may not be technologically or organisationally equipped to evaluate and manage a number of acute problems.³ Investigators and policymakers in both countries have concluded that a large proportion of patients who come to accident and emergency departments could be managed less expensively and more effectively in alternative ambulatory settings.^{4,5}

Several investigators have proposed guidelines to identify patients who present to accident and emergency departments without a true need for emergency services. In some cases the guidelines are specific and linked to policies of refusing care to patients with less urgent needs.⁶ In this week's issue Dale *et al* propose general guidelines for separating two classes of patients: those who need accident and emergency care and those who need primary care.⁷ Triage guidelines, broad or specific, generally predict the sickest patients who attend accident and emergency departments. To date, however, no triage guidelines perfectly predict which patients truly are emergencies.

Part of the difficulty of developing accurate triage guidelines is the lack of agreement on how to judge the appropriateness of a visit to an accident and emergency department. Investigators have used expert opinion, self ratings by patients, review of activities in accident and emergency departments, and subsequent admission to judge appropriateness. All these approaches find that appreciable proportions of patients presenting to accident and emergency departments do not require emergency care. When these measures were applied to a sample of patients, however, there was little agreement about which specific patients made unnecessary visits.⁸

Even if there were a gold standard for determining the appropriateness of visits, perfectly accurate triage guidelines could probably never be developed. Short nursing interviews cannot be expected to predict the seriousness of some patients' conditions. Treatment of patients in an accident and emergency department, after all, is generally not begun until after the doctor has had an opportunity to gather additional clinical data.

Triage guidelines that are not perfectly accurate may still be valuable. It is less problematic if guidelines systematically recommend care in the accident and emergency department for some patients who could be treated in alternative settings than it is if they routinely recommend alternative care for patients who truly are emergencies. The importance of errors in triage is also directly related to how easily they can be rectified. Mistaken triage in which the patient is sent to an alternative site of ambulatory care is more problematic if

the site is several kilometres away than if it is across the street.

If one of the goals of sending patients to alternative sites providing primary care is to save money then Dale *et al* have another important message. Among a random sample of patients presenting to an accident and emergency department, primary care physicians provided less costly non-emergency ambulatory care than did emergency physicians.⁹ This finding is consistent with those of other investigators who have found that emergency physicians tend to interpret clinical signs and symptoms as being potentially more serious and therefore in need of more investigation than do other providers in the ambulatory setting.^{10,11}

Although recommendations for organising acute ambulatory care services may need to be modified if studies of outcome show a difference between emergency and primary care physicians, some recommendations can be offered. Hospitals with accident and emergency departments should also have a site providing drop in ambulatory care. Ideally, the two sites should be geographically close but staffed by different types of providers. Triage guidelines that are used to send patients presenting to accident and emergency departments to the alternative sites of ambulatory care should be biased towards having patients seen in the accident and emergency department. Nurses who use triage guidelines should receive standardised training on how to interpret and apply them. They should also be taught that the guidelines can be bypassed either when the patient initially presented or after further evaluation. Finally, attempts should be made to reduce the demand for care in accident and emergency departments by enhancing access to primary care providers who are equipped to offer a broad array of diagnostic and treatment services. Future studies may determine whether this is best achieved by bringing the primary care providers to the accident and emergency department or by moving more technology than currently exists into the general practitioners' practice.

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