adherence to the guideline) may be a reasonable, albeit surrogate, end point. The recent article did not distinguish between process and outcome. In the review by Grimshaw and Russell, the process of care was improved in all but four of the 59 studies (in an updated review, improvements were found in 81 of 89 studies). Nine of the 11 studies evaluating effects on the outcome of care found a significant improvement (12 of 17 studies in the updated review found an improvement). All 14 studies carried out in the UK noted significant improvements in compliance with guidelines.

RD HARDERN Accident & Emergency Department, The General Infirmary, Leeds LS1 3EX


This letter was shown to the authors, who reply as follows:

Sir,
The approach proposed to guideline development by the correspondent requires scientific rigour, but is idealistic. A problem arises concerning the many areas of medicine where such clear scientific evidence does not exist. Are such areas not proper subjects for guidelines? It is in precisely these areas that guidelines may be most valuable, when evidence is uncertain or conflicting, as a means of ensuring consistent and acceptable practice. Most guidelines will involve elements of firm evidence and of opinion, and should make clear which is which. Users of guidelines must recognise that, as new evidence arises, the parts based on opinion should change. For instance, in drawing up guidelines on indications for endoscopy, a working party used a mixture of literature review and consensus opinion. The well known British Thoracic Society guidelines on asthma are quite clear on the lack of firm evidence that increased use of inhaled steroids would decrease mortality in asthma. But both groups appropriately drew up guidelines on what they consider best medical practice despite this lack of hard evidence. Clinicians and purchasers of health care need guidelines of this kind, based on evidence where available but if not available, on what might be considered acceptable practice, to face everyday clinical problems with a little less uncertainty.

T WALLEY
Department of Pharmacology & Therapeutics, University of Liverpool, Liverpool L69 3BX, UK

Are blood tests of value in the primary assessment and resuscitation of patients in the A&E Department?

Sir,
The guidelines issued to senior house officers by consultant staff in the A&E Department of Southampton General Hospital following the clinical audit of the value of blood tests in the assessment of their patients may not be widely applicable. The audit assumption that patients are immediately admitted to A&E Departments following an initial diagnosis may not be valid elsewhere. The guidelines appear overly restrictive.

The practice in this hospital differs in many ways. When a raised amylase is found in a patient with abdominal pain, the serum alanine aminotransferase and alkaline phosphatase is provided to A&E as an indicator of the likelihood of the presence of bile duct stones. An admission serum calcium is also useful as a factor in the prediction of the severity of disease.

Cardiac enzymes were also reported to be of no benefit to patients in A&E. It is surprising that there were no occasions where Coronary Care beds were full or whether the patient’s history or electrocardiogram (ECG) was equivocal. Cardiac enzymes can aid in the selection of patients for intensive care and for thrombolytic therapy but the sensitivity and specificity of cardiac enzymes in the diagnosis of myocardial infarction in relation to the duration of chest pain must be considered. A speeding laboratory turn around time for cardiac enzymes is important and the interval in this department is 20 to 35 min.

Alcohol may be a significant contributory factor in trauma, poisoning and coma and should be listed in the clinical guidelines. Cost switching between units within hospitals should not be allowed to interfere with patient investigations.

WP TORNEY
Department of Chemical Pathology, Beaumont Hospital, Dublin 9, Ireland

This letter was shown to the author who replied as follows:

Sir,
I would disagree with regard to the value of cardiac enzymes in the A&E Department. The diagnosis of acute myocardial infarction is made from the patient’s history and especially the ECG which forms the basis for the thrombolytic regimes currently used. Cardiac enzymes, eg, creatinine kinase do not rise for 8–10 hours after coronary occlusion. In terms of myocardial salvage the maximum benefit from thrombolysis is gained in the first six hours. Enzymatic diagnosis of myocardial infarction is therefore essentially retrospective. If the initial ECG is normal or equivocal then the patient requires a repeat ECG every 15 minutes to exclude infarct. When the coronary care unit or other inpatient area is full, prompt thrombolysis in the A&E Department is mandatory.

Finally, alcohol measurement is rarely of use in an A&E Department as it must never be presumed to be the sole cause of a patient’s depressed conscious level. What is required is the effective support of the patients’ vital functions and the exclusion of serious head injury and other causes of coma.

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