STRIKING A BALANCE: INDIVIDUAL COMPETENCE AND SYSTEMS CAPABILITY AS PRECURSORS OF QUALITY CARE

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Abstract

There is a growing tendency in some quarters to define quality in terms of the absence of adverse events. A number of high-profile reports have quantified the prevalence of adverse events and their impact on quality and cost. These findings have caught the attention of clinicians, policy players and managers.

Strategies to address identified issues swing between two poles. The first emphasises the competence of individual clinical performance. The second, taking a system's perspective, highlights the totality of factors entailed in clinical production processes.

This paper examines how prevailing approaches reflect the first of these strategies to the detriment of a system's perspective. Against this background we report findings of a recent study of the organisation of care in a number of Australian hospitals and discuss some of the opportunities for service improvement.

Background

Over the past ten years, health researchers have developed sophisticated methods to measure the extent and causes of adverse events as indicators of poor quality. The evidence shows that adverse events were not particular to individual health care systems[1]. For example, an Australia study reported that 16.6% of hospital admissions were associated with an adverse event[2]. In Britain, the estimated rate is 10.8%[3]. In the US, the adverse event rate was initially reported as 3.7%[4]. More recently, using a similar methodology to that of the Australian study, the American rate was reported as 17%[5]. Importantly the evidence also suggests that up to half of the adverse events were preventable.

Within the media and in medical and policy circles, these findings were initially judged as casting doubts on clinical competence. This being the case it is not surprising that for medical clinicians remedy was seen to lie in the structures and methods that retrospectively focus on clinical practices of individual clinicians in individual cases[6]. Among others included here are mortality and morbidity meetings, clinical audit and medical peer review[7-10]. For their part, players in policy and management circles have acted to complement these strategies by developing surveillance mechanisms and by instituting systems to manage complaints.

Some of the deficiencies inherent in this approach have been well documented[11-13]. For example, clinical audit meetings in the NHS have been characterised as antagonistic forums. As with their "peer review" equivalents in Australia, these meetings are dominated by medicine; usually identifiable individuals whose preferences determine both the focus of specific meetings and what is deemed to be within the scope of clinical audit. Consistent with this finding, there is little evidence of a systematic approach to problem identification or of an overall plan for clinical quality improvement. Equally, the evidence points to the way that the clinical audit process is de-coupled from organisational processes such as research and development and clinical risk management[12,13].

While the foregoing pre-occupation with clinical performance serves to underline the accountability of doctors, there is growing evidence that its individualised and medicalised focus is counter-productive. For example, a reliance on medically-dominated clinical audit and peer review as mechanisms for addressing adverse events serves to underwrite the belief that medical interventions are the primary dimension of clinical service delivery. On a different front the culture of fault, and hence blame, that characterises clinical audit/review processes in some settings has been shown to invite defensive stances that are counter-productive for measured consideration of cause and effect. Moreover, it is likely that this defensiveness will be heightened in the event that audit and peer review are linked to credentialling and revalidation.

Additional to these considerations, the tendency to focus on the performance of individual clinicians flies in the face of mounting evidence about the way that adverse events may be sourced to system-based factors[2,14,15]. For example, what are termed "system errors" accounted for 16% of all adverse events in the Australian study cited earlier[2]. Additionally, 77% of the adverse events reported by Wilson et al resulted from errors of omission or commission that cannot necessarily be attributed to individual practitioner incompetence. In a similar vein, an American study found that 74% of the errors detected in a common DRG (heart failure and shock) were due to systems problems and only 26% to clinical performance problems[16] **(1)**. Equally, a recent Australian study of emergency Caesarean sections found that only 10%, 14% and 28% respectively in Level 1, 2, and 3 hospitals met College standards for decision-to-incision times. Failure to meet standard times was attributed to delays in communication and a lack of understanding by some operatives of the preparations required for such an operation. Systems-based processes were involved in each of the 16 steps described in the study as necessary preparation for the procedure[17].

In summary, these findings suggest that while individual clinical competence is necessary to achieve safe high-quality care, it is not sufficient. Rather, service quality and the ability to manage the separate elements of product design, the production process and patient satisfaction is integral to achieving good patient outcomes[13]. This means that clinical quality is not guaranteed by the competence of individual clinicians. Rather its attainment requires systems that are capable of supporting and monitoring composites of the skilled contributions of people drawn from a wide range of specialties and professional groupings.

Some 30 years ago Hughes[18] showed that for each doctor, five other health professionals were involved in a patient's care. The

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(1) Systems problems are defined as occurring when health care workers: do not know and understand expectations about their performance; lack the necessary information to perform and/or review their work; and finally, when organisational factors create obstacles to high-quality care[16] (p173).

importance of this insight is graphically demonstrated in the results of a recent study of the organisation of care for three surgical procedures**(2)** in 12 clinical settings[19]. These settings were located in seven Australian teaching hospitals. The study was designed to examine how factors pertinent to the organisation of care in individual settings affected quality.

On the organisation of care the study showed that in each setting, on average, 193 nurses and 65 doctors were involved in caring for its sample of 40 randomly-selected patients. Furthermore, reflecting the bed management policies of the hospitals in which they were located, in five of the 12 settings patients with the same condition were spread across seven or more wards. In two of the settings, patients were spread across at least 15 wards.

The data further showed that most settings were characterised by the absence of mechanism for coordinating work and monitoring its performance. For example:

■ 80% of doctors and 90% of nurses reported that they did not receive data on quality;

■ 82% of doctors and 92% of nurses did not meet to review the management of care within their unit; and

■ 76% of doctors and 59% of nurses did not use a written document that specified tasks and activities related to treating patients.

Notwithstanding these worrying results, the data also showed that 57% of doctors and 44% of nurses believed that "… there (were) better ways of managing patients" for the conditions under study. This response begs the question "To whom would they address their concerns and questions?". The results suggest that the organisational arrangements of individual clinical settings involved in the study were such that the ideas of these doctors and nurses were likely to fall into a void.

The implications of these findings are threefold. Firstly, they confirm earlier findings on the interdisciplinary nature of clinical service provision. Secondly, they indicate how systems-based factors such as a hospital's bed management policies may affect the organisation of care. Finally, the findings point to benefits that would derive from efforts by both managers and clinicians to establish structures and practices which were oriented to systematise clinical work.

Among others, included here would be structures and practices that promote multidisciplinary agreement about the:

■ composite of clinical processes that characterise the diagnosis and treatment of specified conditions

■ quality standards and outcome measures that will be used to assess care, and

■ organisational systems that are required to coordinate multidisciplinary work, monitor performance and deal with variances that are brought to light.

How systems-based factors such as these may affect quality is suggested by findings in the research cited earlier. Findings showed that clinical settings which exhibited elements of the foregoing structures and processes produced better quality care than those that did not, without adversely affecting cost [19]. □

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(2) The conditions studied were appendicectomy, transurethral resection of the prostate and Caesarean section without complications.