

Toward Performance-Based Continuing Medical Education

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Several factors in recent years have combined to make the *continuing* phase of medical education the most critical of all. An "information explosion" is reflected by the exponential increase in contributions to the medical literature. The rate of change in patterns of medical practice has increased concurrently with rapid societal changes. At the same time, basic trends affecting the physician's practice include a growing emphasis on assessment of quality of care, concern for the comprehensiveness of care, and exploration of various models of team approach to health care. It has been estimated that at least three quarters of the physician's total medical knowledge over his/her practice career is acquired after completion of formal undergraduate and graduate training.¹

Although much attention has been directed to improving continuing medical education during recent years, there are two basic flaws in our approach. First, each physician is faced with a "non-system" for planning and obtaining his/her own continuing medical education. Physicians find it difficult to identify their specific needs, and more difficult to meet their individual needs even when identified. Secondly, and probably more importantly, we persist with a *knowledge-based* approach to continuing medical education despite mounting evidence that medical knowledge does not correlate well with clinical performance. A recent report by Ashbaugh and McKean, for example, showed that 94 percent of deficiencies in surgical practice identified by 55 audits of 5,499 patient records were in the area of performance, while only six percent were on the basis of lack of knowledge.²

Miller has suggested that five basic conditions must be met for meaningful learning by adults: (1) students must be adequately motivated to change their behavior; (2) they must be aware of the inadequacy of their present behavior (and the superiority of the behavior they are required to adopt); (3) they must have a clear picture of the new behavior; (4) they must have opportunities to practice the new behavior with a sequence of appropriate materials; and (5) they must get continuing reinforcement of the new behavior.³

There are undoubtedly many reasons why our practice behaviors often do not change based on newly acquired medical knowledge. These include force of habit, medical "fashion," and inadequate effort (ie, time and priority) in revising one's practice methods. In addition, Scott has pointed out the subtle and easily overlooked biases that all of us harbor, and the need to adopt habits of more critical thought.⁴

Chart audit represents an important tool for measuring our performance as physicians for both in-hospital and ambulatory medical care. It has the important advantage of looking at actual clinical problems and the quality of care rendered, and provides a method to measure changes in practice methods and improvement in quality of care. Continuing medical education based on peer review of clinical performance has the potential to "close the loop" between knowledge and performance.

A recent report by Nelson reviews the progress and failures to date with multi-level Professional Standards Review Organization (PSRO) efforts in Utah, pointing out the large amount of

unusable data which have been obtained so far with this approach. The Utah experience is important in demonstrating the need for medical audit to (1) employ a special study format that looks at a particular element of care, selected for its relevance to patient welfare and potential for improvement; (2) use criteria solidly validated by clinical research; and (3) involve a direct and personal interaction between the reviewers and the physician being reviewed.⁵ As the research base in primary care and family medicine continues to develop, we will have new opportunities to reassess and improve through continuing medical education the clinical approaches used by family physicians in everyday practice to better meet the needs of our patients and their families.

References

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