Communication

Teaching Peer Review to Medical Students

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Medical audit became a legal requirement for the profession with the passage of Professional Standards Review Organization (PSRO) legislation in 1973. Physicians, however, have been more tolerating than accepting of this responsibility. Only 10 to 20 percent of physicians in the Utah program participated in the development of specific criteria for medical audit. Those physicians not involved in the criteria development then rejected the criteria as invalid.[1]

Physicians' negative reaction to peer review is partially based on the lack of clear evidence of improvement of the quality of care through evaluation.[2] Other reasons are unfamiliarity with the principles of peer review and the threat of critical examination.

Cooper has suggested that if physicians were exposed to some of the concepts of medical audit early in their careers, they would more likely accept it as a normal pattern, and it would become less threatening in practice.[3] Medical audit has been established as a necessary step for recertification by the American Board of Family Practice and is a part of many family practice residency programs.[4]

Despite this, there has been a paucity of courses related to medical audit in undergraduate medical curricula.[5] Surveys published in 1974 and 1975 reported that about 15 percent of medical schools were offering some training in medical care evaluation. These varied from a one-hour lecture as part of a broader course to extensive courses, including lectures, seminars, and field sessions.[5,6]

Methods

This report presents experience over the past three years with teaching peer review at the University of Pittsburgh School of Medicine. Students serving on the senior elective in primary care are required to perform a medical audit involving their practice sites. The objectives of this project relate to other goals of the elective in addition to medical care evaluation.*

Senior students electing an experience in primary care are placed full-time for six weeks with internists, pediatricians, or family physicians in a variety of practice settings (rural/urban, solo/group). Twenty senior students have participated so far.

Students serving on this elective at the same time meet as a peer review committee at one of their preceptor sites or at the medical school. This committee's first objective is to decide how one defines good health care and how this relates to health. Following this, students discuss the advantages and disadvantages of various methods of

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*A complete set of objectives for the primary care elective is available from the author.

peer review. Each of these discussions is guided by the director of the primary care elective.

The tracer method of evaluating quality of care has been used for the actual audit. This method was selected because it is the basis for most ambulatory care audits today and because it is the most practical for students to use. The tracer method is based on the premise that evaluation of diagnostic, therapeutic, and follow-up processes of a set of common health problems can provide an assessment of the quality of care of a delivery system.[7] Smith has described the applicability of this method in a family practice.[8] His report described the method and used one health problem as an example.

After accepting the use of the tracer method, students review the criteria for a suitable tracer and select a single problem for audit. They then review the literature and discuss their ideas with the preceptors before meeting as a committee to draft the minimal care plan.

Following this, the student committee, working with a consultant with special expertise for the chosen problem, prepares the final version of the criteria set.

During a six-week clinical experience students do not have a sufficient number of charts of their own to audit a specific problem. Charts of their preceptors are, therefore, chosen as the next most relevant records for audit. Not all students have completed the criteria development in time to actually perform the chart review.

Discussion

From their initial discussion relating medical care to health, students accept the fact that the ultimate outcome of how well people are is only very modestly the result of their medical care.[9] They also learn that process evaluation using explicit criteria yields very few acceptable cases[10] and that evidence is lacking to correlate outcome with adherence to process criteria.[11]

Although this creates some reluctance to proceed with an audit, students also come to realize that as residents and practicing physicians they will have to be involved in this process. In developing the criteria, students not only learn from reviewing the literature, but also have an opportunity to discuss their research with a practicing physician preceptor.

Functioning on a committee allows the students to share information among peers and to critically review one another's proposals. They begin to realize the difficulty in deciding on precise criteria, even, for example, what level of blood glucose constitutes diabetes mellitus or what constitutes an adequate follow-up examination in hypertension.

In performing the actual audit, students are surprised at the incomplete information on patient charts. Comparing their own observations of good medical care in the practice with the charts helps them recognize the limitations in using office records in evaluating the delivery of care.[12] The actual in-depth understanding of a specific clinical problem is an incidental but important result of the criteria development.

Student evaluations of the primary care elective have included favorable comments about the peer review project, and all have recommended retaining it as part of the elective. The value of various forms of audit for evaluating the quality of care is presently debatable.[2] In our experience, medical audit has proved to be a valuable teaching device whether or not it is an effective tool for improving the quality of care.

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