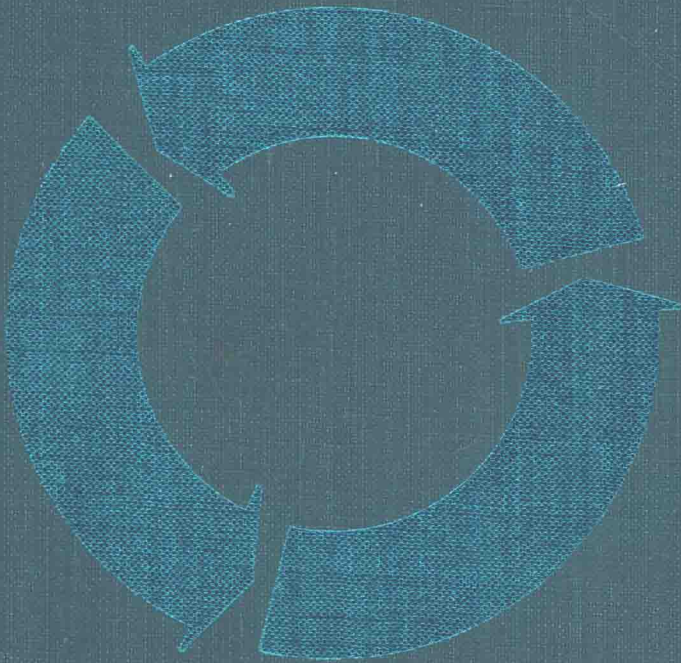


MEDICAL PEER REVIEW

theory and practice



Edited by
PAUL Y. ERTEL
M. GENE ALDRIDGE

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Preface

Anthropology and the history of medicine reveal that the art, science, and technology associated with the practice of medicine have roots dating back more than 2000 years. It is the continuing obligation of the health professions to sort through this legacy in order to retain appropriate knowledge, concepts, and practices that are useful to both society and the health professions.

As the delivery of contemporary health care exposes the public to new technologies, the public increasingly demands the benefits of these new technologies. However, as the cost of the technology increases, it becomes evident that not all of this demand can be met. The theory of “rising expectations” developed in the political and social sciences is applicable to the current debate surrounding medical and health care delivery.

While medical science and technology are advancing, our ability to measure the effects of these advancements on the quality of health care has been less than systematically analyzed and applied. We have successfully met the problems associated with some major epidemics and have begun the technological process of transplanting organs, but we have not been able to systematically monitor the quality and the cost of more mundane clinical and health care matters. And despite all the technological advances, the health professions still need good practitioners who can

translate the new technologies into effective and humane patient care.

Society, however, has not registered unbounded trust or satisfaction with American health professionals, as witnessed by the unprecedented malpractice actions, the medical fraud complaints, and the numerous laws and regulations focused on public accountability. There is a clear direction that would demythologize the “priestly role” that the medical practitioner has previously played.

There must be some reason why health professionals have not dealt as well with their declining social acceptance as they have with their ascending scientific progress. Perhaps the motivational philosophy behind health care, like its art, simply has not been able to keep up with the pace of its science. Health professionals would seem to modernize their professional philosophy with decreasing success and update their sense of social obligation with increasing reluctance. That reluctance appears directly proportional and parallel to the health professional's rising comfort with the rational appeal of medical technology. In dealing with patients, it is virtually irresistible to become dependent on all that technology and its attendant hardware. This includes the tools that permit health professionals to predictably manipulate organic systems and to apply reliable management principles based on the physical and social sciences. In the process,

medicine would appear to many to be increasingly preoccupied with its own technology to the point that we have lost sight of both the art and humanism. This myopia has produced a health system wherein the health professional is becoming progressively alienated from those persons it serves. What else could explain the paradoxical change from a degree of pride, which reasonable men might be expected to hold for the successes of the medical profession, into the quite different attitude of bringing it to task?

Appropriate and effective action must be taken to evaluate health care. Accurate *planning, rate setting, reimbursement, and regulation* of health care systems cannot be established without more precise evaluation and feedback on the outcomes of the health system. The question is *how* do we evaluate the current delivery system? Many methods, concepts, and models have been proposed. However, they all hinge upon whether there is a professional commitment to address these issues forthrightly, in order that the health care professions can work toward a delivery system that meets both social and medical obligations. The implementation of an effective evaluation system for health and medical care is essential in order to correct any imbalances of care and contain runaway costs. This book proposes that the evaluation approach must be couched in an effective and systematic approach to peer review. Public trust must be earned. The public listens carefully to what is said and watches the actions of the health profession, measuring results from actions, however, not words.

Apparently either societal expectations have exceeded the medical profession's capacity to respond or it lacks awareness of the intensity and urgency of social demands. We believe it is essential now to deal with the complex and difficult problems that are vexing society with the same competence and priority with which technological problems have historically been addressed. Peer review provides a means

of organizing the labyrinthian complexity and guiding the necessary corrective activity.

Physicians and other health professionals should be accountable to society for what they do, and not all social expectations are irrational or inimical to medical progress. Personal accountability is a concept wholly in keeping with professional ethics; now hopefully the health and medical professional can effectively demonstrate corporate accountability through the application of its own evaluation technology. Peer review offers a systematic means of achieving professional accountability.

From these fundamental rationales have emerged the objectives for this book. Past generations of physicians bequeathed the science and the skills to practice medicine effectively. Accompanying that capability is the obligation of physicians and the related health care disciplines to use their technology to proper ends and to practice medicine as professionals. We view medical peer review systems as serving the achievement of both ends.

In planning this book, our objective has been to provide a work of some enduring relevance. We wish to focus on those aspects of health care and its evaluation that will be as important tomorrow as they are today. Our design strategy, therefore, was to present valid principles of peer review and facts about operative review systems for interested health care personnel. We have presumed that our readers will be highly trained in the health or information science fields, will possess analytic capability, and will be interested in medical peer review. Such readers will want to compare and judge the concepts and applications described in this volume by relying on the common language of plain, spoken English in lieu of technical jargon. Moreover, we seek to protect our readers from those vocal "experts" who choose to dazzle with cybernetic mystique and nightmarish data systems. Instead we focus the reader's attention on those concepts and

processes that are rationally substantive and fundamental to peer review.

In the absence of any single, unifying theory of peer review, we have sought to present our readers with generic information. It is equally important to minimize fragmentary information. Readers must not be left with the impression that a peer review system is merely a collection of evaluators' techniques. The final chapters show the convergent trends in peer review that lend coherence to seemingly divergent elements presented earlier in the book. The major concepts do articulate, and we have made every effort to help the reader recognize this.

Part one of the book traces the evolution of medical practice, social values, and attitudes toward health care from their separate origins to their recent impact point, the PSRO Act of 1972. This legislation will have far-reaching effects on medical practice. Thus physicians have an enormous stake in the development of evaluative systems. To familiarize our readers with the realm of possibilities, we have traced each major evaluation mode from its underlying concepts, through planning, design, and development, to implementation as a system applicable to health care. Part one then proceeds from an explanation of general theoretical concepts for health and medical evaluation to theoretical applications of these concepts.

In Part two the applications are particularized by describing operating review systems. Here the developers of a representative spectrum of nationally recognized evaluative systems are provided a forum for discussion of issues, description of technologies and methodologies, assessment of practice, and analysis of results in the medical community.

One final note is required. A specific frame of reference has been conveyed by the title of this book. We would be remiss if we did not explicitly share that frame of reference via specific definitions for each of the words utilized in the title. The following definitions are provided.

Medical is used in its broadest dictionary sense to connote that the given subject under discussion relates to or is concerned with "the practice of medicine." It is not intended that this term apply narrowly to physicians only unless it is obvious from the context.

Peer, in its usual dictionary sense, is used to refer to "one that is of equal standing with another." By this we mean that the peer of a physician is a physician, the peer of a nurse is a nurse, and so on, and that all health professionals who deliver clinical services directly to patients are included in general references to "peers" (again, unless otherwise specifically restricted by the context).

Review carries the dictionary definition "to go over or examine critically or deliberately."

Peer review, as used in the title of this book, refers to the broadest generic term that embraces the whole of this field. We fully recognize and wish to alert the reader also to the fact that others (notably Brown and McConkey in Chapter 17) utilize the term "quality assurance" in this generic sense. More for reasons of convenience and economy than any other, we opted to use the term "peer review" in the title because most contributing authors also used the term in this generic sense and for reasons of conceptual consistency. There is a parallel to the *assurance of quality care* which is the *assurance of efficient care* (resource utilization). Since "quality review" and "utilization review" are often contrasted with each other, "quality assurance" carries no literal connotation in regard to encompassing utilization. We therefore settled on "peer review" as it is a term that unequivocally embraces both concepts of quality review and utilization review.

The only form of peer review discussed in this book is a holistic, systematic, and integrated approach to the evaluation of care (as opposed to the more fragmented and informal or "traditional" form of peer review). It is fully recognized that at some point in the evaluation of health

care, regardless of how the review is conducted, an implicit judgment must be rendered as to its efficacy and efficiency. The systematic approach to peer review so structures the review process as to create an environment wherein the often hidden (implicit) assumptions concerning optimal care are minimized and explicit or objective criteria for assessing care are maximized. The more systematic it is, the more each of the steps in the review process are seen to interact with all others, and the more any given step reflects the context and purpose in the evolution of the whole review process.

Theory and practice, the two major divisions of this book, are intended to be complementary from a structural viewpoint. There was, however, no constraint placed on any author to conform to ideas or concepts put forth by any other author. Rather the content boundaries of all chapters (and particularly so in the Theory Section) were reasonably well defined in advance simply to assure thoroughness in topical coverage and continuity while avoiding duplication. For reasons of economy, therefore, several authors cross-refer to segments in each other's chapters, but this practice is not to be interpreted necessarily as an endorsement of concepts unless so stated.

While we share with many a conviction that the whole field of health evaluation technology is currently in ferment, we also believe that in its present context, peer review is much too nascent to discuss co-

herently without defining what is meant by some of the more essential and basic terms. Wherever this occurs, it is done to enhance an understanding of how such terms are used in this text and not to impose any general restrictions on concepts. It is in this spirit of enhancing communication that we offered the definitions above. We have also provided a glossary of terms and list of abbreviations common to peer review.

In this same sense we have defined medical peer review as follows:

Medical peer review is the investigational, managerial, and educational process for systematically monitoring medical and health care in which the judgments regarding provider performance and recommendations regarding corrective actions are based on a review of appropriate case data and are made by qualified professional peers who practice in the same community and who communicate the results of their efforts to the public.

Our common goal then is to describe the theory and practice of medical peer review as it is understood today. Admittedly this is an ambitious objective, perhaps even optimistic. Nevertheless the attempt has been made to incorporate into this one volume important theoretical considerations, topics of factual importance in the field, and insights derived from practical experiences with some of the peer review systems and tools in current use.

Paul Y. Ertel
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PART ONE

THEORY

There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction in a new order of things.

Machiavelli (AD 1469-1527)

The Theory Part of this text is designed to bring together the various implicit and explicit formulations, principles, and general concepts about peer review. When viewed separately, a number of these concepts may seem to be in conflict. However, when viewed as part of an evolutionary change process, they are not. As Kaplan has stated, "Without a theory, however provisional or loosely formulated, there is only miscellany of observations, having no significance either in themselves or over against the plenum of fact from which they have been arbitrarily or accidentally selected."^{1, p.268}

Whatever evolutionary focus peer review ultimately might have developed spontaneously is a matter for speculation; what is clear is that the PSRO law (Public Law 92-603, 1972) has created an unprecedented role for peer review as the mechanism for institutional and professional accountability in health care delivery. The accountability function is a most important variable in the peer review process. The accountability function provides for representatives of the public to participate in what was until 1972 singularly a professional activity. Regardless of the rationale for or against the enactment of this law, its very existence poses both problems and challenging opportunities for medical professionals. Society will now be watching closely to see how the problems and the opportunities are handled.

The opportunities, which the PSRO law has provided, are both derived from and contingent upon professional participation in the mechanism of public accountability plus adequate funding to develop a greatly strengthened, orderly, and efficient system of peer review. This, in turn, promises to become the feedback mechanism needed by the medical profession to develop a more effective and humane health care system. Thus, when peer review becomes the mechanism for the public accountability function in medical care, it also represents a tremendous potential for effecting desirable change in the health care

system. On the other hand, should this machinery become the monopoly of a single constituency, it could (and most probably would) become highly limited in use. There is little justification for allowing any single group to maintain full control over any of the evolutionary tools of society, and public accountability is no exception to the general rule.

The actual structure of our social, political, and economic tools may enhance or hinder the appropriate application of these tools by society. This principle, as applied to medicine, implies that the way we choose to structure the evaluation system for examining the process and output of our health system will determine not only how we view the review system but also how we use it as a resource. The use of peer review, its mechanics, and society's view of it, then, are interdependent issues that must be simultaneously addressed if a peer review system is to be thoroughly understood. In the Theory Part we have spelled out as clearly as possible the limitations and the problems as well as the potentials that exist in the structural and mechanical aspects of peer review. This is done out of respect for the criticism put forth by Ellul in his work *The Technological Society*, namely that any proposed technique tends to integrate the machine into society.² The machine (in this case, computers), when linked to a peer review system, could become antisocial in both character and function. It has the potential to alienate the very people it was designed to assist—the patient and the professional. Thus we have done our utmost to present a balanced account of the advantages and disadvantages of systematic peer review.

To maximize the value of a theory of peer review, it seems appropriate to review three major research needs that confront medicine as it seeks to establish workable public and professionally acceptable methods for achieving accountability:

1. The need to find an effective methodology in which to evaluate the delivery of medical care in a medical institution setting
2. The need to find a methodology to measure, validly and reliably, health status outcomes of medical care
3. The need to find a methodology that would measure the impact of medical care systems (illness intervention) and health care systems (preventive medicine) on the health status of populations served by those systems

Peer review methods have been evolving for decades in an attempt to better answer the first of the above needs. With the advent of PSRO this work has taken on a new impetus and importance. But the ultimate success of daily peer review operations in a community will most depend on whether local health professionals will adequately support and participate in peer review activities in their own hospital or place of practice. What will be required over the next few years is a professional investment that will apply the development of technological assessment strategies to review activities. Technology has been defined as the “systematic application of organized knowledge to practical activities, especially productive ones.”³ This means that the health professional and the public must see practical and worthwhile improvements in the cost and quality of care for patients as a direct result of the applied peer review systems.

But we can move realistically toward such an ultimate system of account-