ORATOR: John J. Massarelli, M.S. (Med.)

ORATION: THE QUALITY OF MEDICAL CARE

"Nothing short of a strong conviction of the obligation resting upon each individual of our Society, to attempt to do something for the common good, would persuade me to appear before you on this occasion; and I would crave your indulgence while I cast my mite, and beg you to remember that this offering, small though it be, may be as much for him who brings it, as the rich gifts, which have been cast in, out of their abundance, by those who have preceded him in this place."

These words were the introduction to the Annual Oration to the Worcester District Medical Society in 1843. Although the phrasing is old-fashioned, the thought is especially appropriate for this evening, and I offer it as my own introduction, with thanks to Dr. Thomas R. Boutelle.

The First Annual Oration was given in June, 1795, the year following the founding of the Worcester District Medical Society. The speaker was a Dr. Babbitt; we do not have a copy of the oration and in fact don't even know the title. In the following year, 1796, Dr. O. Fiske spoke on "A History of the Malignant Dysentery as it Appeared in Worcester in the Months of July, August, and September." Our records are meager, but the early orations were apparently all on scientific subjects. In the mid nineteenth century two orations concerned the ethics of medical practice, a theme which has been repeated off and on since that time. We then had a period of technical subjects again, such as consanguineous marriages, the protoplasmic theory of life in its relation to general medicine, and medical physiognomy. In 1892 the subject was "A Sketch of the Medical History of the Worcester District Medical Society," which also became a topic that has been discussed on several occasions since that time. At the turn of the century Dr. Getchell spoke upon specialism in the practice of medicine. Homer Gage delivered the oration in 1904, and spoke about the problems that progress has brought to the Worcester District Medical Society. Dr. Michael Fallon spoke in 1909 on a report of five cases of infections of the pancreas. Two years later, in 1911, a Dr. J. Duggan spoke on versatility in the medical profession. In 1917 the oration was "A Physician's Impression of Florida." The 1937 oration by Dr. C. A. Sparrow was entitled "Social Security and the Physician." Twenty one years ago, Dr. Lundy gave his famous oration on arrow wounds. In recent years the themes have been general rather than specific, and the trend is toward the sociologic aspects of medicine.

Back in 1842 the oration was not delivered because the orator was not prepared. In 1849 the orator died during the year, and no substitute was appointed. Several other orators died before performing their chore, and on one of these occasions, the orator's son, also a physician, delivered the oration. In 1883, the orator, a Dr. W. Tylor, simply failed to attend the meeting, and was criticized by the president from the podium. In 1919 Dr. Emerson did not give the oration as scheduled, because he was in Siberia; no reason for his being in such an exotic locale is known, and we presume that he was not there for the usual reason. And, finally, to conclude this resume of the history of tonight's function, in 1973 the oration was postponed for two months, but there was a substitute on the original date who seemed to entertain a modest turnout.
Another introduction, this time the one given at the Annual Oration of 1878, by Dr. Leonard Wheeler, seems also appropriate at this time, before I begin the body of tonight's paper. "The title by which this annual paper is dignified is, at first consideration, a little oppressive. With the word 'oration' we associate an idea of stately dignity. We think of it as a discourse of weighty matter, delivered with power of rhetoric. I should have felt more at ease in launching my pen upon an annual "essay" or annual "dissertation"; and, in fact, what I have to read is not properly an oration at all, but simply our annual paper."

**The Meaning of Quality**

The subject of this paper will be the quality of medical care, one in which there is currently great and increasing interest. There was no listing of this subject at all in the "Cumulated Index Medicus" prior to the volume for 1968, but for that year there were 54 references cited. For 1969 the list had grown to 100 references and for 1970 (the most recent edition) there were 125 articles under this heading.

The word "quality" comes from the Latin 'qualis,' meaning "of which," and signifies an attribute or property of a person or object. Portia used the word in this sense, as an attribute of human beings, when she spoke of the "quality of mercy." Later it came to mean "degree of excellences" and we speak of poor or low quality, and good or high quality. Finally, simply high quality, or excellence, came to be a legitimate meaning of the word. Presumably this is the sense in which it is used, that is, as "excellence," in the name of the "Quality Fish Market." These last two meanings "degree of excellence and excellence" will be what we are talking about tonight when we say "quality."

We will define "medical care" as that portion of health care which is carried out by the medical profession, that is, by physicians and surgeons. There are equally important paramedical, economic, and social aspects of health care which will not be discussed here.

**Hippocrates Quoted**

Ever since Mother Eve bit the apple and tainted our nature, there has been an unevenness in the quality of every human endeavor, including medical practice. In ancient days Hippocrates pointed this out, writing, "As in all the other arts, those who practice them differ much from one another in dexterity and knowledge, so it is in like manner with Medicine." He later says, "I would give great praise to the physician whose mistakes are small, for perfect accuracy is seldom to be seen, since many physicians seem to me to be in the same plight as bad pilots, who, if they commit mistakes while conducting the ship in a calm do not expose themselves but when a storm and violent hurricane overtake them they then, from their ignorance and mistakes, are discovered to be what they are, by all men, namely, in losing their ship. And thus bad and commonplace physicians, when they treat men who have no serious illness, in which case when they commit great mistakes without producing any formidable mischief, (and such complaints occur much more frequently to men than dangerous ones): under these circumstances, when they commit mistakes they do not expose themselves to ordinary men; but when they fall in with a great, strong, and a dangerous disease, then their mistakes and want of skill are made apparent to all."

Fortunately, in these times and in our country, the range of quality is not as broad as it was in those days. I suspect that, rather than a bellshaped normal Gaussian curve, the graph of quality of medical care would make up a sharply spiked or leptokurtic curve, and that at one end of the graph are a few practitioners whose special gifts put their level of quality out of reach.
of most of us, and at the other end are a few incompetents, but that the great majority of doctors fit in a fairly narrow band in the middle of the curve.

A massive system of selection, guidance, restraint, and discipline currently governs the medical profession, and accounts for the present level of quality of medical care. The great bulk of this activity is carried out by the profession itself, but to some extent there is evaluation and control by patients, fiscal intermediaries, hospital administrations, the courts, and all levels of government.

**Licensing Physicians**

Historically the single most important control of the quality of medical care in our country has been the licensure, by each state, of practitioners of medicine. In colonial days, medicine was practiced by unlicensed part-timers. The many clergy-men physicians were the best of these, by reason of their superior education and idealistic motives. Full-time physicians and surgeons began to appear, a few trained in European universities but most having learned the art by apprenticeship. By 1781 there were enough practitioners in Massachusetts to form the Massachusetts Medical Society which immediately requested and was given the function of examining and licensing all physicians in the Commonwealth. Shortly afterward, the Harvard Medical School opened, and, based on English precedent, demanded the right to license its graduates, without reexamination by the Society. This was granted, and in its early years the State had a dual system of licensure, by the Medical Society and by the University. Finally, the Commonwealth of Massachusetts Board of Registration in Medicine was established in 1894 as the sole licensing authority for the practice of the healing arts in Massachusetts. Its function, of course, abides.

**Insuring Excellence**

The work of insuring excellence begins with the efforts of the medical schools' Admissions Committees to select the best qualified applicants. It is continued during the education of doctors in medical school, during their internship, and in the residency training program. This area, medical education, is probably now the most critical continuing factor in producing high quality medical care.

The doctor in practice maintains the quality of medical care by expanding his knowledge and skills through reading the medical literature, hospital rounds and conferences, teaching assignments, meetings at all levels from local to international, post-graduate courses, and, recently, formal personal critiques such as the self-assessment tests pioneered by the American College of Physicians. Consultations with other physicians in difficult cases are an important source of practical education for all of us.

In hospitals, doctors provide an exhaustive array of checks on the quality of medical practice. Consider the doctor's appraisal by the Credentials Committee prior to his appointment, by the Utilization Review Committee, the Record Committee, the Tissue Committee, the record librarian, PAS and MAP, etc. Death conferences and ward rounds expose his practice to other doctors. Consider his continued evaluation by the chief of service, the house officers, the pathologists who autopsy his unsuccessful cases, the consultants he calls in, the colleagues who cover for him.

We have, then, reasonably good quality of medical care, and reasonably good means of insuring this level of excellence. However, this is not enough. Dr. Paul Sanazaro and his associates in the Department of Health, Education, and Welfare have recently pointed out that "With the growing public subsidy of medical care since the mid-1960s, the principle of quality assurance has merged with that of public
accountability." In addition to government, other fiscal intermediaries and the people generally have demanded that we develop mechanisms for objectively evaluating and documenting our work.

Samuel Johnson, speaking of the London physician two centuries ago, said, "His degree of reputation is, for the most part, totally casual: they that employ him know not his excellence; they that reject him know not his deficiency." The situation is not much different nowadays. The medical profession's ancient and continuing commitment to excellence requires that we meet this legitimate challenge of consumerism and the "third-parties" to demonstrate the quality of our work in the cold light of day.

The Peer Review Concept

At the AMA's annual convention in 1969, the Council on Medical Service report stated that the Council "knows of no greater challenge facing the profession today than to secure universal acceptance and application of the (peer) review concept as the most meaningful method for creating a public awareness of Medicine's efforts to assure high quality of health services at a reasonable cost, slowing the rate of escalation in health care charges, stimulating health insurance organizations to make broader protection available to more people, and retaining professional control in patient-physician fiscal and economic relationships." The Board of Trustees concurred with this statement and strongly urged that "peer review be assigned the highest priority by the State and County Medical Societies." The House of Delegates adopted this report.

The Massachusetts Medical Society has established a committee on peer review. At the council meeting of October, 1972, the Chairman of this committee defined its goals as he saw them. The first goal is education; in his words: "Education of each of us as physicians as to what our responsibilities are in this area, education of our patients; education of the third parties, and the rest of the public as to what are the capabilities of medicine today and what are its obligations, and what are our limitations. A second goal of peer review, no less important, is involvement of physicians in review of current medical practices. I cannot emphasize how important this is. The third goal of peer review is the adjudication of cases, when questions are raised regarding quality, proper utilization, or reasonableness of charges." He further said, "We agree with the concept that peer review should in no way be considered a police action and that it is a positive approach in maintaining the responsibility for quality of medical care."

The Worcester District Medical Society, in turn, has established a Peer Review Committee. In his initial report to the Society, the Chairman, Dr. James Cosgrove, said that the Committee "should represent the physicians in their desire to maintain a high quality of care" and that "the effects of the work of this committee will be reflected in high quality of care."

The strenuous activity in the area of peer review about which we have been hearing so much does not represent any change in the philosophy of the medical profession The terminology is new. The documentation is new. But the concept itself is a time-honored one of which all doctors can be proud. We have already mentioned the system of checks and balances with which all doctors have been living for generations. Although never formally designated as such, these activities are truly "peer review."

Evaluating Quality

Let us now consider the mechanisms of evaluating quality. In industry, quality control is a well defined discipline. Obviously, the evaluation of quality is easier when a product is the end-result of an activity, or when sales volume or customer satisfaction is the primary motivation of the activity. But in the practice of medicine there is no palpable product which can be measured, the equivalent of sales volume is not related to quality, and patient satisfaction may have nothing to do with the quality of the professional care he received. In general there are two ways by which evaluation of a service can be accomplished: process review and outcomes review. Process review of medical care could be carried out by auditing medical records, or, ideally, by on-site evaluation of practice.

Auditing of Medical Records

Reviewing medical records or auditing abstracts of records is the backbone of present ideas of assessing the quality of medical care. This mechanism has its drawbacks. First of all it isn't foolproof. A
doctor may practice excellent medicine, yet not be a good record-keeper, and simply reviewing his records will give a falsely poor picture of his care.

Conversely, a poor clinician may keep excellent records which might produce an unrealistically superior rating of the quality of his care; major problems could be overlooked entirely, and never picked up in such a review. Secondly, rating physicians by reviewing records could result in a requirement for more time spent in keeping records than is desirable, time that would necessarily have to be diverted from direct patient care. The title of a recent article summarizes this nicely, "IS THE PATIENT'S RECORD MORE IMPORTANT THAN THE PATIENT?"

The highly articulate advocates of Dr. Weed's problem-oriented medical record have recently been claiming that this sort of chart lends itself to audit of the doctor's actual performance. Unfortunately, there is no hard data to back this up and, whatever other advantages the problem-oriented medical record may have, reviewing such records suffers from the same limitations as reviewing traditional records.

Despite these defects, record review has been and will be the single most important means of judging the quality of the care rendered to each patient. The Joint Commission on Accreditation of Hospitals is instituting a Quality Assurance Program, the keystone of which is a retrospective audit of abstracts of medical records. Because the hospitals in our area are all certified by this body, and because the American Hospital Association is also endorsing the Q.A.P., this procedure is almost certainly one with which we will be living in the near future. It consists of first defining the common, severe, treatable health problems seen in a hospital, for example, urinary tract infection, gastric ulcer, and so forth. Then standards are set up for the care of this problem this is done for each hospital by a committee of knowledgeable doctors on that hospital's staff. Information is retrieved by a trained secretary, with computer assistance when available, as to whether those standards met and as to the complications of the condition being studied. Deviations from these standards or the occurrence of complications, as revealed in an abstract of the record, are reported to a committee of staff doctors, who then recommend action to correct any deficiencies which their review may uncover. Other aspects of this Quality Assurance Program are utilization review and preadmission screening of the necessity for elective admissions.

The great advantages of auditing records as a means of evaluating the quality of medical care are the relative ease with which it can be done and its applicability to all forms of practice - that is, to any specialty in a hospital, group, or solo practice setting.

Peer Physician's Evaluation

Another mechanism of quality surveillance by process review is onsite evaluation of practice. This would involve a peer physician's actually visiting the doctor to be evaluated, unobtrusively sitting in as he sees patients in his office, making hospital rounds with him, observing his surgery, or even scrubbing in and assisting, and so forth. It requires completely disinterested examiners, preferably from outside the community, who are capable of evaluating a practice, and who are willing and able to leave their own practice for the time necessary for the survey. This requirement, of course, makes an otherwise sensible and practical mechanism of judging the quality of care given by an individual doctor impossible to adopt generally in this day and age. Perhaps it could be used in certain circumstances on a limited basis, for example, as a pre-requisite for certification in a specialty.
An entirely different mechanism for the evaluation of the quality of medical care is a technique being developed and refined by Dr. John W. Williamson, currently of Johns Hopkins University. Dr. Williamson calls his approach "quality assurance"; its first function, analogous to diagnosis, he labels "quality assessment," and its second function, analogous to therapy, is called "quality achievement." The assessment phase is accomplished by, first, development of outcome standards; second, measurement of outcome; and, third, evaluation of significance. In the second phase, if the actual outcome does not meet the predicted outcome, reasons are sought and appropriate action undertaken. The step of determining the outcome is done by a person trained for this, called a health accountant who does the actual follow-up, usually by letter or telephone. This is an essential element; the outcome is not determined by reviewing the patient's chart as in the JCAH's Medical Audit, but rather by independent investigation.

Perhaps an example from Dr. Williamson's work would explain the process more clearly. Over 2,000 consecutive medical patients who visited the emergency room of an eastern municipal hospital were screened for cases of congestive heart failure associated with an elevated diastolic blood pressure, and 98 such cases were found. Criteria established by the staff involved indicated that the expected mortality rate at the end of one year should be under 10%, and that of those patients who returned to their major life activity, 50% should be free of symptoms after one year. The health accountant, an individual especially trained for this sort of work, then conducted the follow-up, and found that at the end of one year after the original diagnosis, 21% had died (significantly higher than the predicted less than 10%), and 84% of those who went back to work had overt cardiovascular symptoms (also significantly above the 50% or less that had been predicted).

Analysis of the fatalities suggested that eleven deaths may have been preventable; only two of these had been taking anti-hypertensive drugs or a digitalis preparation, and only one was under a physician's regular care. Of the 38 symptomatic working patients, only 13 had seen a physician more than once in the preceding year and were taking medication for hypertension or heart failure. A course of action seemed indicated, that is, improvement of the follow-up of this sort of patient. A new clinic was established in that hospital with the responsibility for following these individuals. Thus this particular study by outcome assessment, was able to suggest action which was taken to achieve a better quality of care.

The mechanism of outcome assessment avoids some of the drawbacks of record review, but is not free of defects. It is limited to conditions which are relatively common so that adequate numbers of cases are available for demographic study by the health accountant. This means that it is applicable only to hospitals or groups of doctors, rather than to any individual doctor's practice. Furthermore, it is applicable only to fairly serious illnesses which require medical management; it is useless to measure the outcome of cases of the common cold, where all doctors would rate as stars, or of carcinoma of the pancreas where we wouldn't do much better than faith healers or chiropractors.

**PSRO Defined**

On the last day of the 1972 session of Congress, a number of amendments to the Social Security Bill, HR-1, were passed. These were embodied in Public Law 92-603, section 249F of which is the Bennett Amendment on Professional Standards Review Organizations, usually known by the initials PSRO, and sometimes pronounced "pisseroo." The PSRO provision was written by Senator Wallace F. Bennett, Republican of Utah. Its purpose is to establish procedures assuring "that the services for which payment may be made under the Social
Security Act will conform to appropriate professional standards for the provision of health care. The law states that "each PSRO shall apply professionally developed norms of care, diagnosis, and treatment based upon typical patterns of practice in its regions as principal points of evaluation and review."

The Bennett Amendment calls for the establishment of non-profit, voluntary associations of a substantial portion of the licensed medical practitioners in geographical regions to be designated by the Secretary of the Department of Health, Education, and Welfare. This association -the PSRO - is reimbursed by HEW for all normal operating expenses. It will review the necessity for various types of health facilities for Medicare or Medicaid patients, and the quality of the medical care provided to those patients. Only institutional care will be scrutinized, although HEW can authorize the PSRO to evaluate ambulatory practice if that organization so requests. In cases where Peer Review or Utilization Review Committees are already functioning effectively, the PSRO is obliged to use their services. All professional decisions will be made only by doctors.

Senator Bennett himself has said, "The thrust of PSRO is informational and educational not punitive." However, in cases where medical services in hospitals, ECFs, or nursing homes are considered unnecessary or improper, the PSRO reports this, and economic sanctions are applied in that no payment will be made for those services. An appeal mechanism exists. Repeated offenders may be prohibited from reimbursement under any federal health program, and HEW can also fine persons the amount paid for unnecessary or incompetent services.

The medical community must approve the PSRO in its area. Before an agreement is signed between HEW and a PSRO, all practitioners in its area of operation are notified. If more than ten percent disapprove, a plebiscite would be held and the majority vote would prevail. When three or more PSRO's exist in a state, a statewide review council will be set up, including "representatives of the public" to evaluate the local PSRO's. A National Professional Standards Review Council composed of eleven doctors will oversee the entire operation in an advisory capacity.

The American Medical Association has already established a PSRO advisory committee, and will attempt to play a dominant role in PSRO development. Dr. Hoffman, President of the AMA, has said, "HMO's and academia face many of the same problems that trouble fee-for-service physicians. I foresee a community of interest rather than a fight over PSRO control." Details of the Bennett Amendment are not spelled out and many vague areas exist, which should allow the profession to help shape the development and structure of the PSRO concept. It is essential that we do so, in order for us to provide the best quality of medical care possible for our patients, without political or other non-medical interference. We have our chance to do this. It must be done before the end of 1975. If effective PSRO's are not functioning in any area by January 1, 1976, HEW is empowered to contract with nonpractitioner PSRO's, and without the majority approval of the medical community. The trite expression, "If we don't do it, the government will" is unequivocally spelled out again for us in this field in a report of the Senate Finance Committee concerning PSRO's: "Government should not have to review medical determinations unless the medical profession evidences an unwillingness to properly assume the task." Take fair warning, all of you here tonight!

In conclusion, let me summarize what I have tried to say, and make some suggestions for the immediate future:

a. There is great and increasing interest in the subject of "the quality of medical care."
b. As in all other fields of human endeavor, there is some unevenness in the quality of medical care in our country, our state, and our community today. However, the great majority of doctors maintain a reasonably high level of quality. There are, and have been, many checks and balances which govern the medical profession, including activities by the medical schools, state licensure boards, and by the working members of the profession itself.

c. Demands from fiscal intermediaries and from consumers have made it imperative that the quality of medical care be objectively evaluated and documented. Only doctors are capable of properly carrying out this function; the medical profession must take the lead in perfecting the necessary technics.

d. The concept of "peer review" has been accepted by organized medicine, and the implementation of this concept is being widely pursued. Surveillance of medical records has drawbacks as a means of evaluation, but this technic is the keystone of present ideas of auditing medical care. On-site evaluation is impractical except for a few selected circumstances. "Outcomes assessment" is another technic that deserves study and trial.

e. PSRO's will come into being in the next two years. It behooves all of us to become interested in this activity.

Finally, at last, I have two exhortations to make of you, the members of the Worcester District Medical Society:

First, your Society should develop and expand the Peer Review Committee. The work "so nobly begun" must be encouraged and supported by all of us. An educational program must be begun as soon as possible to acquaint the people of our community of the existence of the Peer Review Committee, and of its effective work. Before the first PSRO is called into being, everyone should be aware of our Peer Review Committee and the many Utilization Review committees.

Second, we must participate in the efforts of the Massachusetts Medical Society to set up PSRO's, but recognize that the Worcester District Medical Society will have the responsibility of creating one or possibly more PSRO's, depending on the Secretary of HEW's geographic designations. The Worcester District Medical Society must plan now for a central Massachusetts PSRO which will utilize to the fullest our Peer Review Committee and all our existing Utilization Review Committees.

The medical profession's ancient commitment to excellence demands continuing efforts by each of us to improve the quality of medical care.