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Peer-Review Components of the Health-Care System: November 1974 no. 1

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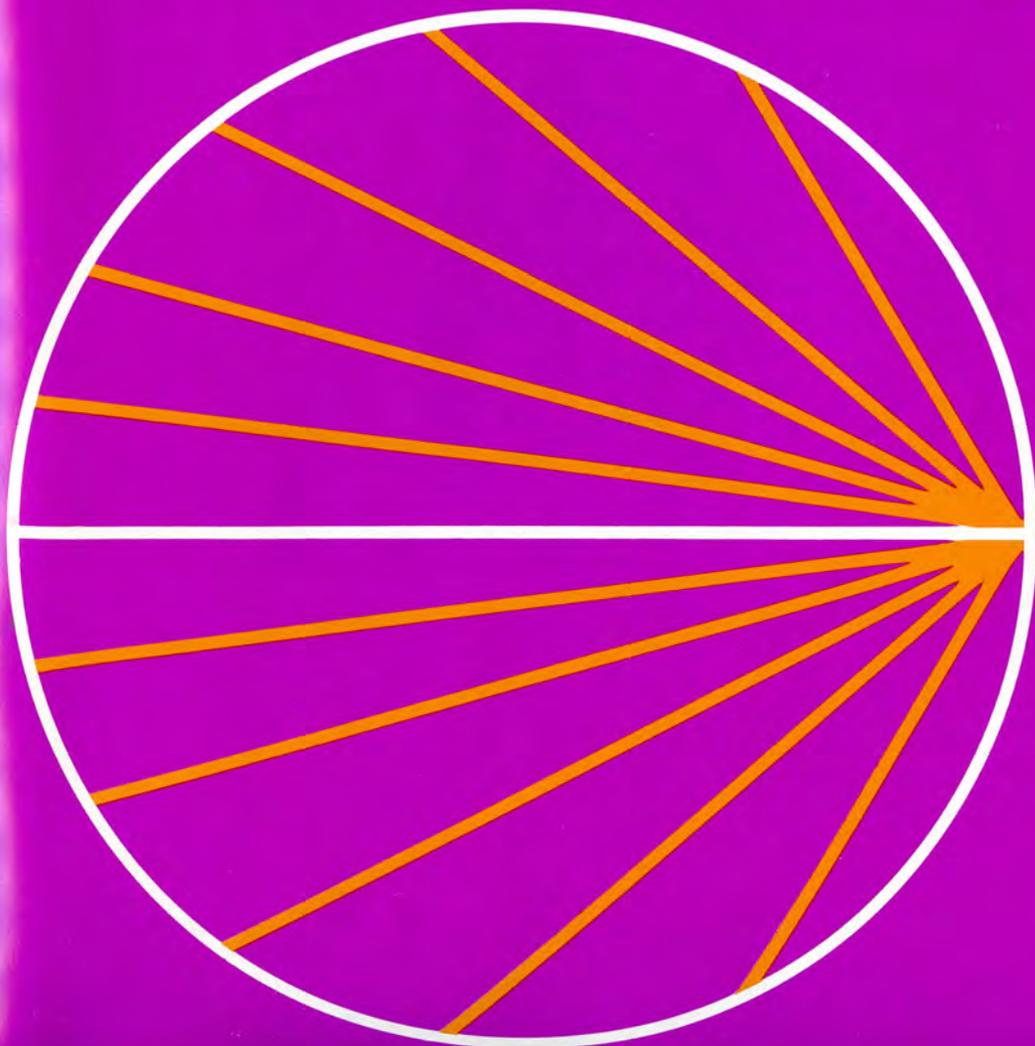
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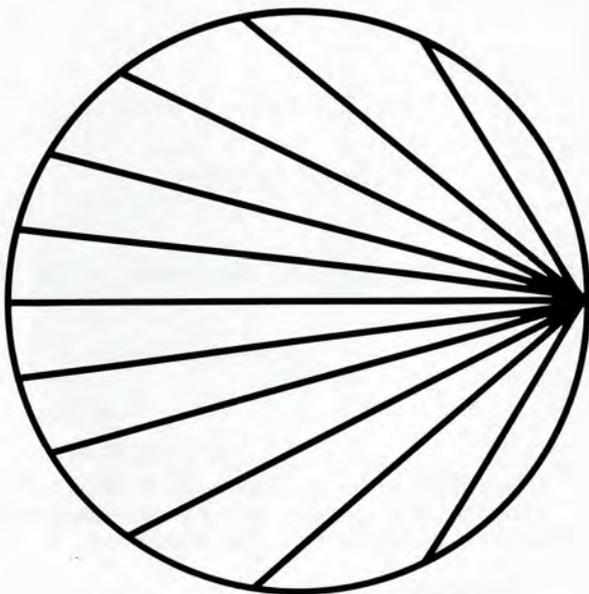
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About the Participants

George Baker, M.D., is an assistant clinical professor of medicine, Harvard Medical School, and an associate physician, Massachusetts General Hospital. He is chairman of that hospital's utilization-review committee.

H. Thomas Ballantine Jr., M.D., is president of the Commonwealth Institute of Medicine and past-president of the Massachusetts Medical Society. He is an associate clinical professor of surgery at Harvard Medical School and a visiting neurosurgeon at Massachusetts General Hospital.

Daniel S. Bernstein, M.D., is associate dean for postgraduate education and hospital affiliations at Boston University School of Medicine. He was previously assistant director of the Tri-State Regional Medical Program. He has been involved in the development of Professional Standards Review Organizations within Massachusetts and in the training of PSRO management nationally.

E. Langdon Burwell, M.D., an internist in practice in Falmouth, Massachusetts, is a director of the American Association of Foundations for Medical Care. He is a member of the Institute of Medicine of the National Academy of Sciences, a director of the Commonwealth Institute of Medicine, and a past director of Massachusetts Blue Shield.

Paul M. Densen, D.Sc., is director of the Harvard Center for Community Health and Medical Care and a professor of community health, Harvard University School of Public Health. He was previously deputy administrator of the Health Services Administration of the City of New York. He served on the Health Services Research Panel of the President's Science Advisory Committee, and as a member of the President's Commission on Federal Statistics.

Richard H. Egdahl, Ph.D., M.D., is director of Boston University Medical Center, academic vice president for health affairs of Boston University, and executive vice president of University Hospital. He is a professor of surgery at Boston University School of Medicine and specializes in endocrine research and surgery. He also participates in the area of health-services research and development and as a consultant in health policy.

Robert E. Fulton is regional director for the Department of Health, Education, and Welfare's New England region. Previously, he served as director for the same six-state area for the Office of Economic Opportunity. Earlier, he had posts with the Department of State, the Atomic Energy Commission and the Navy Department. He holds graduate degrees in law and business administration.

Paul M. Gertman, M.D., is chief of the Health-Care Research section of University Hospital and an assistant professor of medicine and surgery, Boston University School of Medicine. He is a consultant to the federal Office of Management and Budget and is involved in quality-assurance development both within Massachusetts and nationally. He was a Carnegie-Commonwealth Clinical Scholar at Johns Hopkins University.

Richard Kahan is now executive director of the Bay State Professional Standards Review Organization and, at the time of the symposium reported herein, was executive director of the Bay State Health Care Foundation. He was previously director of research, Massachusetts Blue Cross/Blue Shield, and manager of applications and planning of the MEDINET division of General Electric.

David M. Kinzer is president of the Massachusetts Hospital Association. He previously was executive vice president of the Illinois Hospital Association. He participated in numerous commissions and councils organized by Illinois state and regional agencies. He is a past president of the Hospital Administrators' Study Society.

John Larkin Thompson is president, treasurer and chief executive officer of Blue Shield of Massachusetts, Inc. An attorney with a graduate degree in business administration, he is past member and chairman of the Massachusetts Port Authority and is heavily involved in many business and civic activities.

Leon S. White, Ph.D., is Commissioner of Health and Hospitals of the City of Boston. He has served on the faculty of the Sloan School of Management, Massachusetts Institute of Technology, and as a consultant to the Commonwealth of Massachusetts Secretaries of Administration and Finance and Human Services. He was director of an Institute of Medicine, National Academy of Sciences study on "Universal Entitlement to Health Care."

Abbreviations in This Volume

- CIM:** Commonwealth Institute of Medicine (Massachusetts)
CHAMP: Commonwealth Hospital Admissions Monitoring Program
(Massachusetts)
ECF: Extended-care facility
HASP: Hospital Admissions Surveillance Program (Illinois)
HEW: Department of Health, Education, and Welfare
HMO: Health Maintenance Organization
MHA: Massachusetts Hospital Association
PAS: Professional Activity Study
PSRO: Professional Standards Review Organization
QAP: Quality Assurance Program (American Hospital Association)
TAP: Trustees, Administrators, Physicians Program (Joint Commission on
Accreditation of Hospitals)
UR: Utilization review

The Morning Session

Richard H. Egdahl
Moderator

The Bay State Foundation

Richard Kahan

Richard H. Egdahl: I would like to welcome you to Boston University Medical Center to hear and participate in this program, "Peer Review Components of the Health Care System," the first of an extended series of symposia relating to the various important problems of health-care delivery.

This audience will be participating in one of the currently most active and creative areas in health-care delivery — peer review. The format will permit questions from the various experts, and I think we will perhaps discern the complex problems in a way that will allow us a better understanding for future effective action.

The Foundations for Medical Care movement, which started in California and with which most of you are familiar, has been a leader in promoting peer review. We have several foundations in this state, and you are all aware also of the Health Maintenance Organization (HMO) movement and the very timely Professional Standards Review Organizations (PSROs) that are with us now. These three movements are closely connected in our discussion of this morning's program, which is devoted to the organizational aspects of the physician's practice and the methods employed to contend with cost and quality problems.

I would like to start the program by introducing to you Mr. Richard Kahan, who was with Blue Cross as research director for several years and who has a background in computers and management. He is an MIT graduate, and recently he assumed the position of executive director of the Bay State Health Care Foundation. Mr. Kahan is going to tell us something about this Bay State Foundation — what it is doing and what it plans to do in the future.

Richard Kahan: I would like to divide my presentation into three parts. First, I would like to spend a few minutes making some general comments about foundations and peer reviews. Then I should like to spend some time discussing Bay State, its history and current status. Finally, I would like to give some thoughts about the future of the Bay State Foundation.

I think it is appropriate that this seminar on foundations and peer-review organizations is being held during the Boston University School of Medicine's centennial year. While the centennial year is an opportune time to look back and try to see where one has been, it's also an appropriate time to take stock of our problems and see how we may move forward.

If we look back, we see not only how 100 years ago a medical school was founded, that has since turned out to be a major medical school, but also we can see other major changes in the improvements of the health-care system. Excluding obvious medical advances, which I am not competent to discuss, we can see where the advent of the Flexner Report initiated major improvements in medical education; where the founding of the Joint Commission on Accreditation of Hospitals, an effort which has been remarkably successful, helped develop standards and criteria for structure, processes, and outcome measurements of hospitals. Led by the "Blues," we have seen the growth of a major and, by and large, successful attempt to develop financing mechanisms for the health-care system. The advent and growth of the speciality societies has had a major impact upon physicians' efforts to increase their skills, and the introduction of Medicare and Medicaid has denoted a serious attempt to provide the availability of health-care services to more of our nation's population.

I do not, however, believe in a Voltairian attitude of "all is for the best in this best of possible worlds." In the last 20 years we have experienced skyrocketing increases in health-care costs. Moreover, it has become apparent that all the care provided our population is not only expensive, but that some of it is unnecessary as well as being of doubtful quality. And while we could argue and disagree as to the appropriate percentages to be ascribed to these phenomena, all must agree that these phenomena do exist. If we take stock now, however, I believe we will perceive this time as the starting point of what may well turn out to be a major organizational change within the health-care system.

While the foundation movement had its genesis 20 years ago on the West Coast with the development of San Joaquin Foundation for Medical Care, the move across the country has been remarkably slow. This is despite the valiant efforts of a few farsighted men who, with almost evangelical fervor, have tried to awaken their colleagues. However, with the discussions since 1969-70 of national health insurance, professional

review organizations, and health maintenance organizations, more and more medical leaders are recognizing that the foundation is the organizational tool whereby needed changes in the health-care system can be effected, and that changes can be made from within the system.

With the advent of Public Law 92-603 (the PSRO legislation) in October, 1972, the health-care scene has been transformed; from only 20 foundations in 1970, the American Association of Foundations for Medical Care in 1973 now has 77 member organizations, and its membership is growing rapidly. I expect that by the end of 1974 there will be approximately 200 foundation-like organizations. I have used the phrase "foundation-like" organizations because the term "foundation" is not well defined. The best available definition that I know of appears in Dr. Richard Egdahl's article in the March 8, 1973 *New England Journal of Medicine*, in which he describes and defines "comprehensive foundations" and "claims review foundations." Under the impetus of the PSRO legislation, however, the foundation movement is moving so rapidly that Egdahl's model is becoming classical. We now have a neoclassical model, and Bay State Health Care Foundation is an example of such a modification.

Before I describe Bay State and its history, I would like to deal explicitly with what I alluded to earlier. I stated that "this time is the starting point of what *may* well turn out to be a major organizational change within the health-care system." I believe that this will be the case. But while the few well-established foundations for medical care appear to have been successful, it would be foolish to believe that their experience can *ipso facto* be duplicated nationwide, and I would be the last to argue that foundations are the panacea for the nation's health-care problems. Indeed, there are some who question whether the goals of cost containment and quality care are in fact compatible. As Dr. Charles Edwards [HEW'S assistant secretary for health] has stated (in a slightly different context), "Neither the Congress nor I know where we are going or what we can achieve. We would like to upgrade the level of health care in the country, but the question is, 'How do you do that?'" But I do not wish to be perceived as a Jeremiah, and I do approach the foundation movement with enthusiasm. I also try to retain a healthy skepticism or agnosticism.

Let me turn to Bay State Health Care Foundation. The foundation was founded within the Middlesex (County) South and East District Medical Societies in January, 1971 by Dr. Robert J. Brennan and some other physicians in that area, in an attempt to:

1. promote the availability of high-quality health care;
2. insure accessibility to high-quality health care;

3. organize peer-review activities in order to deal with quality at a reasonable cost;
4. encourage experimental models of health-care delivery and the utilization of ambulatory care as an alternative to hospitalization;
5. promote comprehensive health-care planning; and
6. develop and promulgate acceptable standards of comprehensive health-insurance coverage.

Stimulated by these valiant plans, Suffolk and Norfolk District Medical Societies joined Bay State in February, 1972, and other areas soon followed, so that our membership is growing by leaps and bounds. At last count, we have nearly 800 members for the 12 district medical societies in greater Boston.

About a year ago, in an attempt to meet these ends, Bay State started negotiations with Blue Shield of Massachusetts to see whether together they could define a comprehensive package of health-care benefits and determine whether this package could be marketed. While Bay State did not plan to do its own claims review, it did plan to do its own peer review and pay its own doctors for it (a deviation, albeit slight, from Dr. Egdahl's model). After lengthy discussions it became apparent that Bay State lacked peer and utilization review experience and, if the physicians in Bay State would be at risk, they had a need to attain such experience before marketing success bankrupted them. While this same problem faced but did not faze Dr. Harrington of San Joaquin, I do not believe one should ascribe Bay State's attitude merely to the innate conservatism of New England versus the bravado or bravery of California. Let me point out that Bay State faced significantly different problems from those of San Joaquin and other California foundations. Massachusetts Blue Cross/Blue Shield is much stronger organizationally and marketing-wise than its counterpart in California. Also, the benefits now being sold in Massachusetts in 1972 and 1973 are significantly more comprehensive than those sold in California in 1954.

Thus, Bay State and Blue Shield decided and started to negotiate a peer-review demonstration project. The contract was signed on September 18, 1973 and went into effect October 1, 1973. This contract serves several purposes:

1. It provides financial stability to Bay State.
2. It provides visibility to Bay State.
3. It demonstrates Blue Shield's commitment to the concept of peer review.
4. It will provide Bay State with needed expertise.
5. It will hopefully be cost-effective via two mechanisms:

- a.) direct cost savings, and
- b.) the educational impact upon physicians.

About this time, Bay State also made recommendations to HEW as to area designations of PSROs. In that presentation we argued that in order to effectively pursue the goals of Public Law 92-603, i.e., quality care at reasonable cost in the appropriate place, boundaries that encompass unified medical-service areas should be designated as PSRO regions. Only in this way is there a chance of developing comprehensive data to describe the health-care system and determine its strengths and weaknesses. In this way, PSROs will develop more effective and comprehensive health-care planning than has previously been possible. Before someone corrects me, let me hasten to add that I, too, recognize the necessity for uniformity of statewide data and the gathering of statewide data. It was felt, however, that our plan, while congruent with plans of the Commonwealth Institute of Medicine (CIM), did not have to rest solely upon CIM or a statewide professional-services review committee.

Today, Bay State Health Care Foundation is an ongoing organization. It has a contract under which we are doing retrospective peer review; we have funding, an office, a staff, and nearly 800 members. Where do we go from here?

We are confident that we have a good chance of being designated as the PSRO for the greater Boston area, and we have begun to plan for this event. We are trying to develop subregionalization of the greater Boston area to insure local participation, enthusiasm and knowledge. We are reviewing the various guidelines and criteria presently available to determine their adaptability, completeness and suitability to our patterns of practice. This is being done in conjunction with the appropriate speciality societies as well as with our own peer-review and guidelines committees. We have begun to look at the pros and cons of preadmission certification, concurrent review, and retrospective review. We are trying to evaluate the various systems and develop our plans for an embryonic PSRO. As there are no guidelines available from HEW, this is made easy or difficult — depending upon one's point of view.

It is clear, however, that if an effective peer-review organization can be developed, and I believe it can be, then the other health insurers, especially the Blues — the largest health insurer in this state — must climb aboard. Certainly hospital utilization-review committees will find it difficult to work with a PSRO for Title XVIII and Title XIX patients and ignore the other patients in the hospital. Thus, if all patients undergo the same review process irrespective of whether the locus of activity be the utilization-review committee or the PSRO, then the Blues and other carriers must work with the same system.

Therefore, Bay State's future plans regarding experimental models of health-care delivery, the use of ambulatory care, and comprehensiveness of health-insurance coverage are dependent upon the farsightedness of Blue Cross/Blue Shield. They could well preempt our aim to sponsor fully comprehensive health-care coverage and stop us in effect from being a "comprehensive foundation," but they could also help the Bay State Foundation build a "claims review foundation." I do not see that as being necessarily bad. Indeed, I would hope that our presence or threat, if you will, will push Blue Cross/Blue Shield into fulfilling their role more effectively and comprehensively. We do see ourselves as sponsoring a fully comprehensive, prepaid, fee-for-service benefit package in whatever form that sponsorship takes.

Comprehensive Foundations for Medical Care

E. Langdon Burwell

Egdahl: Our second speaker, Dr. E. Langdon Burwell, is an internist from Falmouth. He attended the Harvard Medical School and trained at the Peter Bent Brigham Hospital, and he has been very active in the foundation movement. Dr. Burwell is one of the people who have been talking about foundations for several years and to whom physicians are beginning to listen. He serves on the Board of Directors of the American Association of Foundations for Medical Care, and is a member of the Institute of Medicine of the National Academy of Sciences.

E. Landon Burwell: I thought it might be appropriate before this rather heterogeneous audience to go back through the history and fundamentals of the whole foundation concept, because I'm sure we vary a good deal in our knowledge of what it's all about. I think there's a good deal of confusion as to just what foundations, per se, are, and what they do. Do they take care of people? Are they a management system? Are they a computer system? It might be well to review from the beginning, starting with fairly simple principles.

One of the stories you may have heard, which I think illustrates how foundations were started, was Dr. Donald Harrington's experience in 1954 when he first conceived and developed the San Joaquin Foundation in California. He knew that the Kaiser-Permanente Organization was planning to establish a closed-panel prepaid group practice in Stockton, and that the Interational Longshoremen's Union under Harry Bridges was considering signing up its members with the Kaiser Plan. Dr. Harrington then heard the criticisms that were being voiced by the union against medical practice in the area. He noticed posted on the union bulletin board, along

with the schedules of shiploadings, a list of physicians' names and the comment, "Don't go to these physicians. They cheat the brothers."

Even more startling was the fact that included on this list of names were some of his more respected colleagues. It seems that some of the criticism was engendered by physicians who practiced good medicine but may have neglected other aspects, such as, how long the patients were kept in the hospital or how the hospital bill was ever paid. Some physicians had no idea of what their patients' health-insurance plans were. That some health-insurance policies covered only 10 per cent of the total bill was a fact of which doctors were unaware. When the patient became angry about such things, it was usually directed at the physician.

Dr. Harrington began to contemplate developing a means to meet these criticisms — to add to the existing system improvements that were necessary, at the same time preserving what was good about the practice of medicine. This was really the genesis of the comprehensive health-care foundation. This prototype, as you all well know, was called the San Joaquin Foundation of California. As Dick Kahan mentioned earlier, there are many neoclassic forms of foundations that have developed since that time. They are not all like the San Joaquin Foundation; many have taken only a part of the activity of the comprehensive health-care foundation and developed one particular aspect.

What were the reasons for the problems which Dr. Harrington accounted?

These are my views, not his. Originally, the physician was the manager of the health-care delivery system. He practiced in a little town or even a big town; he knew his patients; he knew their social situations; he knew their jobs; and he knew the families. When he prescribed a treatment or an operation, he knew whether or not they could afford it, where they were going to get their care, who was going to do the nursing care if it meant being kept at home. He really managed the whole health-care delivery system. If he knew they couldn't afford the medications, he often gave them some out of his own supply. Gradually, as medicine became more specialized, more technically competent, the doctor withdrew from the managerial function. He did "his thing," whether it was open heart surgery or gynecology or whatever he was doing, competently; but gradually, he said, "As far as paying for health insurance, cost of hospitalization and everything, somebody else will have to take care of that. I haven't got the time." — which was true. It was hard enough to keep up with the rapidly exploding technical advances in his field. All of a sudden the whole system began to fall apart because nobody was managing the system. Other managers came in to fill the void. These managers, while often well-

intentioned, saw only a part of the problem and made decisions that were really not based on a full understanding of the whole system.

Dr. Harrington and several of the rest of us concluded that the only solution is for the doctor to be reintroduced into the managerial system. The definition of the comprehensive foundation for medical care that appears in Dr. Egdahl's paper in the *New England Journal of Medicine* — that the foundation is a mechanism for the management of health-care services — is pretty close to a good definition of what a foundation is. We physicians must return to the managerial system, but obviously we can't do it all. We are not financiers, computer experts, systems engineers, or business managers. We must work with the people who are very competent in these areas; we must be part of a team, and we must be among the leading members of the team. In doing so, the foundation managerial mechanisms seem to many of us the best way of accomplishing this purpose.

The development of the San Joaquin Foundation was a prototype foundation. There have been other such foundations in California, among them the Tri-County Foundation and the Fresno Foundation. Then, as the concept began to spread east, we saw the development of the New Mexico Medical Care Foundation, which concentrated primarily on monitoring the Medicaid program. Colorado developed a statewide program, with regional subdivisions, for monitoring hospital care for Medicaid patients. In Illinois, the Hospital Admissions Surveillance Program (HASP) developed, and concentrated also on hospitalization of Medicaid beneficiaries. In Massachusetts, the Commonwealth Institute of Medicine, sponsored by the Massachusetts Medical Society, has signed a contract with the state to review concurrently Medicaid hospitalizations. The CIM is not a comprehensive medical-care foundation, but an overall management system designed to encourage the development of foundations and PSROs. Recently, the amalgamation of the Barnstable Foundation with the physicians in the Plymouth District Medical Society has led to the formation of the Pilgrim Foundation for Medical Care. This organization, as well as the Bay State Health Care Foundation and the Western Massachusetts Health Care Foundation, is similarly not a true comprehensive foundation, but they all have been derived from and have learned from the original prototype started in California 20 years ago.

The comprehensive health-care foundation should cover a broad spectrum of medical and surgical services. A peer-review foundation, such as the Bay State Foundation, functions by performing peer-review claims referred to it by an insurance carrier. These peer-review functions involve decisions about the appropriateness and necessity of hospital care, the criteria by which judgment is made.

Comprehensive foundations can apply certain standards to health-insurance benefit packages and insist upon these standards if the foundation is going to contract with third-party insurers for claims review.

Another function of comprehensive foundations involves assuring remuneration to the physicians delivering services. Many physicians had been unhappy by the manner they were reimbursed by third-party carriers. The California Relative Value System was developed to relate various medical services to one another: A relative value for different medical procedures was developed, expressed in units, to which a conversion factor was applied (depending upon the economics of a particular geographic area); e.g., an office call was one unit, a cardioversion — four units, an appendectomy — 10 units. Other suggestions and evaluations of the Relative Value System have been developed, but that method of unit measurement was the basic way foundations paid their physicians, and, on a fee-for-service basis, physicians knew how much they would be earning for any given procedure. This was guaranteed by the foundation, with no question of payment if the service was approved as a necessary service. The physicians then agreed that, if they were paid this reasonable fee guaranteed to them by the foundation and the carrier, they would not bill over and above the reasonable fee. This bilateral agreement mutually satisfied the providers and the consumers.

Another possible feature of the comprehensive foundation for medical care is the ability to provide peer review not only of physician services but of physician-generated services, as well. Physician services account for roughly 15 to 20 per cent of the \$84 billion that was spent last year on health care in this country; the remainder applies to physician-generated services — the hospital bill, the nursing-home bill, the drug bill, the prosthesis, and other medical items that the physician prescribes but for which he is not paid. It is in the peer review of these physician-generated services that the big cost savings occur; the estimate is that the savings, as far as cost control goes, have been roughly 1.5 to 2 per cent.

The preoccupation that health insurers have with physicians' fees is a source of concern to me. Third-party payers argue about whether a hysterectomy is worth \$200 or \$275 or \$499.99, but the whole point is whether the hysterectomy was needed in the first place. If it weren't needed in the first place, there is no point in paying anything. The hospital days provided — were they necessary? Did that patient need to stay in the hospital at \$150 per day for 20 days, or could he have been taken care of in an extended-care facility for half the price? Could he have been taken care of at home? This type of approach to the problem is just missed completely by the actuaries of third-party carriers. Peer-review function comprises

review of the necessity of care, the quality of care according to certain preset criteria, and the appropriateness of care — in the hospital emergency room, in the doctor's office, or at home. The appropriateness of the fee is also part of the concern of some comprehensive foundations.

In performing peer review, the foundations noted that once guidelines were established for the average length of stay by disease category and for ancillary and diagnostic services, approximately 85 per cent or more of the cases for review passed with nonphysician review and were paid. About 15 per cent or less would go to peer review, and, of those, about two or three per cent would end up going to a full peer-review committee. The others went to a peer-review physician. These physicians, chosen by their peers in the foundation, were paid for their work — payment anywhere from the original \$25 an hour to \$50 an hour. In San Joaquin, Dr. Harrington has stated that the average peer-review physicians spend about three or four hours a month performing peer review. Certain physicians and the key members of the peer-review committee obviously spend more time in supervision and administration.

Presenting a complete picture of all of the finances involved in a given span of illness is another concern of a comprehensive foundation. There is a bill from the hospital, from the attending physician, from the surgeon, from the anesthetist; there are bills for drugs, for wheelchairs, for ambulance service — all going to different carriers. Nobody has a total picture of what this illness costs. A comprehensive foundation tries to organize the processing of claims so that we may arrive at the total cost and review the pattern of treatment. It is important that we be able to judge both the quality and the cost of care.

Another concept introduced, and this is by no means common to all comprehensive foundations, is the concept of risk sharing. Risk sharing means that the physician is actually economically involved in how well the system runs. In a closed-panel, prepaid group practice (Kaiser, for instance), it is part of the selling pitch that, when aware of the total cost of health care, the physician is not going to hospitalize unnecessarily and he is not going to perform unnecessary procedures; if he does, his payment at the end of the year is going to be less. This has led to criticism of under-utilization, when the physicians deliver no care at all and divide up the total premiums. The idea of having the physician *partially* involved financially so that he realizes the total cost of the medical system was introduced by the foundations. If he manages this system well, he makes more money; and if he doesn't, he could lose money but wouldn't become bankrupt. Usually the physician shares perhaps 10 per cent of the risk, and the insurance company carries the remainder. If total responsibility were forced upon the physicians, they, in all probability, would not

assume the risk. The foundations, then, have effectively amalgamated the quality of care of patients with the economics of health care, and have reintroduced the physicians to the management system.

The problem of accessibility — access to quality care — has always been one of the points on which foundations have been a little weaker than closed-panel, prepaid group practice. People need to ask questions: How many new patients are you taking care of? Are you taking care of the poor? Where are your clinics? Are you putting something into the ghetto? The foundations were rearranging the existing elements of the health-care delivery system, but were not building new hospitals or clinics. They rose to this challenge, however, and in many places in California they established mobile centers for the migrant farm workers. They also established health-care screening centers in areas where patients, particularly Medicaid patients, could go for a good physical examination. These centers have improved health-care access.

The final problem to which the comprehensive foundations have addressed themselves is quality control. Quality of medical care has been measured not by structure and process studies but by outcome measurements. We could ask, for instance: How many people survive the myocardial infarction? How many people return to work? What was the length of disability? These are felt to be more practical measurements than whether care was delivered by a board-certified surgeon.

I have presented a short summary of what foundations can accomplish. Initially, not a great deal was done, but gradually it became evident that foundations were reducing the total cost of health care, they were defining and monitoring the quality of care, and they were cutting down the incidence of unnecessary hysterectomies and other procedures. In the Federal Employees' Program in California, the days of hospitalization dropped from something over 1,000 days annually per 1,000 subscribers to less than 500. In fact, down in the San Joaquin area, the figures dropped to 390 days per 1,000 subscribers, which was even better than the Kaiser figures for that area. They were able to reduce unnecessary utilization of high-cost facilities.

The concepts generated by the California foundations spread throughout the country and were introduced, as I mentioned, into the Medicaid Management Program in New Mexico, Illinois, and now the Commonwealth Hospital Admissions Monitoring Program (CHAMP) in Massachusetts. Finally, probably the greatest success achieved was the introduction of the basic philosophy of the foundation movement into the PSRO legislation. With PSRO legislation, the physicians have been reintroduced to the managerial system, and we're all working to set up foundations that will act as umbrella organizations for PSROs.

The Commonwealth Institute of Medicine and the CHAMP System

H. Thomas Ballantine Jr.

Egdahl: Both previous speakers have mentioned the Commonwealth Institute of Medicine. They haven't really defined it as a foundation, but it is obviously a very strong force in Massachusetts. The president of the Commonwealth Institute of Medicine, Dr. H. Thomas Ballantine Jr., is here to talk with us today. He attended the Johns Hopkins School of Medicine and has been a neurosurgeon at the Massachusetts General Hospital for many years. He is a past president of the Massachusetts Medical Society and a recipient of many honors. Dr. Ballantine will tell us about the Commonwealth Institute of Medicine and its new CHAMP program.

H. Thomas Ballantine Jr.: One of the problems with a symposium, it seems to me, is that it is sometimes difficult to plan your presentation since what you have decided to cover may have been covered by the preceding speaker. Or, the previous speaker may have brought to mind something that takes on a great deal more importance than what you had planned to say about it.

I am going to try to introduce you to the concept of the Commonwealth Institute of Medicine (CIM), how it began and what was presumed to be its role. I happened to reread a little brochure that we had put together about six or seven months ago, and it sounded pretty good. It was sent to many people, but, for the benefit of those who may not have read it, I am going to read excerpts from it. This describes the Commonwealth Institute of Medicine at the time the brochure was written:

Medical-care expenditures in the United States exceed \$80 billion annually. Our current health system has become one of the top "industries" in our economy. Because the fundamental aspect of medical care in the

United States is freedom of choice, the system has grown with no overall coordination or concise structure. And no \$80-billion business or industry can operate effectively without adequate management. The challenge lies in preserving the freedom of choice and the personal nature of our medical-care system, while applying much-needed modern management techniques to the problems of cost and quality assurance of medical care. In 1969, the Massachusetts Medical Society began to study the formation of a nonprofit organization for the evaluation of the quality of medical care and its cost-effectiveness directed toward several varying systems for the delivery of medical care. In 1972, the council of the Massachusetts Medical Society made these plans a reality by establishing and providing the initial funding for the Commonwealth Institute of Medicine. The Corporation of the Commonwealth Institute is managed by a Board of Directors with representation from the physicians of Massachusetts, the Governor, the federal government, Blue Cross, Blue Shield, private insurance carriers, consumer input, labor, and the Massachusetts Hospital Association. The Institute is strictly nonprofit. It will not itself engage in any form of medical-care delivery but will offer to give assistance to and provide objective review of accomplishments of both proposed and currently operating medical-care delivery organizations.

A primary responsibility of the Commonwealth Institute is to evaluate and monitor the quality and cost-effectiveness of medical-care delivery organizations. We use this term in order to have a broad generic framework from which we may look at Health Maintenance Organizations (HMOs), which are really not well-defined and sometimes are used as a euphemism for capitation (prepayment) salaried-physician systems; so that we can look at the medical-care delivery system from the standpoint of what foundations can do with it and for it; and in order to examine the strictly fee-for-service, solo practice of medical-care delivery. I will address myself to what I have spoken of frequently as the essential ingredients in the delivery of medical care: (1) the quality of care; (2) its cost; (3) its availability; (4) its acceptability to patient and physician alike (If you have an unacceptable system, you are going to have an unacceptable quality of medical care, as anyone who reads the *New England Journal of Medicine* has seen documented again and again in the studies from Baltimore); and (5) how best to control this multibillion-dollar industry from a management standpoint, and how it could perhaps be ideally organized.

The CIM wanted to set up a system that could evaluate and monitor medical-care delivery organizations. We wanted to work with other organizations, particularly the foundations, in developing guidelines for

evaluating all avenues of medical-care delivery. We wished to look at the cost, and objectively monitor the cost and quality of medical care in Massachusetts in order to produce credible data — data that people could really believe. Dr. Burwell told you about the one to two per cent reduction in physicians' charges by the foundations, and the 12 to 15 per cent reduction in hospital expenses in San Joaquin. You will find that these figures have been challenged and are said to be partisan. Whether they are, in fact, correct, we do not know; but we do know that we need data. Management has learned this the hard way, and that is why it is spending so much money on computers. We need data if we are to have any sort of a sensible management system.

The Commonwealth Institute of Medicine directed its efforts to acting as a liaison among the medical community, insurers and government interests. Among its first actions, the CIM proposed to initiate comparative studies of various medical-care delivery organizations with the idea that they were to be evaluated relative to quality, cost effectiveness and appropriateness of care. To this end, we applied for a grant from the federal government, and we were not successful in obtaining the funds. Then, acting on the results of a feasibility study that had its genesis originally from the Massachusetts Medical Society, the Commonwealth Institute of Medicine developed a plan to cope with the challenge of controlling the cost of medical care. They proposed initially that this be accomplished through on-site, concurrent monitoring of hospital admissions and length of stay, in an attempt to reduce unnecessary hospitalization and hospital days. As a beginning, CIM proposed that this new program, called the Commonwealth Hospital Admissions Monitoring Program (CHAMP), be utilized to monitor the cost of Medicaid hospitalizations in Massachusetts.

What this all means is that the Commonwealth Institute of Medicine is trying to preserve the values of our traditional patient-physician relationship and the things that are good about our medical-care system, while maintaining quality and upgrading it wherever possible. We are striving for cost-effectiveness, not so much to lower the costs of delivery of medical care, but to spread more effectively the medical-care dollar so that more people can get better care.

In this little brochure, we said we would allow for the establishment of statewide guidelines but the actual review of cost and performance in peer review processes would be conducted at the local level, where, as Dr. Burwell has emphasized, there is familiarity with local facilities, records and problems. It seemed to us that if we could derive credible data and have them published, the findings from such programs as I have outlined

should provide sound, much-needed guidelines for social and political policy as it concerns any restructuring of our present medical-care delivery system. And a restructured medical-care delivery system will be a certainty, ladies and gentlemen, within the next two or three years, maybe sooner. I think it is readily apparent that neither the physicians, nor the planners, nor the politicians, nor the public have the information that is essential to make any radical changes. We may find that if we get good data, radical changes will not be necessary, and this would be, I believe, a great comfort to a great many of us.

The CIM brought the CHAMP proposal before the state and, out of the proposal, there finally came a contract on July 19, 1973 to monitor Medicaid hospital admissions for necessity of admission and length of hospital stay. There was a hard bargaining session with the state, its advisors and the officers of the Commonwealth Institute of Medicine before we finally arrived at the CHAMP contract. Now there is a contract between the state and the Commonwealth Institute of Medicine. These are the two parties, and they are both bound by this contract. I would like to go into the way the contract will work, the way this is to be set up, but I would like to remind you that currently neither the Commonwealth Institute of Medicine, nor the state, nor the hospitals, nor the physicians have any choice as to whether they will or will not accept the CHAMP concept. The only choice from a hospital standpoint is one of participation. That is, if the hospital wishes not to participate (and no hospital has refused), then, of course, it receives no payment for Medicaid, it gets no payment for its Medicare, and it must return all its Hill-Burton funds. Other than that it has perfect freedom of choice.

How is the system designed to work? This is the important element. It is designed to work by means of the peer-review mechanism. It is designed around the concept that only a physician can look at the performance of another physician, and that only physicians who are aware of what is happening in their own localities are really in a position to make judgments. This, then, is a physician-oriented program. The only question is: Can the physicians rise to the challenge?

The second important element that must be understood is that medical necessity is the primary ingredient to be considered at all times by all elements of the CHAMP program, and this has been agreed to by the state. No patient who needs to stay in a hospital is going to be denied the right to stay in the hospital if medical necessity demands it or if administrative necessity demands it, providing there is a medical necessity that supports "administrative necessity." These are vitally important concepts for us to understand and carry forward.

The same thing is true when it comes to questions about length of stay. Lengths of stay will have target dates set up, based on the statistical Professional Activity Study (PAS) guidelines at the 50th percentile of length of stay by diagnosis and age. But these are target dates, and what we are setting up is a "management by exception" system. The target date indicates that the length of stay for a hernia might be six days, and, if everything goes well, the patient will be out of the hospital at the end of five or six days. However, on the fourth day, 48 hours before the expected date of discharge, the coordinator in this situation will put on the front of the patient's chart a reminder to the physician stating, in effect: "We will expect this patient to be discharged the day after tomorrow. If it is impossible for this patient to leave within two days, will you please indicate that in the hospital record as part of your progress notes?"

It is not an unreasonable request that if a complication has occurred, quality of care would require that this finding be documented in the progress notes. The nurse coordinator, on her own initiative, may extend the length of stay to the 75th percentile. Beyond that length, she must consult her physician advisor, who will make a ruling concerning further hospitalization.

Who is the physician advisor going to be? The physician advisor is selected by the hospital's utilization-review committee. The name is forwarded to a regional review. (There are to be eight regions in this state, initially.) The regional committee forwards the name to the state CHAMP committee, and that committee appoints the physician advisor. To avoid this cumbersome mechanism, the hospital utilization-review chairmen are in the process of setting up criteria by which the committees themselves will be granted certification to appoint their own physician advisors.

What safeguards are there for the practicing physician, and for the public? A physician who differs with the advisor in any instance can appeal to the utilization-review committee, and then to the regional committee. These regional committees are to be set up by local foundations. There is, therefore, a local and out-of-hospital appeals procedure. The public is protected by this mechanism because the state committee includes two consumer representatives; the hospitals are protected because two of their top administrative people are on the committee. Committee membership also includes four physicians chosen by CIM, since the state has placed CIM at considerable financial risk on this program. It is going to take a great deal of money to make this program work. The state had a mandate from the federal government to establish a monitoring program or else lose federal funding for Medicaid. It seemed to the physicians of Massachusetts that we had better help the state accomplish this; if we did

not, the state would establish a completely state-oriented, state-controlled, in-house monitoring system, certain to be unacceptable to us.

There is a lot of what I call the "Fear-of-the-Dark Syndrome" going around concerning this whole program. First, it supposedly will create more work for the physicians. As I see it, the program should make less work for the physicians in the daily care of their patients.

Secondly, it supposedly will create more work for the utilization-review committee. I believe that this is likely to be true. There is a call from all segments of the medical-care delivery system for more intensive utilization review in hospitals. The Trustees, Administrators, Physicians (TAP) program of the Joint Commission on Accreditation of Hospitals and the Quality Assurance Program (QAP) of the American Hospital Association — both call for more expanded hospital utilization-review activities.

Finally, there is the fear — the silliest of all — that "some nurse is going to tell me how to take care of my patients."

The program is one of management by exception. The coordinator identifies the exceptions, the reasons for the exceptions; then peer review becomes operative. I think it is going to work. One of the things that encouraged us to enter into this program is the fact that the coordinator fills out a form at the end of the patient's hospital stay. This form goes into a computer base, from which we get data. Going back to CIM's original concern about having reliable data about the medical-care delivery system, if we can present credible information to the public, then I think we will have made a tremendous social contribution.

Blue-Shield Sponsored HMOs; The Cape Ann Plan

John Larkin Thompson

Egdahl: We have heard information concerning HMOs, the Harvard Community Health Plan and the Kaiser-Permanente Plan. We have heard about the comprehensive foundations out in California, how the San Joaquin and Sacramento foundations have a broad range of functions, some similar to those of HMOs. There are some really exciting things occurring in Massachusetts that are progressive and intriguing in terms of HMO development.

We have with us today Mr. John Larkin Thompson, president of Massachusetts Blue Shield. He is a graduate of Boston University School of Law, and he has a master's degree from the Columbia University Graduate School of Business Administration. Mr. Thompson is involved in many activities in Boston; he comes to us today, however, as the president of Blue Shield. Mr. Thompson is going to talk to us about one of the exciting new HMOs with which Blue Shield is working.

John Larkin Thompson: It is nice to have some good news for a change. I was a little bit late getting here this morning. The reason for the delay is that I was observing a presentation by Blue Cross and Blue Shield concerning the operation of the Medicaid program for persons over 65 years of age. It is rather startling news: We will be handling that part of the state's Medicaid claim system, and we expect we may be paying claims in another eight or nine days. I am sure that is startling news. Unfortunately, the program is just for the over-65. Maybe someday we can handle the whole thing for the state.

I am somewhat concerned about being up here to represent the Cape Ann program; in the audience today is the gentleman who has made this

whole thing work. His name is Mr. Gary Janko, and he is a particularly significant person in the dynamics of this program. Frankly, it is the remarkable dynamics of the Cape Ann program that I would like to explore with you this morning. I do not think that I am the person or this is the forum for a discussion on the benefits and detriments of HMOs versus other health-care delivery systems, or that it is even appropriate. I think I can, however, bring insight to the dynamics of one particular situation, and, hopefully, the lessons learned from that experience will have ramifications for similar developments within the state.

The Cape Ann Health Plan is the term we use for the program developed by a number of communities on the North Shore — specifically, the town of Essex, the city of Gloucester, the town of Manchester, Rockport Center, and the town of Rockport. We are talking about a population of some 45,000 people clustered on the coast of the Gloucester area. We are talking about a population of rather significant homogeneity as far as its age, financial background, and minority relationships are concerned. It is an area that can be analyzed for the provision of special medical services and programs — probably the ideal situation.

I think that I should also give you a little background on the Cape Ann Medical Center because this was the spark that brought about the development of the health plan itself. The Medical Center is a licensed clinic with full laboratory and x-ray services as well as an emergency room that can handle minor surgical problems. The creation of the Center led to a possible serious split within the medical community of that area. When the Center was completed, in July, 1971, many physicians in the community expressed concern that it would grow and prosper only at the expense of the local hospital. Since the Center was owned by the physicians who practiced therein, many people were of the opinion that profits from the lab and x-ray units were essentially funds that would have supported the local hospital. Some of my staff members, as far as that particular community goes, were somewhat unclear as to whether the local hospital could even have developed some of the ambulatory programs operating within the Medical Center. In any event, the majority of physicians in that community viewed the development of the Cape Ann Medical Center with substantial skepticism.

Physicians in that particular area are operating in very defined groups, along single-specialty, group-practice lines. The pediatricians, the internists, the obstetricians, the gynecologists, the general surgeons have all organized in this fashion in that community; we are talking about approximately 23 physicians in all who reside and practice in the community.

The Cape Ann Medical Center, as distinct from the Health Plan, is an office composed of various facilities and involving the participation of eight of the 11 internists who practice in that area. (The three internists of the Gloucester community who do not participate in the Center were extended the opportunity to join.) This is not a nonprofit organization; it is a profit organization.

In October, 1972, Blue Cross/Blue Shield began to discuss the possibility of a prepaid health plan in the Gloucester area. These discussions started with Mr. Kevin Dyer, the administrator of the Cape Ann Medical Center. At this time, Mr. Dyer, representing the staff of the Center, expressed the desire to include all of the physicians practicing in the Gloucester-Rockport area within the program. The ultimate plan for comprehensive health benefits would be to allow participation to all physicians in that community. That was a basic assumption from which no one ever wavered.

By December, 1972, a benefits package had been established, and in January, 1973, a budget supporting the program was completed by the staff of Blue Cross/Blue Shield, again in conjunction with the administrator of the Center. In addition, as the major elements of the program were being developed, potential organizational structures were considered.

In March, 1973, an organizational structure was agreed upon. With these factors in mind — a benefits structure, a budget program, and an organizational entity with which Blue Cross/Blue Shield could contract — it became apparent that it was now time to go out and discuss the whole matter further with the medical community.

Eight basic assumptions underlie the program:

1. The basic method of reimbursement would be through capitation to the Plan.
2. Blue Cross would pay all hospital claims.
3. The Health Plan would assume a level of risk commensurate with the size of the enrolled population.
4. Blue Cross/Blue Shield would directly underwrite the cost of emergency services occurring out of the geographical area, e.g., hemodialysis and organ transplants.
5. Blue Cross/Blue Shield would assume responsibility for all marketing functions involving their own subscribers.
6. A consumer advisory board would be established to provide an effective voice for the Plan membership as well as the lay community at large.
7. All physicians within the Plan would remain participating physicians with Blue Shield.

8. The primary inpatient facility would be the Addison Gilbert Hospital.

There are two options available as methods of recruiting the staff to provide these services. First, physicians from out of the area may be brought in and establish residence, thereby increasing the number of physicians practicing in that area. I think everyone in this room can appreciate the concern this approach would cause among the resident physicians in the Cape Ann area. I am sure you can all remember some of the very unfortunate conflicts that developed in communities not too far from here over the influx of outsiders coming in to provide medical care. This alternative was never seriously considered. Obviously, the second option — that of bringing all physicians into the program — was most sensible.

The president of the hospital's medical service, Dr. Walter E. O'Donnell, started on the program in March, 1973. A series of meetings was held with all the physicians in the Cape Ann area to explain the general proposal, how the plan would work, its advantages, its risks and all of the concerns about the program. It was repeatedly made clear at each of these meetings that even though Blue Cross/Blue Shield and the Center itself had been involved in protracted discussions for a period of almost a year, this was not an attempt to force a particular program on the community.

A model had been built, and the model would be seriously investigated and discussed. A number of proposals were made modifying that original model, and these meetings continued for some time. I think the Medical Center showed remarkable insight in recognizing the necessity of bringing together the medical community. It is interesting and encouraging that, out of this series of meetings, 25 physicians — 95 per cent of the total "primary physicians" of that area — decided to join this plan. To date, the plan has over 95 per cent participation by the resident physicians of all specialties within that community.

At these meetings it was also decided that the primary physicians, which we will for the moment define as those persons in the specialties of internal medicine, general practice, obstetrics and gynecology, pediatrics, general surgery and radiology, would be reimbursed on a capitation basis. This decision was made by the physicians themselves. Other specialties would be reimbursed on a fee-for-service basis since it was expected that encounters with these other specialties would occur less frequently. The other specialties included psychiatry, urology, dermatology, allergy, etc.

A board of directors was established and included representatives of each of the major primary specialties. These are the people who are being

compensated on a capitation basis, with no one specialty, regardless of the number of physicians in that specialty, having more votes than any other primary specialty. The board would be responsible to the incorporators of the plan and would be constituted by physicians representing the physicians being reimbursed on a capitation basis. They also decided that the administrator of the Cape Ann Medical Center would serve as the executive director of the Health Plan itself. Committees were then established within the physician community to look in far greater detail at the budget that Blue Cross/Blue Shield had prepared, the benefit package itself, the publicity, the brochures and all other aspects of the program before it went to the public.

It was through this committee effort that these physicians began working together in a dynamic setting, something they had never done before. From the input I have received from my staff and from the physicians I have met in that area, I think I can testify that even if the Health Care Plan had not amounted to anything, the need to discuss this plan achieved within the medical community a degree of cooperation that had never existed before.

Common ground was found on every single one of the points that I have mentioned thus far. The issues regarding administration of the plan, its general tone and its benefits were effectively resolved, as were methods employed by the medical community to present itself to subscribers. A peer-review and a utilization-review committee will, as a result, be set up to monitor all medical care rendered by the program. This committee will be representative of all major specialties involved in the program. A central medical-records retrieval system is now being developed and will be fully effective by the time the program is offered to the public at large. It is this unique system that will support the peer-review and quality-control mechanisms. The system will yield summaries of the patient's complete medical records. All inpatient and outpatient encounters will be recorded in one place. The summaries of these encounters will include the procedures performed, as well as related diagnoses.

While the Cape Ann Medical Center will serve as the headquarters of the plan itself, the participating physicians will still use their own offices, linked together by a special telephone system and, of course, by the centralized data-retrieval system.

I should like to point out that the subscribers to the Cape Ann Health Plan choose their primary physician from among the participating physicians in that community. Usually, he will be someone with whom they already have a substantial relationship.

A consumer advisory panel will be established within six months after

the Plan has been put into operation. It will consist of 10 subscribers to the program and five representatives of the community at large. To insure this implementation, this consumer panel will initially be appointed by the board of directors of the Plan; thereafter, it will elect its own members.

It should interest you to know how the funds flow within such an organization. Under the agreement between the Cape Ann Plan and Blue Cross/Blue Shield, a direct medical capitation is paid to the plan. Included under the services covered by this medical capitation are the costs of all medical and surgical services — outpatient, ambulatory, x-ray, physical therapy, home health care, and emergency services. The capitation levels are based on an expected four doctor-office visits per person per year. A band, so to speak, has been established above and below that, and within this particular band the Plan is at risk.

I mentioned earlier that there are some services for which the Plan has no risk whatsoever, and these are hemodialysis, organ transplants, and emergency services outside of the area. These services are covered by Blue Cross/Blue Shield.

I have been to a number of meetings within the last three years since I have been associated with Blue Shield, and at almost all of them a speaker is addressing the group in terms of an analysis of a particular health-care system, whether it be HMO, a foundation or the like. I am always somewhat distressed, since, it seems to me, everyone is trying to define a singular and identifiable entity that stands separate and apart from some other plan that may be just down the street. The Cape Ann Health Plan, I think, absolutely refutes that notion: Here we have a situation where what was originally an open panel became a *de facto* closed panel because so many people joined; and where there is capitation, but fee-for-service is also maintained when appropriate. Maybe the Cape Ann Health Plan should be noted for its schizophrenic approach to the delivery of health care. It bothers me somewhat that we cannot classify this Plan, but maybe there is a lesson to be learned from that. Perhaps we all spend too much time trying to classify these institutions rather than determining how they can better serve the public.

There are a number of particular advantages to this Plan that I would like to review at this point. One is the utilization of all in-place facilities; you are not always looking for substantial capital grants to build new facilities. A second point is the minimization of requirements for additional capital in order to provide the system of delivering comprehensive health care. Thirdly, and most significantly, there is a total utilization of in-place medical manpower; I mentioned earlier that some 95 per cent of

the physicians in that community had decided, in fact, to create their own HMO. Fourth, subscribers have a total freedom of choice in relation to community physicians, who will be identifiable to subscribers since we are not talking about new people, new faces, but about existing relationships and existing reputations. The fifth point is the comprehensive health-care benefit package that will be offered to all subscribers in that area; substantially broader in benefits than the existing Master Medical program, the price will be within eight to 10 per cent of the latter. And finally, as Dr. Ballantine discussed earlier, there is cost containment and quality enhancement through local peer review and utilization review.

We think this is a pretty exciting program. I am sure you can take this package and transport it to some similar environment in the Commonwealth. I hope you are aware that, although we argue the merits and demerits of various alternative health-care delivery systems, we will often be unable to determine the solution. We must extract the best elements of all worlds. I think that the Cape Ann Plan offers a good model for you to think about and try to develop.

Decentralization of HEW Programs

Robert E. Fulton

Egdahl: The final speaker this morning is Mr. Robert Fulton, who is director of Region One, Department of Health, Education, and Welfare. Mr. Fulton is going to talk to us about decentralization of HEW programs. I think that we are all very much interested in what is going to happen. We have heard about decentralization. What does it mean?

Robert E. Fulton: I am not going to make a speech; I am going to make a couple of comments. I would rather participate in the panel discussion. I will just say a very few things about the decentralization push within HEW. This is part of a federal effort of this present Administration to move program authority and personnel out of Washington and into regional settings. In early 1969, shortly after President Nixon came into office, a policy was stated providing for movement on decentralization, for common regional boundaries, for establishment of federal regional councils, and for a whole series of other activities aimed at amplifying and improving federal administrative processes. You may not have seen the effects of some of those simplification moves, but a great many things have happened and a great many more are still in the works.

Within HEW, the push for decentralization was not very strong until early this year, when Secretary Caspar Weinberger arrived on the scene. One of the first things he did was issue a directive that all agencies of HEW prepare decentralization plans, and he stated that the burden of proof would be on each agency and each program to establish the necessity for remaining under central administration at a national level. He gave some general criteria for programs that might qualify for that continued centralized approach. Since then, a great many decentralization plans have

been developed within the department. They are under varying stages of review.

In the health area, the first really major result of the Secretary's push was the movement of health-manpower programs to the regions. There is some question about the future of some of these programs. Developing them at the regional level may turn out to be a mixed blessing. We may be allowed to handle only close-out audits and the sort of thing that is not particularly exciting from an administrative standpoint. In any case, there are many lines of action underway on this, and in the regional office our staff and responsibilities are growing. We must confront space problems, personnel-service problems, and the like, in our attempts to satisfy just the administrative requirements.

I think decentralization is important only if it results in better services and more efficient use of resources. My ambition, as regional director, is fundamentally to bring about the better use of resources: to effect management improvements and strengthen the links of the various HEW resources, both within HEW and with other efforts that may be federal, state, or private in nature.

There are many exciting things occurring on which I won't dwell, and we have a terrific challenge. HEW is the largest federal department. It has now outstripped the Department of Defense in spending money. We have about one-third of the federal budget. We handle money that totals in New England alone something on the order of \$5 billion a year. These monies have major social and economic impact, obviously. I have been on the job now for six months, and I am trying to figure out the highest priorities and what I can do about them.

I want to comment on just a couple of things in the health area. We are about to have a reorganization of the regional components of the Public Health Service. There will be a strengthening of the role of the regional health administrator, over whom I have no authority; but I do have coordination responsibility for health programs.

"Health" is the first word of the title designated to the Department of Health, Education, and Welfare, and I have discovered since I have been here how appropriate a placement that is; health programs and health problems permeate the whole Department, even the Office of Education. That Office interacts with the health field in a number of areas, including, of course, student aid, and every other major part of the regional office has involvements with health. I have found that a great deal of my own time and that of my immediate staff is spent involved with health matters. We are now making major efforts, as some of you know from reading the

papers, to effect better enforcement of standards, particularly the fire- and life-safety standards of nursing homes. A great deal of energy is going into these projects in HEW and in the various state agencies that share these responsibilities.

I will close with what I feel is indicative of some of the problems we have in bringing about change. We are now talking in this region about setting up a new unit that would pool the staffs of all the agencies that are responsible for surveying and certifying health facilities. That responsibility is presently fragmented among the Public Health Service, the Social Security Administration in regard to Medicare, the Social and Rehabilitation Service in regard to Medicaid, and the Federal Engineering and Construction Agency in regard to construction standards. There are probably a few others that I can't think of off hand. In any case, we have developed a plan that consolidates the staffs involved with the survey and certification work. However, we have had some institutional resistance to this move, much of which shows a surprising intensity of feeling regarding administrative matters often considered mundane. I have in mind, in particular, the comments of one of our Public Health Service physicians who disagreed with the plan. He felt that locating the certification process is fundamentally a problem of medical ethics. I am trying to absorb this and understand what it means from an administrative standpoint.

The Morning Panel

Egdahl: Everybody appears to view risk-sharing differently. Do you think it is essential, Mr. Kahan, that the physician be at risk in order to have maximum economy in our health-delivery system?

Kahan: Yes, I think it is essential that the physician or the foundation be at a certain amount of risk. I know we will have arguments about what that amount should be — five per cent? 10 per cent? 15 per cent? 20 per cent? But certainly, the concept of the physician's being at risk is quite important.

Egdahl: Do you envision this for the near future or later, after experience with claims review has been obtained by your various foundation activities? In other words, is this something that is imminent?

Kahan: The reason that the Bay State Foundation did not immediately give full support for a sponsored comprehensive health-care package was that we felt that the physicians should be at risk. Because the physicians lacked the peer-review and utilization-review experience, we bought that experience. We are buying that experience through the pilot peer-review demonstration project, in which we are not at risk except in terms of a contract being cancelled or discontinued. If the physicians are willing, and I think they all are, to go for a comprehensive health-care coverage, then through better use of ambulatory services they can cut hospitalization costs. That is where the action is in terms of finance. They must be at risk and put their money where their mouths are.

Egdahl: Dr. Burwell, do you agree with that?

Burwell: Yes. I think that, in many ventures, if a financial stake in the outcome is arranged, there will be more effort expended to make it work. Of our better health-insurance plans, physicians tend to appreciate Blue Shield because it has not involved them in any financial risk. If Blue Shield went bankrupt, they couldn't care less. If physicians, however, are "part of the action," they will be forced to realize that the success of the system depends on their efforts. This involvement should provide the motivation to do a much better job. I think a certain amount of risk is a productive incentive in the system.

Egdahl: Mr. Thompson, you mentioned the word "risk" with respect to Cape Ann. If the physicians have too many office visits made to them during the year — eight, for instance, instead of four — do they receive less income or does Blue Shield cover those extra visits so the physicians don't lose personal income?

Thompson: To the extent that the utilization exceeds the level that they have agreed to, they stand at risk for a negotiated percentage over the agreed baseline. When we exceed that band, then Blue Cross and Blue Shield come back into participation.

Egdahl: Aren't you worried?

Thompson: It is a reasonable risk put upon them. What we are trying to do is to develop a level of awareness among the physician participants as to the cost ramifications of care, and the best way to make people aware of the cost is to have them share it.

Egdahl: Aren't you afraid that when the patient asks, "When do you want me to see you again, doctor?", the physician may reply, "Well, 10 years from now." That is called "underutilization."

Thompson: One of the things we intend to do, and we have been seriously studying this for some time, is to establish mechanisms determining whether the very serious problem of underutilization exists. I would like to believe, subject to dissent by everybody in the room, that physicians will determine the necessity of a patient's level of care on the basis of need.

Egdahl: Dr. Burwell wants to add to that.

Burwell: No, I would just like to ask another question, if I may, in regard to risk-sharing. If the reduction in utilization of hospital beds saves money for Blue Cross, who benefits? Where does this money go?

Egdahl: Do you split the savings with the doctor?

Thompson: Well, no, there is a split capitation: one capitation for the medical services and another capitation formula for the hospital services. But to the extent that the utilization is below the hospital capitation, then the Plan — and I don't mean Blue Cross/Blue Shield — the Health Plan does share in that savings.

Egdahl: Dr. Ballantine, you said that the Commonwealth Institute's role is to promote high-quality medical care and cost effectiveness. Do you think it is possible to be truly cost-effective without having the physician at some risk, or are you espousing at-risk programs?

Ballantine: No, as I said earlier, we are not going to engage in the delivery of medical care. The Commonwealth Institute of Medicine does not concern itself with physicians' fees in any way, shape or form. The CHAMP program is purely a hospital-utilization program. Where it will go in the future I do not know. I think that we would like to study things like the Cape Ann Plan in comparison to other programs — the Harvard Community Health Plan, for instance. But I must plead with Mr. Thompson and the rest of you to use the term "medical-care delivery organization" (MCDO), rather than "HMO" or something of that sort, in reference to these health-delivery plans. We would call the Cape Ann program an MCDO. We can identify the features of such plans and then contrast and compare them objectively.

Thompson: Dr. Ballantine, not to take exception to that particular name, this morning, in an attempt to describe Cape Ann, I came up with the term "HMOSF" — an HMO on Solid Foundation!

Egdahl: Dr. Ballantine, isn't it your principal function to get data and use it productively? Are you indicting the data quality of Blue Shield/Blue Cross, the data that now exist? What are you going to do with this data? Will you use a newer and bigger computer?

Ballantine: I think that the type of data we are interested in, neither Blue Cross nor Blue Shield has addressed itself to. We would like to have a data base that utilizes all input, whether it comes from government or private sources, related to cost effectiveness and quality of medical care. And just how compatible are cost effectiveness and quality? The two are intertwined.

Let us say that you identify a hospital where the length of stay for herniorrhaphy is consistently 10 per cent higher than that in any other hospital in the Commonwealth. Isn't it time now to examine the practice patterns of the physicians, see the way the hospital is set up, and find out why the longer length of stay? We might discover, in this case, for example, that the staff was not aware that there was in that hospital an unacceptable infection rate for clean cases. They're not hiding anything. It was just never brought to their attention. By delving further into such problems as length of stay, we may be able to identify quality problems.

I think that we need to bring this data together; as yet, there has never been anyone able to do that. We want this gathered data to have an authority that clearly indicates: "This is not Blue Cross data; it is not government data: It is Institute data." The Institute has broad enough representation that if it should say, "This is the way it looks," then that is the way it is.

Egdahl: Dr. Ballantine, let me ask you this question. There will be a great deal of data from the PSRO State Council, from the Bay State and other PSROs, from the Commonwealth Institute, Blue Shield and Blue Cross, John Hancock and other insurance companies, the federal government, and from Washington agencies. Do you envision the Commonwealth Institute as being a sort of repository of the generic data from which decisions about profiles and standards are made? Do you think a statewide PSRO Council will perform these functions, or do you envision them all duplicating one another?

Ballantine: In the beginning there will be many duplications, I believe, and we must wait to see how this shakes out. I think it would be unreasonable to expect every foundation to gather its own data on its own initiative. There should be one, central, data-gathering base — possibly a statewide PSRO Council, in which case CIM could fade into the background. I don't see a uniform method set up yet, however.

Egdahl: Mr. Kahan, what are your thoughts on this problem with data?

Kahan: I find it rather like the parson's egg: part good and part bad. I disagree with you, Dr. Ballantine, that it should not be the local or regional PSRO's job to collect data. However, I agree with you that terms used by all PSROs within the Commonwealth and, hopefully, throughout the nation, should be uniform, and I would look forward very much to CIM defining the terms. We still don't know how to define outpatient visits; we still do not even know how to define mortality rates. It was in your hospital some years ago, I believe, where they used to discharge all dead patients to the morgue, so you could never find out how many patients died at the Massachusetts General Hospital.

However, I think it is important that we still provide, within a uniform data set, enough flexibility in the state that various PSROs — maybe four, five or six PSROs — could experiment with the different potential systems that might be developed. We still do not know enough about prospective pre-admission certification, or concurrent review or retrospective review. I think there is a place for each and a different approach to each.

Egdahl: Mr. Kahan, where do you believe the bulk of data will reside? With the fiscal intermediaries like Blue Cross and Blue Shield? With the PSROs? With the PSRO state councils using that data? Or, do you see these in terms of duplication?

Kahan: I think they were talking about different sets of data.

Another matter, however, of practical concern, is that if the federal government is going to fund PSROs as they are obligated to do (they've also already funded Blue Cross/Blue Shield with a larger computer system or portions of their computer systems), I can hardly imagine them giving us money or additional funds to CIM or the statewide PSRO to develop separate computer systems. I think there will be pressure put upon us to utilize existing computer capabilities that have already been funded by the state.

Egdahl: Blue Shield has a large computer operation whose capabilities are broad. How do you view this, Mr. Thompson?

Thompson: I think Dick Kahan has put his finger on a problem that deserves more discussion — that is, the term "data" means different things to each person in the room. I find it hard to believe that any other organization — CIM, HMO, take your choice — would really want to get 20,000 claims every day and go over them again. It seems to me there is a tremendous need for the participants in this whole process to better un-

derstand what kind of data and what particular shape, whether it be summary or some other, will be sensible for the different levels of organization involved. As I said earlier and mentioned to one of the gentlemen this morning, "When there is a snowstorm and they can't deliver mail for two or three days, we get only 60,000 or 70,000 claims." To try to duplicate the capacity necessary to handle that type of load would be patently stupid. Blue Shield spends about \$7 million a year on just computer services alone, and I don't believe it is in anybody's interest just to try to duplicate these services.

Egdahl: You don't seem to agree with Dr. Burwell's statement, Mr. Kahan, that the physician should control the claims-processing situation?

Kahan: Well, if they want to, fine. Then I am going out to practice medicine.

Egdahl: Dr. Burwell, why do you want to control that claims processing? Blue Shield has Electronic Data Systems, Inc. (EDS), which is doing a good job for them.

Burwell: I am glad you asked that question. Actually, Mr. Thompson, Blue Shield doesn't process the data; EDS processes your data on a contractual basis. If you want to pin a name on it, Dr. Phillip Hempton of Florida has developed the term "fourth party" in health-care delivery. The first party is the patient; the second, the physician; the third party, the financier; and Dr. Hempton proposes that the fourth-party designation refer to the data processor, who is independent and has representatives from all of the others. I am intrigued by the thought the physician would be fairly dominant on the board of this fourth party, but it would have representation from the other parties as well. I think one of the big problems we've had in the past is that those who have handled the data processing have had special interests. We must have a common data system or bank, managed by an objective group, which serves as the source of data for everyone interested, whether it is the federal or state government, Blue Cross/Blue Shield, Aetna, PAS, etc.

Thompson: I don't want to be a pessimist, but let me just mention one experience of the past two or three years. There has been a nationwide attempt to structure a common claim form for all the carriers and also for the federal government. The American Medical Association has been in-

volved in this, and Blue Cross/Blue Shield have spent extensive sums toward this end; it obviously has some very attractive features. But each party involved is interested in different kinds of material and information. You may have found in a recent issue of the *AMA News* the little squib indicating that a common claim form has been developed and is now available; and the price is even given. That announcement is absolutely incorrect: An acceptable form has not yet been developed, particularly one that would prove useful to the carriers around the country. Dr. Burwell is correct: There has to be a better understanding of what constitutes necessary information. I am somewhat pessimistic as to when this is going to happen.

Egdahl: There are several questions relevant to the development of PSROs and the area designations that will soon occur. Following these designations, there will be federal monies appropriated to initiate and implement PSROs. There will be requirements concerning implementation, and most of you have seen the timetable developed in this regard. The question is, Mr. Fulton, what role does your regional office have with respect to the local PSROs and the State Council? Do you offer consultative services? Will you have an active role? What implications arise from the increasing strength of your office with respect to your responsibilities and the types of things we've been talking about today — PSROs, federal Medicaid and Medicare monies, etc.?

Fulton: At present, the staff of the regional office is engaged in developing recommendations of the area designations. There have been a series of hearings and meetings in each state to gather input from the professionals, from state-government people and from citizens. The first recommendations for New England have already gone to Washington, and they do not include Massachusetts; we are not yet prepared to submit the recommendations for Massachusetts or Connecticut. We have dealt first with the smaller states because it is a simpler matter; there seems to be fairly unanimous agreement that single-state PSROs make sense for the other four New England states.

On questions concerning what recommendation will be made for Massachusetts, when it will be made, when the Secretary of HEW will tentatively approve it for publication and formal comment, I'm not really clear. The logical sequence of events indicates that this would have to be done by about the end of November to meet the January 1 deadline for

designation of areas. There must be a period for public comment. After the areas are designated and we have begun the process of developing and funding PSROs, or, I should say, once we have achieved a formal federal connection (I know that the process is already at work in the area), there will be a major regional role in reviewing applications and enforcing regulations under development. As to the question of the State Council and how it will relate to PSRO organizations, it is my assumption and my expectation that the regional office will do the basic developmental work with the medical societies and the state governments.

I have not yet heard any discussion here about the interactions between PSRO and utilization-review requirements or with comprehensive health planning. One of my concerns is that we invent PSRO structures and organizations that overlay and supercede structures that already exist. Congress invents most of them, the administrative people invent some more, and medical professions have their own; the handling of data is going to be fundamentally affected by the way these structural relationships are evolved. I do not know which comes first: I guess it's a "chicken-egg" proposition. When the Blue Cross data bank is split five ways for Massachusetts, or however many PSROs we have, it seems to me that may create some problems for Blue Cross. But they really can't know how they are going to be called on for data until we determine the alignment of the structures. So there is a very important period ahead for federal, professional and state interaction. The regional office is obviously a key part of that.

Egdahl: It is important to elaborate on your last point. After area designations are finalized and each regional PSRO in the state is activated, you envision the HEW Washington offices as well as the regional HEW offices maintaining an ongoing relationship with not only the state agencies and rate-setting commissions, but also with the statewide PSRO Council and with each of the PSROs within the state. This relationship is encouraged through the interaction of resources and because of the complexity of overlapping functions.

Fulton: We would be responsible for providing the staff and the funding for the staff, and, I assume, also for assuring that the various regulations issued to implement the PSRO requirements are carried out. That is one of our problems at the moment. There are some 12 or 15 different procedural regulations in various stages of development, and as many task forces working on PSRO matters, each with a different aspect of PSRO. All of these will soon begin spilling out of Washington for comment and then, of

course, hurry-up implementation. As we move past January 1, the push to bring PSRO to an operational level will certainly be with us.

Thompson: I would like to add just one thing to Mr. Fulton's remarks. The contract Blue Shield has with the Bay State Foundation is going to bring insight into the whole problem concerning what reasonable amount of data can be meaningfully utilized by a review organization. I wish the contract had been signed maybe a year ago. Had that happened, the information they would now have made available would be extremely helpful in future planning for data processing, storage and retrieval.

Egdahl: Are there any other questions for Mr. Fulton from the panelists? Any reactions as to what constitutes a clearly enlarged role for regional HEW in terms of the tremendous complexity of this development?

Burwell: Just a general comment. I think we are entering a period of regulatory relationships unique in so many ways that it is going to be a challenge to all of us. I don't know how to avoid worrying about the impact of the next health bill in terms of health financing. Certainly, 1974 and 1975 are going to be, I believe, the years of the great debate on health financing, and, as if health affairs were not complex enough, we will probably change the financing system in the middle of the debate.

Egdahl: Do you think we have appropriate mechanisms in terms of organizations such as your foundation, the rate-setting commission, the statewide PSRO council, and the medical societies? Do you think we need new mechanisms, or will individuals just be getting together to work it out? Mr. Thompson was not very optimistic about that.

Burwell: I think we do need new approaches and we need to see the whole structural relationship in some coherent way.

Ballantine: I address myself to one question that Mr. Fulton answered in part. I think we have effective means of communication; there is no doubt in my mind about that. The problem does not concern a common data base; it does concern communication among individuals. I think our challenge is to make them work together. We have the organizational structure, but we don't have people talking to one another. When a state official calls the relationship between CIM and his department a strictly "arms-length business" and says, "There are porcupine quills on either

side" — when such an attitude prevails, it is pretty hard, I think, to look at cooperation with government.

A question that you had before, Dr. Egdahl, regarding bureaucratic interference, bears on this very thing. Ladies and gentlemen, you may think there is too much bureaucratic interference today, but "you ain't seen nothing yet." We must look at these things fairly and squarely. We'll have to acknowledge or discover what is to be acknowledged as the legitimate right of the third parties to information about the quality and cost effectiveness of the services they are paying for. And we cannot deny that right, in all fairness. You would ask it for yourself, and you do ask it for yourself if you pay your own bill. That is point number one.

Point number two, it seems to me, is whether you will be allowed this privilege. You are a small voice in the wilderness; there are many other people who are saying that the cost of medical-care delivery is too high, that the doctors are making too much money, that the hospitals are making a killing, and that there is no regulation. The bureaucracy is here to stay. This does not bother me too much. The question is, who will control the bureaucracy?

In the PSRO legislation and in the CIM contract, the state has said, in effect, "Look, we will set down the general rules and regulations by which you will play the game, but we will not set down individual rules and regulations for you. We will leave that to you yourselves." Most politicians will say that the medical profession is going to fall flat on its face, that it will be unable to get together, and that, because of the resulting administrative and managerial chaos, the state will have to step in to establish some semblance of order. The challenge to us is to develop a system whereby the physicians set policies for the managers, unless you wish the physicians to work for the managers. It is as simple as that in my book.

Egdahl: Dr. Ballantine, while you were talking, about seven or eight questions arose concerning the Commonwealth Institute of Medicine. What do you think will happen to CIM in terms of its functions once there are five effective PSROs in this state, with a good PSRO State Council and a National Council? If the foundations become active in negotiating contracts for peer review with Blue Shield, what then is the role of the Commonwealth Institute?

Ballantine: If that is the case, the Commonwealth Institute of Medicine could go back to studying the medical-care delivery system from the standpoint of the efficiency of medical-care delivery organizations. There

is also a strong possibility that it will fulfill the coordinating functions for the statewide PSRO Council.

Egdahl: You look upon it as an educational and research data arm of the statewide Council?

Ballantine: That is correct.

Burwell: In that the Commonwealth Institute has already demonstrated its effectiveness, I see the CIM assuming a much larger role. PSROs, even if they have as many as 2,000 physicians, are going to be incompetent in the performance of many required and complicated tasks. Establishing this common data system and working it out with all the interested parties would be a proper CIM function. The contracting — whether with the state on something like the Medicaid program, or with the federal government — should not be carried out by individual PSROs but by a statewide organization, a statewide quality-control type program. Although the individual PSROs can carry out such contracts, the comparison of one PSRO with another has to be evaluated by an agency or group like the CIM. In this particular state, where we have a rather innovative, abrasive citizenry, with everyone thinking he can do a little better than someone else, CIM has a very appropriate place.

Egdahl: Mr. Kahan, as director of an ongoing foundation, which will generate the largest PSRO in Massachusetts, how do you react to that?

Kahan: I certainly think that CIM has a future role, and I think I understand the concept of that role by and large. I am not sure that I agree, however (but this is really agnosticism rather than disagreement), that negotiations with the federal government, say under PSRO legislation for Titles XVIII and XIX (Medicaid and Medicare), will be or should be statewide. I think these contracts may well be negotiated at a local PSRO level. It would be wise, though, for the PSROs to work out a relationship with CIM so that we do not all go off in our separate ways, defining terms differently, for instance. I think it will be a difficult task. There will be some people from the foundations and embryonic PSROs who will be looking to CIM for advice. They'll want to use CIM, but on their own terms.

Egdahl: Mr. Thompson, there are a number of questions here about the Cape Ann Health Plan. Everybody is fascinated by how you managed to

get this rather unusual HMO developed. You said that people have a dual choice. Let's probe this further: Did the doctors choose to be on a capitation basis? Did the doctors choose fee-for-service? What percentage of the physician's practice is involved in the Cape Ann prepaid plan?

Thompson: The person I would point to for more information is Mr. Gary Janko, the young man who made that program work. He was up there constantly for almost one year. Anyone who really wants to get closer to the specifics should contact Gary Janko, because he really has them.

In response to your question: As it is related to me, essentially the men joined because of the approach taken. Like the reaction to anything new in life, the initial response is often determined by the desirability of that particular project. The physicians in that area were receptive.

Egdahl: Did they choose fee-for-service instead of capitation?

Thompson: They have chosen capitation in the "primary specialties," which are obstetrics and gynecology, general surgery, internal medicine, general practice, and radiology.

Egdahl: Why did they choose that rather than remain on fee-for-service?

Thompson: Well, I really can't answer that one, but it was their decision. As for the other specialties, which we expect certainly will be on a reduced-encounter basis, they decided on fee-for-service. They made these determinations, and it is appropriate that they should.

Egdahl: What alternatives do patients have in the Cape Ann area?

Thompson: When the program starts, and we hope to have it under way shortly, the Blue Cross/Blue Shield subscribers in that area will be offered a dual choice. They can select either to go on Master Medical, if that is what their present employer is offering them through the group plan, or they can select the Cape Ann Health Plan. If they do choose the latter, and at some later time become disenchanted with it, they do have the option to move back into the regular Blue Cross/Blue Shield coverage.

Egdahl: But Blue Shield itself expresses no preference when asked by the subscriber?

Thompson: We will market it by offering a pure dual option. And this is the standard we will follow throughout the entire state for whatever we may be marketing, whether an HMO-type plan, a foundation-type, etc. We will objectively explain the similarities or differences. In some areas there may be a triple choice; in the greater Boston area, for example, there is a Harvard Community Health Plan, a Bay State Foundation Health Care Plan, as well as just traditional Master Medical. The subscriber must make the choice, and we will do our best to inform him of the relative advantages of all the different systems. Everyone argues that the public should be offered alternatives. This is the best way to present it to them.

Ballantine: It is my understanding that you have something like 20 of the total 23 primary physicians in the Cape Ann area. If that is true, it seems a man would have to have some sort of Blue Shield contract to receive any medical care in that area.

Thompson: Well, 21 of the physicians will be participating in the plan; however, this participation will not constitute their entire practice. They have agreed to participate with subscribers to the plan, but these physicians will still have their regular, traditional practice for those patients not covered by the plan.

Ballantine: Is your general surgeon, for example, on capitation for all his services to a patient?

Thompson: General surgeons are on capitation.

Ballantine: Capitation for appendectomies, herniorrhaphies, as well as office visits?

Thompson: Yes, sir.

Egdahl: I would like to turn this discussion to the matter of confidentiality of patient-data profiles. There have recently been some books published on this subject, and it is a very interesting question. With all this data being stored and utilized by so many groups, how are we going to determine where the checkpoints should be and who is guarding confidentiality? Mr. Fulton, maybe you could start with that. You have regional HEW authority. We have the Commonwealth Institute, which has a state contract for reviewing Medicaid hospitalizations. We have the Bay State Foundation, with a claims-review contract with Blue Shield. Blue Shield

controls most of the data. Who is guarding confidentiality, or is it something that cannot be done if the use of data is to remain functional?

Fulton: That is obviously a system-design problem. The federal government, I am sure, will be under pressure to assure that confidentiality is maintained. There are gentlemen here at the table who are more familiar than I with methods of assuring privacy, but it does seem to me that a great many of the regulatory functions and the review functions that we have been talking about do not have to involve individual patient identification at all. Systems simply have to be established so that the confidentiality is maintained.

Kahan: I understand the problem, and I think we have every reason to be concerned. We must first recognize that there are different types of data. I am particularly concerned about confidentiality of individual patient data; aggregate data is less of a concern. I myself have encountered very few problems in regard to requests for individualized data. When I was director of research for Blue Cross/Blue Shield, I was involved a little with physicians' fees. I can recall only one or two occasions where Blue Shield had to say to a doctor, "I'm sorry, we can tell you your fees, but we can't tell you anyone else's."

Ballantine: In regard to data, the CHAMP contract reads as follows;

The CIM has the right to possess, maintain and publish such data as it deems necessary to its function provided, however, that such reports as required hereunder, and data deemed property of the state shall not specifically identify individual patients, individual health-care practitioners, or other individuals. Any data information shall be held in confidence and shall not be disclosed to any person except to the extent necessary to carry out the purposes of this agreement or, in such cases and under such circumstances as federal regulations provide to assure adequate protection of the rights and interests of patients.

The health-care practitioners are providers of health care. In other words, we are interested in broad data that will not be used to identify individuals or health-care providers. I think this is a part of confidentiality. To what extent a federal agency is allowed to invade the privacy of the doctor-patient relationship is the other aspect. The Internal Revenue Service recently, in the process of investigating the estate of a patient of mine who died, asked me very detailed questions concerning what I had told the patient about his condition prior to his death, how aware of his condition the patient seemed to be, and how well-informed the relatives were. Why should this be any business of the IRS? It is this type of probing that makes us all uneasy.

Fulton: Well, I won't try to defend the IRS. They may have had some justifiable reason for asking those questions, possibly related to the decedent's late medical expenses. In general, however, I see no reason for the federal government to involve itself in the details of the doctor-patient relationship.

Egdahl: This is a symposium on peer review, and we wouldn't be here if it weren't for the rising cost of health care. Congress became interested in quality of care because costs were rising tremendously. Therefore, my next question is: How does peer review cut costs? Please elaborate on how you expect to cut hospital costs 12 to 15 per cent. Physician peer review can cut off hospital payments, but allows the physician to order hospital services that follow. Since the physician generates 85 per cent of the health-care costs, how are you going to get the physician involved and break the slow circle of rising costs? Can we control health costs without having physicians maximally involved in the management system? Should physicians share in the financial risks of delivering health care? What are the effects of having physicians at risk?

Burwell: Some of the answers to these questions can be found in the data generated by the California foundations for medical care.

We can see exactly how peer review can reduce the cost of health care by eliminating unnecessary operations. If a physician is performing hysterectomies on normal uteri, he is soon told, "Doctor, your peers don't practice gynecology the way you do, and if you want to keep doing it, you will have to explain to the patient why payment will be denied you." He'll soon get the message. We have an example here in our own state. Blue Shield was honoring surgical claims for various thoracic procedures because the surgeon coded them acceptably. However, most of the claims were for inoperable cancer patients. Peer review revealed that the procedures should not have been performed in the first place. It's very hard for the computer to spot aberrant physician practice. Professional peer review, if performed efficiently, will spot it and reduce the cost of care accordingly.

Egdahl: Any other comments from the panelists on this issue?

Thompson: Massachusetts Blue Shield is in the process of installing a new and extremely sophisticated computer system, which is quite expen-

sive. This new system will increase somewhat the state's health-care costs. However, the computer will provide the capability for monitoring and developing the kind of information Dr. Burwell was talking about. I am troubled when we speak about peer review only in terms of cost. I think this stance is unfortunate and not entirely fair to the physician. The public is concerned when they hear about the "poor quality of care." They hear this so frequently that they are not willing to accept higher costs.

Egdahl: Mr. Kahan, would you like to conclude our discussion of this subject?

Kahan: We have been talking about peer review in a global sense, but our focus should be on inpatient peer review and outpatient or ambulatory-care peer review. The former is done concurrently, and the latter retrospectively. Concurrent inpatient peer review could discover, for example, that patients are being kept in the hospital longer than necessary; costs could be reduced. Complicated circumstances, however, might be overlooked using concurrent review. Retrospective review for ambulatory care is currently in practice in conjunction with Blue Shield and the Bay State Foundation. Its advantage is that we are able to look at general patterns of practice. It would be impossible to take one specific Blue Shield claim and say, "For this diagnosis, the services provided were or were not necessary." There just aren't the necessary data available to make this kind of judgment. The medical record would be unavailable and precise judgment impossible. But from a physician profile, we might find, for example, that Dr. John Doe has 50 patients, all of whom he is treating similarly. While each specific case could be correct in appropriateness of care, the total practice pattern is inappropriate. It is highly unlikely that every patient has to have both the left and right foot x-rayed, or that every patient must have at least three EKGs a month. It just doesn't make sense, and the properly programmed computer can identify these practice patterns. If this review is effective, I think a contribution to the quality of care will be made. The money saved may not be significant, but identifying the physician who exhibits such behavior is significant.

Egdahl: This morning we have concentrated on health-care financing mechanisms. The panelists have made many excellent points that will stimulate our thinking for some time to come. Furthermore, our speakers have identified the problem of aberrant physician practice, which does not relate significantly to cost reductions, but is highly relevant to the quality of care problems.

The Afternoon Session

Daniel S. Bernstein
Moderator

Conceptual Framework of the Standard-Setting Process

Paul M. Densen

Daniel S. Bernstein: The first speaker this afternoon is Dr. Paul Densen, director of the Harvard University Center for Community Health and Medical Care. He will be talking primarily about standard-setting and -monitoring, and health-care research. Dr. Densen has had a long and distinguished career in public health in New York City, rising to deputy commissioner of health. He has been at Harvard since, and is an outstanding authority on the problems of standard-setting and uniformity of records.

Paul M. Densen: When Dr. Bernstein asked me to talk about the subject of peer review, I asked him to change my subject slightly because it seems to me that any process of peer review cannot be effective in the long run nor be meaningful in advancing the quality of care and controlling cost unless it is done within some conceptual framework of the standard-setting process.

As an example, let us look first at the way in which standards have been changed over the years with regard to myocardial infarcts and their length of stay in the hospital. Several generations ago, a hospital myocardial-infarct case was kept in bed just as long as possible. If one were judging the quality of care for such cases at that time, one would have thought that the physician who had this patient walking in a short time was incorrect. Since those early days, there has been research on the homeostatic mechanisms involved in circulatory conditions. Today it is clear that, in the absence of other complications, it is advantageous for the patient to be up and walking around within a reasonable period of time. Yet, even today, if you look at the length of hospital stay for cases of myocardial infarcts, you will find that there is an enormous range. According to the data

of the Commission on Professional and Hospital Activities, nearly 16 per cent of patients between the ages of 50 and 59 stayed less than 8 days, and slightly more than 12 per cent had stays of more than 28 days. About a third of the patients stayed between 15 and 21 days, and about 21 per cent between 22 and 28 days. Now what can we say about the proper length of stay of myocardial infarcts in the face of this kind of variability? How should one go about setting standards for recertification?

Fortunately, we now have some information that seems to point to a solution. This information was derived from a carefully controlled trial of early mobilization and discharge from the hospital in uncomplicated cases of myocardial infarcts. The paper was published in *Lancet* ("Early Mobilization after Uncomplicated Myocardial Infarction — A Prospective Study of 538 Patients," 2:346-9, August 18, 1973) by the Medical Division of the Royal Infirmary in Glasgow. Cases of uncomplicated myocardial infarcts were carefully defined, and those patients were kept in the hospital for seven days. Then, they were randomly allocated to "long-term stay" and "short-term stay" cases. According to the article, all of the patients were "matched on admission to the hospital" and all were encouraged to return to work one month after discharge. Eight months after each discharge, the results were analyzed. It turned out that the "short-term group" fared no worse than the "long-termers" with respect to mortality, complication rates, ventricular aneurysm, or disability upon return to work. Of course, there is a great more detail in the paper, but the point here is that the information necessary for standard-setting is going to come from expert opinion that prevails at the time, and experimental evidence.

We should be aware of the fact that we have this kind of mixture. That is not to say that we should not set standards either within our own operation or on a wider basis, depending on what society thinks ought to be done at that particular point in time. But even within a given hospital — in the utilization-review committee's operation — we find a mixture of these two kinds of judgments being made on individual cases. It is important to recognize the assumptions on which standards are based, and, at the same time, make it a part of the operating program to institute the necessary research required to develop a rational basis for the setting of these standards. That is a never-ending process. The point I am trying to make is that unless one systematically provides for this kind of research over a period of time, the standard-setting process becomes sterile and doesn't really advance. This is why I think that any standard-setting mechanism must be accompanied by research as an integral part of the ongoing process, not as some esoteric side issue.

Let me take another example of this point. These days we are all concerned with Professional Standards Review Organizations. What are the implications of these ideas for the operation of PSROs? Again, I think the best way to illustrate my point is take an actual example. Dr. John Wennberg has been developing some data for the state of Vermont that show the enormous variation throughout the state in the supply of medical resources and in the utilization by the public. The data are particularly interesting with regard to tonsillectomies. In the northern section of Vermont, the likelihood of having a tonsillectomy by age 24 is about 20 per cent; in middle Vermont, the comparable figure is about 53 per cent; and, a little further south, the chance of having a tonsillectomy by age 24 is also 20 per cent.

If a Professional Standards Review Organization is faced with this kind of variation for a state, what should their standards be? Do they add up all the numbers, divide by three and take this as the standard? Or, should the standard be such that the probability of having a tonsillectomy by age 24 is 53 per cent? Or 20 per cent? To some degree, it is obviously an arbitrary decision based upon the best available knowledge and the needs of the state.

One suggestion is that all tonsillectomies should be approved by a board-certified pediatrician. At least this has the merit of having someone presumably knowledgeable of the problems related to this kind of case making the decision. And, the same standard of care for all children throughout the state would be insured. However, another effect would be a reduction in variability: Each tonsillectomy would be relative to the average. This is a mixed blessing because, if we think for a moment, we will recognize that the wheel was not invented by an average man. Somehow we have to make provision for the person who wants to strike out in new directions; if we don't, we are not going to make any progress.

Again we are back to the fact that in the daily operation of setting standards, it is necessary to be arbitrary because we just don't have all the necessary knowledge. In addition to operating on a daily basis, we also want to set a long-range policy to test the assumptions of the daily operation. In this way, we can provide for the individual who has a new idea and wants to try it out. It is put into the long-range research approach and tested.

I would like to illustrate the whole process with an allegorical story that I think demonstrates the concept rather well. To do this, I have to go back to the 1830s in this country, when there was a devastating yellow-fever epidemic. At that time, the city of Philadelphia had a health officer. The

population started screaming to have something done about these deaths from yellow fever, and the health officer, being conscientious, did his best: He consulted the experts; he read the textbooks; and the answer he found was to shoot off a cannon. If we look at the literature of that day, this is exactly what was recommended to control epidemics of yellow fever. So, he shot off the cannon, and sure enough the epidemic of yellow fever began to decline. He was very pleased with himself, and so was the population. They were so pleased that they doubled his salary in the next year. But the health officer looked across the river to Camden, New Jersey and discovered that no cannon was fired there and the epidemic lessened just the same. He looked a little bit further and discovered that elsewhere the cannon was shot off, and the epidemic kept right on increasing. Obviously, what happened was that the health officer was just plain lucky. He shot off the cannon at the top of the epidemic curve in Philadelphia. Being a good health officer, he realized that his, like all operating programs, was based on an assumption. I have no objection to operating on the basis of assumptions. What I am pleading for in conceptualizing this standard-setting process is the recognition of the fact that we will always be operating on assumptions. To make this story end properly: Of course, the health officer instituted a research program, and today we know of the role of the mosquito in causing yellow fever. This knowledge resulted in a rational basis for the control of yellow fever.

Exactly the same process is still going on with regard to myocardial infarcts. The patient in the hospital used to be kept in bed. It was the obvious thing to do. This is an assumption. Later research revealed, however, that to establish collateral circulation, the patient should be ambulated. Standards are bound to change from time to time as knowledge changes. But at any one time, the information affecting standard-setting is going to be a mixture of two things: scientific evidence and expert opinion.

I would like to suggest that in establishing these curious organizations called PSROs, whose roles are not yet clearly defined, there be at least two facets of the operating program.

One is that it be based upon standards that are founded upon the knowledge available at the time. This knowledge is going to be a composite of expert opinion and scientific evidence. In this area, I think the utilization-review committees in the hospitals can play an extremely important role because they know what current practice is. This is sometimes based on scientific evidence and sometimes on expert opinion. Particularly in the chronic diseases, it is more likely reliant on the latter than on the former.

The second component of the PSRO operating program should be to ascertain that research is instituted to improve these standards. This is not the same as saying that the PSRO will do the research. This is unlikely, if for no other reason than the fact that the daily operating responsibility alone is a huge task. But, as a management process, PSRO must recognize its responsibility to see that research is carried out in accordance with the assumptions on which its program is based. The plea that I want to leave with those of you responsible for setting up PSROs is to not move this responsibility into the academic areas.

If we again think about the simple problem of tonsillectomies, there is very little relation, currently, between whether or not the child has a tonsillectomy and the subsequent health of that child. I am not saying there isn't any relationship between the process of care and the health of that child. When we get into the chronic-disease area, the relationship between the process of care and the health of the patient is even more nebulous. But these are the kinds of problems with which PSROs will be faced, and I think they can discharge their responsibilities well if they recognize that they have these two basic areas to deal with. But it will be necessary to conceptualize the standard-setting process in some general framework of this kind.

Hospital Length of Stay

Paul M. Gertman

Bernstein: It is important to reflect often about the concept that medicine is a mixture of both art and science and that as physicians we are very artful and, at times, not scientific. We must apply hard data that will be derived from the practice of medicine so that physicians can deliver care of the highest quality.

The next speaker is Dr. Paul Gertman, chief of the Health-Care Research section of the Evans Memorial Department of Clinical Research at University Hospital and also an assistant professor of medicine at Boston University School of Medicine.

Paul M. Gertman: To those of us concerned with peer-review systems, length of hospital stay is an important consideration for two principal reasons: First, the principal motive of third-party payers (federal, state and private) in backing peer-review development has been primarily to reduce hospital length of stay, thereby reducing total expenditures for medical care. Second, hospital-length-of-stay statistical profiles have been in the past, and are proposed to be in the future, the principal device for screening hospital discharges for peer and utilization review. Therefore, it seems incumbent upon us to develop a better understanding of this key measurement of the operation of health care systems.

In the few minutes that I have this afternoon, I would like to briefly explore a few selective points about hospital-length-of-stay data: First, the compilation of length-of-stay norm data, particularly with relation to Professional Activity Study percentiles such as those being used in the CHAMP program; second, some validity and classification questions about these data; third, the appropriateness of hospital utilization and its

relationship to length of stay; and, finally, the implications of these topics to the development of effective peer-review mechanisms.

Let us start first with the data base for measurement of hospital length of stay. Over the past few decades, several public and private organizations have developed extremely large data bases on hospital length of stay by diagnosis through the use of computer-format discharge abstracts. In addition to collecting data on the primary diagnosis and length of hospital stay, most of these systems have also included information about the age of the patient, whether the patient has had an operative procedure, and whether more than one active clinical diagnosis was present. From these data bases, a vast array of tabulations and statistical analyses of length-of-stay information has been obtained.

The largest of these data systems is the Professional Activity Study of the Commission of Professional and Hospital Activities in Ann Arbor, Michigan. Over 25 per cent of the hospitals in the eastern United States, representing approximately one-third of the total short-term, nonfederal hospital beds, are in the PAS system. PAS provides individual, regional and national analyses of their data. Table 1 illustrates the type of data that PAS produces. This table of hospital lengths of stay represents data for the eastern U.S. on the primary diagnosis of ischemic heart disease (the Number 1 ranking discharge diagnosis in the country).

I would like to touch briefly upon several of the problems associated with the data contained in this type of table. I am particularly concerned with information contained in the 75th percentile of length of stay (the principal screening cut-off point used by many utilization-review groups). I would also like to talk about the validity of some of these data. Independent evaluations have shown that patient age, occurrence of an operative procedure, and number of days in the hospital are fairly reliable and validly recorded and transferred into the discharge abstract systems. However, in the organization of PAS and other data systems, a crucial bit of information is the listing of the primary diagnosis related to the patient's hospitalization. In this area, there have been some serious problems. Independent examinations of the validity of the primary diagnosis on the face sheet of the hospital chart (which is the key item entered into the computer discharge data system that makes up the data base leading to these types of tables) have shown that the principal diagnosis may be incorrect on as many as 40 per cent of hospital face-sheet records. Nationwide surveys by the National Center for Health Statistics have indicated that the minimum national average for errors in the principal diagnosis probably runs from 12 to 15 per cent and these are gross errors

TYPE OF PATIENT (1)	TOTAL PATIENTS (2)	AVG. STAY (3)	VARIANCE (4)	PERCENTILES						
				5th (5)	10th (6)	50th (7)	75th (8)	90th (9)	95th (10)	99th (11)
1. SINGLE DX										
A. Not Operated										
0-19 YRS	6	4.5	4	1	1	4	6	7	7	7
20-34	109	7.8	37	1	2	6	10	14	16	22
35-49	1057	8.3	34	2	2	7	11	18	19	29
50-64	1872	8.7	40	2	3	7	11	17	21	33
65+	1599	10.1	57	2	3	8	13	19	23	40
B. Operated										
0-19 YRS	3	10.3	162	2	2	4	25	25	25	25
20-34	21	5.5	32	2	2	3	6	12	13	25
35-49	328	5.3	37	2	2	2	5	15	19	28
50-64	454	6.3	62	2	2	2	6	17	22	39
65+	72	11.4	148	2	2	7	16	24	45	59
2. MULTIPLE DX										
A. Not Operated										
0-19 YRS	17	14.4	279	1	4	10	16	29	72	72
20-34	262	8.6	31	2	3	7	12	16	20	25
35-49	4460	10.9	55	2	3	9	14	21	24	33
50-64	14508	12.0	85	3	4	10	16	22	27	39
65+	28258	14.1	103	3	5	12	18	26	33	57
B. Operated										
0-19 YRS	3	8.3	30	2	2	11	12	12	12	12
20-34	49	9.6	79	2	2	7	12	25	28	39
35-49	789	10.3	115	2	2	6	15	24	32	51
50-64	1910	14.3	176	2	2	11	20	31	40	65
65+	3199	21.2	221	4	7	18	27	42	52	84
SUBTOTALS:										
1. SINGLE DX										
A. Not Operated	4643	9.1	45	2	3	7	12	17	21	34
B. Operated	878	6.3	61	2	2	2	7	17	22	39
2. MULTIPLE DX										
A. Not Operated	47505	13.1	88	3	4	11	17	24	30	50
B. Operated	5950	17.4	209	2	2	14	24	37	47	76
1. SINGLE DX	5521	8.6	49	2	2	7	12	17	21	35
2. MULTIPLE DX	53455	13.6	104	3	4	11	18	26	33	56
A. NOT OPERATED	52148	12.8	86	3	4	11	16	24	30	49
B. OPERATED	6828	16.0	204	2	2	13	22	35	45	73
TOTAL 0-19 YRS	29	11.3	190	1	2	7	12	25	29	72
" 20-34	441	8.3	38	2	2	7	11	18	21	30
" 35-49	6634	10.1	60	2	2	8	14	20	25	34
" 50-64	18744	11.8	78	2	3	10	15	23	28	43
" 65+	33128	14.6	118	3	5	12	19	28	36	61
GRAND TOTAL	58978	13.1	100	3	4	11	17	25	32	54

Table 1: PAS-type data.

of major misclassification, rather than simple judgmental questions about whether a patient had a mild myocardial infarction or severe chest pains. None of the major discharge abstracting services that provide hospital-length-of-stay analyses have ever performed a direct nationwide re-audit of the principal diagnoses recorded in the medical records forming their principal data base. Thus, it is not clear whether the length-of-stay measure provided for a given diagnosis, such as represented in Table 1,

signifies a reasonably accurate measure of length of stay for a given diagnosis, or whether it may be grossly incorrect and represents a fictitious picture of practice. Many of the operators of the discharge abstract systems have stated that they believe the errors will cancel out and that these types of data analyses are accurate; but this has been only a hope because they haven't wanted to take a further analytical look.

Another major problem in this type of data base is whether secondary diagnoses, which may be representative of patients with more severe or critical problems, are recorded on the face sheets and then put into the computer abstract form that forms the data base for these analyses. If one looks at the 75th percentile column for patients with single diagnosis of ischemic heart disease with no secondary diagnosis, the acceptable 75th percentile level for review might be 12 days. However, if multiple diagnoses are listed, the 75th percentile cut-off point for potentially approved length of stay would be 18 days, or a 50 per cent increase for this principal diagnosis. In using the average 75th percentile level, which is 17 days (listed at the bottom), one finds that this may not be a particularly useful number. Individuals hospitalized for a simple ischemic cardiac disease problem would be approved for a longer length of stay than they might need, while individuals with severe or complex problems (reflected by multiple diagnoses) who may seriously need to be in the hospital for a longer-than-average period of time, might be selected for audit by the third-party payers and possibly be denied payment of their fees. To some of you, this discussion of classification of diagnosis and sources of error in hospital length-of-stay data base may seem like technical jargon. However, if the measures used for judging how long patients would be allowed in the hospital are seriously inaccurate, either for payment purposes or peer-review screening purposes, then ensuing technical problems may create a serious detrimental impact on effectiveness, cost and time investments of providers.

I would like to move on to what I believe may be an even more important issue with regard to hospital-length-of-stay data and data bases. These data bases have provided normative patterns for comparative review of individual hospitalizations. It has been suggested for many years that patients whose lengths of stay deviate significantly from these normative patterns may represent the primary source of unnecessary utilization. This is why these statistical measures of length of stay have been used by many utilization-review committees and other peer-review screening activities to select out cases by exception. However, this statistical approach is essentially a measure of norms and deviance from norms — it is

not a measure of appropriateness or inappropriateness of hospital use. Although significant deviance from these norms may have a higher correlation with some degree of inefficiency or inappropriateness of hospital use, this possibility has never been fully documented.

In order to explore this issue, two years ago in Baltimore, several of my colleagues and I conducted a pilot investigation of inappropriate hospital utilization and its relationship to length of stay. The study showed that 54 per cent of all inappropriate days were related to delays in performing or in receiving the results of diagnostic tests. In addition, it was found that 40 per cent of inappropriate hospitalization days occurred in cases where the total length of stay was one week or less, and 67 per cent of all inappropriate days occurred where the total length of stay was 12 days or less. A basic statistical measure that review committees might utilize in screening cases is whether the length of stay by diagnosis was more than one standard deviation from the PAS mean for all cases in that diagnostic group. PAS even provides a special printout to member hospitals in these cases. In the Baltimore study, it was found that 98 per cent of all inappropriate days occurred where the length of stay by diagnosis was within one standard deviation of the PAS mean, which is their definition of a normal length of stay. And, 72 per cent of the inappropriate days occurred in cases where the length of stay by diagnosis was within one-half standard deviation of the mean.

There are several potentially important implications of these pilot-study data: First, the study indicated that a majority of inappropriate hospital use (after the fat is cut away for inappropriate admissions and discharge delay problems) may be produced by a large percentage of the patient population being hospitalized only one or two days more than necessary, rather than by a small group of patients with many days of unnecessary stay. This should not come as a surprise to most of the practicing physicians here in the audience. Second, a majority of inappropriate hospital use may be the result of inefficient scheduling and poor performance of diagnostic services. Rather than peer review, the application of modern management techniques (such as operations research) to our hospital systems, and particularly to the support services, might produce a greater reduction of unnecessary hospital utilization. Third, the study indicates that much inappropriate hospital use occurs in the early and middle part of the patient's hospital course. Thus, measures (such as recertification), aimed at reviewing the terminal part of a patient's hospital stay may miss the bulk of unnecessary utilization. Finally, the data of this preliminary Baltimore study suggest that inappropriate hospital utilization is only poorly correlated with absolute length of stay in the hospital. And,

more importantly, there is no true relationship between the number of inappropriate days in an admission and the deviance in length of stay from the PAS mean or any other percentile statistical norm. This raises some serious questions about the validity of statistical length-of-stay measures, such as the basic screening mechanism, in controlling unnecessary hospital use and in reducing cost, and the advisability of investing many millions of dollars in building these length-of-stay data bases for this purpose.

A final subject to consider briefly is the relationship between quality of care and hospital length of stay. Special research studies judging quality of care on the basis of so-called process criteria have consistently shown that the major problem is not overutilization, but rather consistent underutilization of appropriate diagnostic and therapeutic services in the care of hospitalized patients. Studies have shown that anywhere from one-eighth to one-third of patients admitted may have received suboptimal amounts of services in the hospital as judged by these process quality criteria. For example, a study by Dr. Payne of the University of Michigan found a 27 per cent net underutilization of total diagnostic and therapeutic services. Thus, it is indicated that the application of quality-of-care process criteria review probably will not lend itself to a decrease in utilization of hospital health services, but rather may lead to an increase.

In summary, I would like to make the following points: First, if a region is to develop an effective data system for examining hospital services by diagnosis, particularly in terms of utilization and length of stay, it is critical that physicians pay close attention to the provision of information with respect to both the principal diagnosis and to additional clinically active diagnoses. Each utilization-review committee and local PSRO should develop, from the outset of its activities, an internal system to audit this critical information upon which all other data analyses are based. Second, the bulk of inappropriate hospital use probably results from small amounts of unnecessary utilization in a large number of cases and is unrelated to hospital length of stay. This means that a screening process to pick up statistical exceptions will probably overlook the vast majority of unnecessary utilization of hospital bed days. Third, after gross inequities and bad *ad hoc* activities have been dispensed with, the bulk of unnecessary or inappropriate hospital bed use is probably related to factors such as the organization of hospital diagnostic-support services and the availability of extended-care and nursing-home beds, which are directly under the control of the physician in the PSRO. And finally, it is likely that peer review for quality of care will increase total utilization of hospital services.

Hospital Association Programs for Quality Assurance

David M. Kinzer

Bernstein: The next speaker, Mr. David Kinzer, has just arrived in Massachusetts and has already learned a lot about the myriad of problems with which he has been faced in the brief time that he has been here. As president of the Massachusetts Hospital Association (MHA) and from his experience as a past executive vice-president of the Illinois Hospital Association, he is very familiar with the data presented.

David M. Kinzer: Dr. Bernstein mentioned one credential that I do have. I have very few for this presentation. Let me begin with a disclaimer on this general subject of PSRO and then finish with an addendum to the brief credential he gave.

First of all, my disclaimer is (this has been misunderstood widely) that as a representative of the hospitals of Massachusetts, I don't want to run PSRO. Some people think that the Massachusetts Hospital Association, as hospitals, want to run it, and part of the misunderstanding relates to the fact that the American Hospital Association came out with a program called the Quality Assurance Program (QAP). QAP was a model for internal monitoring and organization of the hospital peer-review system, but it wasn't intended to be a means of capturing the system.

To carry this point a little further, if the law had stated that hospitals should oversee PSROs, I still wouldn't want to run them. Even if the government gave us a lot more money than it would actually cost, I still wouldn't want it. My point here, and I feel most strongly about it, is that this is a professional game, and, as institutions, we have an obligation to cooperate and do everything in our power to make it succeed on grounds other than those that originally motivated the legislation. I am talking

about the issue of quality of care. PSRO is going to go right down the drain unless we, as physicians and hospitals, can prove ourselves qualitatively. The economists are going to say, "Well, you didn't save enough money." And I couldn't agree more with Dr. Gertman about what's going to happen. It isn't going to save a lot of money and, if it's run properly, it may even increase utilization of hospitals because of the underutilization of diagnostic services. There are a lot of people not getting the care they need.

Now let me make one point, and I will argue with any physician in the room about it. One of the most basic issues is whether or not we can maintain the hospital medical staff and the utilization-review (UR) committee as the basic building block, or keystone, of our PSRO monitoring system. If we don't, I believe PSRO's won't work. I am absolutely convinced that this is true, based on my experience in Illinois.

The real problem — and this is one of the issues previously raised by our association and now by CHAMP — is that it is quite difficult to ask a physician, who is a busy man anyway, to spend time on a hospital UR committee only to be second-guessed by an outside mechanism. Sooner or later, he is going to abandon the committee if it requires too much of his time. I have talked to Dr. Ballantine and Mr. Kahan and many of the new people I've met since I have arrived, and I do think there's a basic understanding on this point. The effort in Massachusetts is not to subvert the hospital UR committees, but to make them stronger. In the spirit of what I said earlier, we are trying, with Dr. Ballantine and the Commonwealth Institute's executive director, Mr. Richard Beckman, to make CHAMP work as well as we can and strengthen the hospital UR committees. We all know of some UR committees that are quite competent, but a lot of them are mediocre, and some are really nothing more than paper organizations. I feel that as a hospital group, part of our responsibility in quality assurance is to do all we can collaboratively with organized medicine to strengthen this component of the medical-staff organization and the hospital, and I don't separate those two elements.

Presently, many problems are apparent in the general structure of peer review. PSRO, cost controls, and quality assurance are all getting mixed together. As a representative of hospitals, I have a couple of crass motives. One is concerned with economics — the real threat is economic because currently the motive of federal legislation is economic. The second motive is that after we have gone through this stage in our development, we will still have hospitals that can only function if there is a viable medical staff. What good is a hospital without a competent organization of doctors? And, if the control of operating hospitals is far removed, we will have

buildings — bricks and mortar — and equipment, but I am not sure we will have quality assurance.

In the country as a whole, physicians, hospitals, and all others in the health field have been preoccupied during the last six or eight months with organizing and preparing for PSRO. In our state, we have pilot projects like CHAMP, which is monitoring the Medicaid hospital caseload. At the same time, there are proposals in Washington that could be enacted and implemented long before we ever get PSRO going. One of these is a new proposal that comes under economic stabilization and is called Phase IV. This is so important that, during the next month, the Massachusetts Hospital Association will be going to regional meetings across the state to explain its implications to boards and to key members of medical staffs. Phase IV is an economic control concerned with the cost of the total hospital admission rather than with the cost or charges of separate services ordered by physicians. Economic control will apply to cost per admission as well as to income per admission. I am not going to give you all the details, but there has been a "corridor" put in (Washington uses the term "corridor") to allow for reduction in stay as a result of peer-review activities. If the number of admissions or total hospital census goes down, there will be some "give" on the hospital's allowable increase in cost or income per admission because, as we have fewer patients, the average cost will, of course, go up.

I believe that Phase IV will act as an incentive to reduce the amount of care given. Also, possibly through the hospital administrator's office, it might be used to somehow (and we don't know how this can be done in most situations) persuade physicians to prescribe less or, if we really get something difficult or expensive, to refer it to Massachusetts General or some other referral hospital. Organizationally, it is an attempt to control the mix of patients (what we call in the jargon of the field, "more of the bread and butter and less of the expensive so that you can stay afloat economically"). The Cost of Living Council is talking about implementing Phase IV on January 1, 1974. I believe these actions are an attempt to use the dollar to force a system of peer review on every hospital. I find it truly frightening and believe it has no generic relationship to PSRO. In fact, it could make PSRO useless in one frame of reference.

Nobody has been able to dissuade the Cost of Living Council from its proposal, which is supposed to be presented soon. I would certainly urge the physicians and administrators present to take a look at this in terms of its effect on peer review and quality assurance.

I am going to conclude by returning to some experiences with the

Illinois Medicaid monitoring program, which is called HASP (Hospital Admissions Surveillance Program), and try to, as constructively as I can, relate some of its elements. It has been two years since this program was initiated in Illinois and it has been in actual operation one year, during which time very little useful data have been derived. The only fact we can be sure of, and I learned this just before I left Illinois to come here, is that in the first year of HASP we had an 11 per cent caseload increase under Medicaid and a 20 per cent increase in expenditures for hospitalization; the cost of hospital care was about \$50 million more than it was before HASP was initiated. It is difficult to ascertain how much more would have been spent if HASP hadn't been operational.

There are some factors particular to CHAMP that I would like to mention. First of all, I stress emphatically the vital importance of properly informing the practicing physician. I am getting reports in my office right now that doctors don't know what CHAMP is and nobody is making an attempt to tell them. We had a meeting with Mr. Beckman of the Commonwealth Institute just a couple of days ago, and we plan on crossing the state to try and solve this problem, because if the doctors do not understand CHAMP, they certainly won't support it. There is an urgent need to make the physician aware that this isn't merely another governmentally controlled program. The presentation of CHAMP has to be related to the delivery of better medical care.

Another important consideration as far as physicians are concerned is the question of whether doctors will control hospitals or the hospitals will control doctors. CHAMP's real gain would be to get consensus support by all those involved, and I feel the same is true with regard to PSRO. Unless we get the major third parties and the providers together, we are all going to lose to government, and I could give you chapter and verse about this.

The third point has to do with scientific credibility. As I mentioned, the Illinois experiment proved nothing because we didn't have enough data. Even many of their own good hospitals didn't keep comparative data on length of stay for Medicaid versus health insurance, etc. In Massachusetts, we are much better off because the Massachusetts Hospital Association provides a utilization information service, which is currently in use by 78 hospitals, and which will be the source of the data service for the CHAMP program. A staff meeting was held this week with the purpose of establishing a control group of hospitals to measure the impact of CHAMP on length of stay, number of admissions, etc. The CIM, and MHA, and the Commonwealth must be in a position to know the real impact of the CHAMP program before the federal government makes claims about impressive savings.

It is also very important that we find the answers to some questions involved with the total concept of peer review. Let me cite a few examples: One subtle and controversial question is whether or not the physician advisor should be employed by the hospital. Another related question is whether the nurse coordinator belongs to the reviewing organization or whether she will be hired by the hospital. There are arguments on both sides, but the answer should be based on the integrity and capability of the people involved. One of the problems with HASP, to give you a specific example, was that the very best hospitals in Illinois, with their own money, hired monitors to oversee the existing monitors. The reason was that an external surveillance program provided no incentive for the people involved to make the hospitals understand the system. A lot of the money that was lost through denials was related to the failure of the physicians on the staff to either understand or accept the forms. Therefore, the hospital was the financial loser. One of the very good hospitals in Illinois hired four people to counter the four people that the program brought in so that they could be sure no money would be lost. This behavior neither saves money nor does much to reduce the cost of hospital care. Thus, one of the basic drawbacks of an outside system is that it tends to become more expensive. Now, I think one of the big hazards of PSROs and other monitoring systems is that very soon people are going to discover that they do not save millions and millions of dollars. If the system is totally dependent on federal monies, it is going to be tossed down the drain, and we are all going to be blamed. If organized medicine, in conjunction with the total medical system, is going to make PSROs effective, other than federal sources of money will be necessary, and the hospitals will have to pay (probably from the ordinary reimbursement sources). I have lived too long to believe that we can rely on government financing as a stable source for the health-care system.

If viable utilization committees dedicated to quality assurance are instituted and supported, outside physician advisors and outside nurse coordinators will be unnecessary. The responsible organization will be the hospital utilization committee. It should be an organizational effort on the part of local hospital employees — both physicians and administrators. Presently, we are far from getting there, but I think that this should be a goal.

System Effects of Peer Review

Leon S. White

Bernstein: The next speaker is Dr. Leon White, whom most of you already know as the Commissioner of Health and Hospitals for Boston. Dr. White had a long career as a member of the Massachusetts Rate Setting Commission prior to taking his current position in Health and Hospitals. Dr. White is also on the faculty at MIT's Sloan School of Management.

Leon S. White: Previous speakers today have discussed the issues of cost, quality, length of stay, and utilization in relation to peer review. Before beginning my talk, it might be appropriate to read a paragraph from a book that I found in the MIT library not too long ago, which summarizes some of what has already been discussed:

The rise in hospital cost has resulted largely from the general increase in the price of all commodities, the higher salaries and wages being paid, and the extension of services available in hospitals. For the higher prices charged for hospital care today, the public receives a much better quality of service than heretofore because of the improved facilities and medical techniques and a larger staff which provides a higher standard of medical service. It should be noted that the increased cost of hospital care has been offset for the individual patient, in part at least, by the reduction in the average length of the period of hospitalization necessary in most instances. The average length of stay per patient has been reduced from 18 or 20 days in 1910, to 10 or 12 days or even as low as 8 days at present. The advances in medical science have also greatly enhanced the effectiveness and value of hospital service.

This paragraph came from *Hospital Care in the United States*. It was prepared by the Commission on Hospital Care and was published in 1947. That was 26 years ago. How far have we come in the last 26 years? How far do we still have to go?

My assignment today is to talk about system effects of peer review. To discuss this topic in its totality would take much more time than I have been allocated, because peer review, at least as defined by the AMA, covers the entire range of medical-review efforts: medical-practice analysis, inpatient hospitalization and utilization, extended-care-facility utilization review, medical audit, ambulatory-care review, and claims review. This is too broad for me to consider and, therefore, I would like to focus on issues related to hospital-utilization review. The AMA definition states that hospital-utilization review includes the analysis of the appropriateness of admissions, services ordered and provided, length of stay, discharge practices, and documentation. But this is still a bit more than I can cover, so to make matters as simple as possible, I would like to focus on admissions and length of stay, and assume that the utilization-review process does, in fact, have some control over these decisions.

In looking at the system effects, I shall focus on a two-sector model: a hospital-care sector and a secondary-care sector (i.e., a post-hospital sector). The hospital sector consists of employees, beds, patients, and a backlog of elective admissions. The secondary-care sector is characterized by employees, beds and patients. The source of activity for these sectors is a population that provides patients who appear to require hospital care. We shall further assume that the in-hospital population is the sole source of patients for the secondary-care sector. Thus, the model consists of a general population supplying patients to the hospital sector, a patient population in the hospital sector that in turn provides patients for secondary-care sector, and patients in both sectors who eventually return, for the most part, to the general population.

To characterize the effects of peer review, I have chosen to focus on several dimensions of the problem that cover the major issues: The initial effect of peer review seems to be the focusing of attention on admission and retention decision criteria. Neither admission decisions nor length-of-stay decisions have been systematically challenged before, but this is what is happening today. Consequently, the doctors making these decisions are forced to review them more carefully than ever before. As a result, many doctors are modifying their decision criteria prior to any kind of formal governmental or private insurance system examination of what they are doing. For example, in California medical-care foundations, data have been collected on length of stay for a variety of diagnoses. Foundation doctors are looking at how their fellow doctors treat certain kinds of diseases, and movement toward a set of norms has resulted.

A second effect of the introduction of strong utilization review is an in-

itial negative response on the part of hospital administrators. As one administrator said in a symposium held at MIT's Sloan School of Management last fall, "The advocates of utilization review are asking the hospital to do so good a job that you put yourself out of business." This is not quite the reaction one might expect. However, it does have some ring of truth to it if the administrator's main concern is to keep the utilization rate up at his hospital. If you get him away from his hospital and talk to him about what really concerns him, he might say, "quality of care and minimizing the number of people who enter the hospital sector, that is, those requiring hospitalization at any hospital." But, when it comes to his hospital, he knows he has to have 84, 85, or 86 per cent utilization to survive.

The utilization-review advocates are asking that the hospital sector rebalance the supply of beds against a *new* demand pattern. The demand pattern that currently determines patient flow into the hospital sector is going to change to the extent that admission decisions are changed. Consequently, the supply of beds ought to change in relation to the impact of both altered admission decisions and length-of-stay decisions.

The effect of utilization review on admission rates is a subject of some controversy. Some people, such as the hospital administrators I have talked to, seem to think that admission rates will drop, at least in the short run. I think this will be true on a sector-wide basis, but not necessarily for any individual hospital. If we look at admissions over some period of time for the hospital-sector populations, and if, in fact, admission decisions at all hospitals are tightened up, then my short-range assumption would be that the admission rate for the sector will drop. Moreover, I expect average length of stay to drop also. I cannot help but be influenced in part by language that has developed in relation to utilization review, and that is, "administratively necessary stays" (i.e., stays not required for medical reasons). To the extent that there are administratively necessary stays, then better administration (not only of the hospital, but also of the two-sector system) will presumably eliminate these stays. Thus, average length of stay should also drop in the short run. In addition, variations in length of stay will tend to narrow down. I have previously mentioned some evidence for this in the experience of the San Joaquin Foundation.

Other effects of utilization review will also be seen. One is the effect on the hospital-information system. Clearly, in larger hospitals, at least, dependence on computers will increase. In a full-scale peer-review system, such hospitals will not be able to handle the kinds of information that are being requested without using computers. Moreover, this may lead to

what the economists call a "spillover effect." The resulting data bank will facilitate utilization review; in addition, it may help hospital administrators to better manage their hospitals. For example, through the utilization-review data-collection system, administrators will learn things that can be used to influence the decision behavior of physicians in the direction of greater efficiency and economy.

The primary effect of utilization review on the post-hospital-care system would appear to be pressure, at least initial pressure, to accommodate the pool of hospital patients currently awaiting placement in the secondary sector; that is, administratively necessary stays. This amounts to a one-time surge in demand for secondary-sector beds. Once this demand is accommodated, the patient population in the hospital sector will have been reduced to the number that are validly in that sector. Beyond this one-time surge, the impact on the secondary sector will be a function of the medical technology and medical capability that is developed to reduce hospital stays and to transfer part of the time of "hospitalization" to a lower level of care facility.

A problem might be whether this administrative length-of-stay group can be eliminated from the hospital sector without building more extended-care facilities (ECFs) near to or as a part of the hospital. If redistribution between the sectors is forced, doctors will have greater difficulty in following their own patients. I am not sure they will allow this to happen. In a small MIT study on the utilization of ECFs, a master's student found that the distance of a skilled nursing home from the hospital clearly affects the way doctors utilize it — the further away, the poorer the utilization. Moreover, the one-time surge in demand for secondary beds may result in a need for more beds. This, in turn, will create a need for more employees in the secondary sector, while additional empty beds might initially appear in the hospital sector. This brings me to the effect on the hospital-utilization rate.

If effective utilization review results in a reduction in admission rate, in a shorter length of stay, and in less beds used for administratively necessary stays, then lower hospital utilization in the sector as a whole appears certain. The impact on any individual hospital, however, depends largely on the condition of the patients at that hospital. If the hospital does not have many administrative stays, it is not going to be affected as much as another hospital with a large number of administrative stays. If the doctors who are making the decisions about admissions and length of stay at that hospital are already conscientiously reacting to these kinds of issues, again the effect will be reduced.

The impact on the utilization rate at an individual hospital will also depend on its ability to attract new patients, i.e., patients who had not previously used the hospital. From a marketing point of view, if the hospital is not drawing in as many patients as it formerly counted on, and if it wants to maintain the size of its inpatient census, the hospital has no choice but to try and increase the size of its "market" and/or "market share." In other words, it must increase the potential population of patients and maintain an adequate admissions rate from this larger population, or the hospital must increase its admissions rate from the population it served prior to effective utilization review.

There are two primary ways a hospital can affect its admissions rate. One way is to increase the number of emergency-ward patients coming to the hospital. On the average, one out of 10 patients who seek emergency-room treatment ends up being admitted as an inpatient. In Boston, today, there is more than one hospital adding to the capacity of its emergency room. We can be sure they are not doing this solely out of loyalty to the citizens of Boston. The second way to increase market size and share is to increase the size and/or the productivity of a hospital's admitting staff. There may even come a time when doctors' productivity in "producing" patients will be measured and high productivity rewarded. (Note that in Kaiser hospitals just the opposite is true.) In any case, much more attention will be focused on the admitting staff because they are the ones who actually bring the patients into the hospital.

The above is all based on the assumption that every hospital within the sector wants to maintain its current size. This probably cannot happen, and the spotlight will then be focused on the marginal beds in each hospital and/or the marginal hospitals in the sector. Decisions to reduce the number of beds in the hospital sector will be difficult to implement. As you can see from the mood of the state legislature, it is hard enough to pass a certificate-of-need law and get it enforced. When an attempt is made to put a hospital out of business, I suspect that the local community, whether it provides 80 per cent or 30 per cent of the patients that go to that hospital, is going to protest vigorously. But the question of reducing beds in the sector will have to be faced when a drop in utilization on a sector-wide basis is experienced.

The short-term effect of utilization review on cost (again assuming that the length of stay is reduced and the number of patients in the hospital sector is also reduced) is that the cost-per-patient day is likely to rise significantly because individual hospitals will not get rid of beds and cannot reduce employment levels that quickly. In the short run, employees are going to remain longer than the beds because of union agreements and

other types of employment safeguards, and this is going to have an effect on the cost-per-patient day. The cost for the hospital sector as a whole, however, will probably not climb at the rate it otherwise would, presuming that some kind of transfer of patients to the secondary sector does, in fact, take place. But sector costs will still climb because hospital costs are a function of the kinds of illness that hospitals are treating and the kind of technology they are applying. The hospital sector is the only industry that I know of where improvements in technology usually add rather than subtract people from the payroll. The concept in industry is to substitute machines for labor. In the hospital sector, new machines usually require new people with higher skill levels to run them. No one is replaced. Up to now, there has been very little substitution of technology for labor. Rather, what happens is that new technology is added to existing capabilities to improve effectiveness in treating illness. Greater effectiveness, not efficiency, has been the goal of technological development in medicine. This will no doubt continue after utilization review is broadly implemented.

The long-term cost picture depends on whether a proper balance is struck between beds and demand. If the number of beds in the hospital sector is not tightly controlled, the ensuing level of inefficiency will be paid for in terms of the price of hospital care. However, I believe that governmental regulatory programs will, in time, tend to balance supply and demand in a more precise way.

Finally, I would like to talk briefly about the effect of utilization review on physicians. I think that if the assumptions that I have alluded to so many times do prove to be true, the average physician will be dealing with sicker hospital patients. I cannot elaborate on the impact of this probability, but physicians will not treat as many of the "bread and butter" patients, and this may have a negative effect on their own productivity. Some care will have to be taken to see that hospitals still see a wide distribution of illnesses among the patients admitted, otherwise a hospital may become imbalanced with too many intensive-care beds. Such a hospital will certainly take its toll on doctors. Also, I think that there will be pressure placed on physicians in terms of maintaining their own capabilities to practice high-quality medicine. Clearly, the physician who does not keep up may find himself in a difficult situation if his fees are disallowed because the patient should not have been hospitalized in the first place, or because he is keeping his patients there too long.

To summarize what I have been saying, I think it is clear that effective utilization review will cause great change. On the other hand, looking back to the initial quotation, it is also clear that the situation has not been changing as quickly as one might have expected.

Hospital Utilization Committees

George Baker

Bernstein: Our next speaker is Dr. George Baker, chairman of the utilization-review committee at Massachusetts General Hospital. In addition, he is a member of the Massachusetts Medical Society and is on the faculty of the Harvard Medical School.

George Baker: Listening to today's presentations has made me realize the difference in my position from that of the other speakers. Basically, I am the indian while you have been listening to the chiefs!

From the very outset, you must realize that my experience has been only at one hospital, and though my title would have me speaking about utilization-review committees, I feel I cannot do this. All I can do is to try to share my experiences involving one committee and one hospital.

If any of you have been involved with utilization-review work for any length of time, you would realize that "react to" is the best phrase that one could use to describe one's activities in this area. Since I started in this job, it has become apparent that one is constantly faced with new sets of regulations or new sets of ideas. What you have heard this morning was a group of men discussing what is ahead for us. What you have heard this afternoon is a bit closer to home. We already have utilization review using length of stay, which, we have just begun to realize, is not always the best parameter. I would like to make a few general comments on this subject as related to what has already been covered in today's symposium.

We composed the following statement at the Massachusetts General Hospital just a couple of days ago, and it is about to be given to each patient who comes into the hospital:

The Massachusetts General Hospital, as directed by federal and state laws applicable to third-party coverage of hospital patients (Medicare,

Medicaid, Blue Cross and other private insurance companies), has a utilization-review program that evaluates the need for hospitalization for all patients as well as the justification for continued stay at all times. This justification is based on an evaluation of individual patient *needs* as they pertain to the diagnostic, therapeutic, and nursing-care facilities of the Massachusetts General Hospital. If, in the opinion of the utilization-review committee, and in consultation with your physician, it is felt that an admission or further hospitalization cannot be justified on the basis of the above criteria, then your insurance coverage may not apply, and you will become responsible for subsequent hospital charges. Notification of termination of third-party coverage will be given to the patient and/or responsible family member as well as to your physician. In those rare circumstances where this may arise, the Social Service Department, as well as members of the hospital's administration, will be glad to discuss the situation with you.

This statement is going to shock many patients, because the fact remains that the patients themselves are not aware of the imminent changes because they have not been truly involved. When utilization review becomes a reality, the patients are going to be contacting their congressman or their Blue Cross representative to see if what we are saying is true. There has been some talk earlier this morning about marketing. As far as many of the insurance companies are concerned, with all due respect to Blue Cross, there has been little communication between their marketing groups and their utilization-review groups.

As I mentioned, most of the utilization-review activities in my hospital have been developed as a reaction to outside forces, namely Medicare, Blue Cross and Medicaid. Now there is the Commonwealth Institute of Medicine. There has been an increasing number of requirements, often at cross purposes, and we have tried to adjust to each contract or copy of the *Federal Register*. But as long as we maintain the basic philosophy of the prime importance of patient need, and as long as we develop a system that can justify our decisions, it won't matter what the third parties say — our position will be protected.

A primary change will soon take place in our hospital: the entrance of the CIM CHAMP Program into the Massachusetts General Hospital. Three weeks hence, we will undertake a prospective review system. We used to have what we thought was a good program. It consisted of looking only at prolonged lengths of stay, which meant that every stay of more than 18 days was evaluated. We did a random sampling and chart review on all short-term admissions to try and discern cases that did not need to be hospitalized. When such cases were found, our next action, obviously, was to change physician behavior. It is no longer necessary to hospitalize a

patient for a GI series, barium enema or gall-bladder test. The patient might think this unfair because Blue Cross will only pay fees when these tests are done on an inpatient basis. But this is the concern of the patients and the individual insurance companies.

With regard to utilization review: In their most recent contract (which I participated in writing), Blue Cross designated 13 diagnoses for which length of stay will be carefully considered. Of these 13 diagnoses, only one calls for more than 18 days. It is, therefore, patently ridiculous for hospitals like ours to use a system that starts evaluating patient stays only after 18 days. We are going to have to implement a system that evaluates every patient after a 48-hour stay. We did our own little study at the hospital to see the correlation between our admission diagnosis, the diagnosis at 48 hours, and the diagnosis at discharge. The correlation between 48 hours and discharge was about 75-80 per cent. The correlation between admission diagnosis and diagnosis at 48 hours was approximately 50 per cent. Our data is certainly no better than that of PAS. With regard to the use of PAS length-of-stay data, we feel that it probably can be used. However, we are going to determine the diagnosis after the patient has been in the hospital 48 hours. We hope this will at least simplify some of the problems.

I would like to second what Dr. White said: A hospital of our size undertaking this kind of program will need computer backup. Otherwise, the number of "tickler" files would be absolutely impossible. I also agree there would probably be some very interesting spinoffs of this kind of system. For example, one of our chief billing administrators came to a meeting two days ago and mentioned that the hospital was required to issue an invoice no less than once a month. We said, "That sounds like a logical thing to do." He replied, "Yes, but that bill has to show the diagnosis as well as any procedures that were done." He continued, "We have no way of doing this. We have the admission diagnosis, and we used to do our billing when the patient was discharged, so we had his chart. How am I going to get a current diagnosis on a patient who is still hospitalized?" And I said, "It just so happens that we are going to have a computer system working within three weeks, and if it works, all of that data will be available. We will tell the computer to give you a list of patients every 21 days along with their diagnosis and their procedures."

The only logical way to have any of these systems work is to have the in-house utilization-review committee be the primary organ. This means that the utilization committee should be responsive to requirements of third parties. In any event, peer review must be done within the hospital, where true patient needs can be determined. Length-of-stay data are all we

have to work with at the present time. I know of no other system we can use, except reverting to one doctor looking over another's shoulder every day as we go along.

If we really do want utilization review and cost containment, cutting length of stay is not going to save anything unless we either close beds or shift the activity of those beds. I think this is the hard, cold truth that a lot of people don't realize. A hospital with an average capacity of about 94 per cent and a long waiting list for admission is not going to have too much trouble if they cut down the length of stay. But this situation is not true of a lot of hospitals around the country, and many of us realize that closing hospital beds is not an easy thing to do politically.

I have to disagree with Dr. Ballantine's statement that CIM and prospective utilization-type review processes based on length of stay are going to decrease the primary physician's work. There is no way we can superimpose a new system with new requirements onto a current operational plan and expect to decrease the primary physician's work, unless we take some responsibility away from him. However, we are giving him *more* responsibility. We are going to get better patient care when a physician is forced, 48 hours before a certification period is up, to note in the chart why the patient has to stay in. It is a logical request because the reason for hospitalization should be in the chart within 48 hours after admission. But just try to convince the physician with 10 patients in the hospital, all of whom are due to be discharged within 48 hours, that 10 progress notes are not more work than he had to do before!

Finally, just a word on quality and cost containment. I am very cynical on this point. We are going to decrease the variance in quality of care as we begin to get more data. However, I also believe it is unrealistic to think we are going to get an upgrade in quality without paying a price for it. This is going to be reflected partially in the amount of time necessary to do the studies or evaluations. The various intermediary letters I read do not make me feel that the federal government is interested in spending one cent more on anything when it comes to the delivery of medical care. I think it will be interesting to see how those of us on the "firing lines" can use the required work on evaluating length of stays to develop as many additive benefits as possible to update quality. But if we are shooting for quality without cost containment, I think the whole PSRO system is going to fail.

The Afternoon Panel

Bernstein: A very interesting question has been submitted, and it is a good one to lead off with: "Why won't the American Hospital Association ask the doctors to help get the bureaucrats out of the hospitals?"

Kinzer: As a matter of fact, I think such a move is under way right now. But I believe that bringing in outside employees to review care will not be of help in the long run. It will only make matters more difficult.

Baker: I have been in an adversary role for the last three years. Nonetheless, I think that the bureaucrat does not want to be involved with the evaluation of medical care. He operates from the viewpoint that, "There is a job to be done, and we must do it." If you can convince him that you could do a good job and could meet reasonable requirements, he will be only too glad to let you take over. Moreover, the great majority of bureaucrats are going to cooperate because physicians are in a position to know more than the bureaucrats about what has to be done.

I would like to make one more point with regard to the effectiveness of the current system. In this state, CIM has elected not to do pre-admissions screening as was done in California and Illinois, because it is an expensive and argumentative way of evaluating admissions. If, on the other hand, a profile is kept on every physician, and there is a good utilization review, after six months Physician X might prove to have had many cases that did not need to be in the hospital in the first place. At that point, we can say to this doctor, "I am sorry, but on the basis of your performance, you are going to have to get justification for all of your admissions." In this respect, the bureaucrats are launching an effective program, and, therefore, I do not think the situation is as bad as some think.

Bernstein: In relation to utilization-review committees, I would like to ask Dr. Densen whether he envisions PSROs uniting the criteria by which various utilization-review committees are currently structured. Do you think this is a practical objective of PSRO development?

Densen: I do not know the present regulations, but I am inclined to agree with Dr. Baker that PSROs' standards must evolve from actual experience with hospital cases. In addition, if the PSRO is concerned with standards that will be operational in more than one hospital, then utilization-review committees in different hospitals should be consulted. Operating standards must be agreed upon, and we can then move on from there.

Bernstein: There are a number of questions addressed to Dr. Gertman. One question is, "In your study, what was the relationship of inappropriate days to the unavailability of staffing (physicians, nurses, etc.) on weekends?"

Gertman: It turned out the lack of staffing was most serious for surgical pathology, which was shut down completely on weekends. Inventive physicians could use the emergency laboratory and x-ray facilities to get services done, but the surgical pathology labs were completely closed and there was no backup. In addition, there were more inappropriate days in those cases admitted in the early part of the week, and not in the Friday and Saturday admissions. Contrary to some of the popular literature, people admitted during the latter part of the week were generally very sick the first two, three or four days. It was in the later part of the first seven days that there was a delay in the diagnosis procedure, or in getting the patient discharged. Thus, people admitted on Tuesday or Wednesday, as opposed to those admitted on Saturday or Sunday, had more inappropriate days.

Bernstein: Another question relative to what you have stated concerning length of stays: "Is there any way of getting third-party insurance or fiscal intermediaries to pay for pre-admission screening, which would then cut down on the length of stay?"

Gertman: I certainly think this is feasible, but, for the most part, our study was not applicable because of the high percentage of emergency admissions.

Densen: I am concerned about third-party payment. If we turn to the balancing problem that Dr. White spoke of, and which Dr. Baker spoke of

in another connection, total care of the patient — not just care in the hospital — must be considered when we write payment mechanisms into the contract. One of the things that sometimes keeps a patient in the hospital is an availability of beds because of the current nature of the payment mechanisms in operation for nursing homes. I would hate to imply that concern with the nature of the payment mechanism should be directed only towards that portion of the patient's problem that happens to be related to the hospital stay.

Bernstein: Here is a question for Dr. Gertman: "Do you know of any length-of-stay study data that take the day of the week of admission into consideration?"

Gertman: I am not aware of any such study. However, I have seen some data showing that weekend admissions have higher lengths of stay than midweek admissions for the same diagnosis. My belief is that people admitted on weekends are generally more ill. Thus, these longer lengths of stay are not caused by a curtailment of hospital services on Saturdays and Sundays.

Baker: CIM booklets show lengths of stay of four days or three days at the 50th percentile. I am concerned when I see that these three or four days may involve Friday, Saturday and Sunday versus Monday, Tuesday and Wednesday. When we are talking about a stay of 18 to 21 days for a myocardial infarction, there is no hangup.

Bernstein: Then what you are saying is that hospitals don't function efficiently on weekends, and that this is a bad time to get sick.

Baker: What I am really leading up to is if we could show that the hospital does not do as much work on Saturday and Sunday as it does on Monday and Tuesday, can a hospital go to a seven-day work week? And if so, how are we going to pay for it?

I think the question of how to run a hospital on the weekend is a valid one. It may, in fact, be forced out into the open by increased emphasis on utilization review. One of the key questions would be whether there are any savings by having a hospital operate over the weekend at the same level of activity as during the week. A second is whether that level could be consistently maintained.

White: It may be that certain kinds of weekend activities may become

operative because they make sense from a benefit/cost perspective. At Boston City Hospital, we look at those kinds of possibilities and implement them within the constraints that we always have to face with regard to union contracts and other labor considerations.

Kinzer: I have heard this question repeatedly over the past 15 years. To my knowledge, every study has shown that the seven-day work week increases costs more than can be justified by economic productivity. The only way this increase can be justified is to apply it to the whole hospital system. If we went to a full seven-day work week in Boston hospitals, it might close 1,000 beds. The next question, of course, is whether such a measure is possible from a practical standpoint.

White: The real problem, as Mr. Kinzer said, is that a seven-day work week would mean an increase in the actual cost-per-day of hospital services, which would run up against the economic-stabilization ceilings. Almost any measure that would increase productivity but which raises the rate per day would be rejected no matter how effective it might be for the total system.

Kinzer: I do not know how hard doctors work in Boston. The really relevant question is whether they want to work on Saturdays and Sundays. If they don't, it will be useless to put the hospitals on a full seven-day work week for all support services.

Bernstein: Certainly some doctors like to work hard and others don't. We haven't made a general survey, but an average of 50 or 60 hours per week is a reasonable estimate of doctors' work hours.

Gertman: I would like to raise one point about inappropriate days spent in hospitals. A lot of patients should have gone to a nursing home or extended-care facility of some type, but there weren't any available beds. In fact, we had a monstrous building sitting next to the hospital, where people could be transferred, so it wasn't the so-called continuity-of-discharge planning that was at fault. Instead, we didn't have the right type of planning information available. Families, particularly spouses or children faced with the decision about institutionalization even for a short period of time, really weren't concerned with medical facts. They needed to know the cost and the options available to them. Some hospitals had

social workers who could not explain the serious financial implications or the choices they faced. This is an extremely complex issue, particularly for poor patients, and we had a significant number of delays because the family asked for a couple of days more to reach a decision. I often wondered if we needed someone more along the line of a bank trust officer to arrange these matters and to explain to the family the available alternatives to social-work placement or nursing placement. I have raised this as a practical problem that hospitals might examine, particularly if they have a group of low-income and middle-income patients who can't totally bear the cost of institutional care or home care, or not-so-poor patients who will automatically be cared for at public expense. I think this is a key issue for eliminating some of the discharge delays.

Bernstein: Dr. Baker and Mr. Kinzer implicate reliance on utilization-review committees to perform PSRO medical audit, but where will their loyalties lie if part or all of their hospital is closed down?

Baker: Mr. Kinzer should answer since he has overall responsibility for a large number of hospitals, while I have only one hospital. At any rate, I don't see any real danger of a change in bed-utilization patterns; all beds are full, and we have a long waiting list. However, I think this is a fair question and I would answer in the following way: I feel that the primary responsibility for the day-to-day performance of utilization review has to go to the in-hospital utilization-review committee. I will admit that the job of this committee is going to be directed by somebody else, somewhere else. Up to the present, utilization review has been directed by Medicare, Medicaid and Blue Cross, and in the future it will probably be done by PSROs. We already have a series of systems that are going to be operational. One of them, as all of you involved with utilization review know, is called the "hold-harmless" provision, and it comes into play if a hospital does not have a good hospitalization-review committee. A patient may be admitted to such a hospital and be retroactively reviewed by a third party. If the length of stay is found to be unnecessarily long, the third party will not pay the fees, and the hospital will not be allowed to bill anyone. In short, the hospital will take a loss, which can't go on for very long. It is equivalent to shutting down their beds. Therefore, the hospitals are in the position of having to follow directives as they are issued. These are going to be administered through the utilization-review committee, which will have to meet certain PSRO requirements.

Kinzer: The economic sanctions that are built into the PSRO legislation are such that there is really no incentive for a hospital to keep overutilizing. I am thinking in terms of the new rules of economic stabilization. However, I do feel that the question of adequacy of facilities and services is basically not one that concerns utilization review or peer review. This is a public question, and we have a law in Massachusetts as well as in other states called Certificate of Need. The public itself is possibly the biggest enemy of planning. There is always a near revolution when somebody wants to close something, and we have to learn to live through this. I do believe that the decisions on adequacy of facilities — where they are placed and distribution of responsibilities — are planning decisions and not the concern of PSROs.

Bernstein: I will end the symposium with a plaintive wail from one member of the audience who said, "May we all be lucky enough to survive the army of professional health administrators, doctors, and otherwise."

