THE COST OF medical care has become one of the major national issues of the 1980's and 1990's. It is not only a significant issue for individuals and businesses, but it has also assumed a central role in this year's national political arena. Coupled with the continued upward spiral of health care cost is the increasing number of people who are uninsured. There are currently estimated to be 31 million to 37 million people without health insurance and another 50 million people who are underinsured. An additional pressure upon the federal health care system has been the rapidly expanding number of people who are eligible for medical benefits. The most rapidly growing segment of our population is that group over the age of 65.

The 1970's and 1980's saw a rapid acceleration in health care cost. In 1965, the national cost of health care was 6.9 per cent of the Gross National Product (GNP). That cost had increased to 12.2 per cent of the GNP by 1990. The prediction of the Health Care Financing Administration (HCFA) is that by the year 2000, total health care cost in the United States will be 15 per cent of the GNP. During the time period 1975–1987, the GNP increased 7.9 per cent. During this same time period, health care cost for Medicare increased by 15 per cent. It is important to note that this 15 per cent increase was based in part upon a 7.5 per cent increase in the number of people eligible for benefits. The other half of the 15 per cent total was increased cost. It has become apparent to many people that the traditional fee-for-service system upon which health care has been delivered in this country has to be revised.

The suggestion that physicians make too much money for services is not unique to the 20th Century. In Knut Haeger's History of Surgery, Galen is reputed to have said, "The art of Medicine is the most lucrative of all." Galen's operation for colds, in which he cut off the palate's uvula, a totally obsolete and irrational procedure highly popular in Rome, was the main source of his great accumulation of wealth. During the 1700's, trephination was vigorously promoted and highly valued. Medicine men could earn a fortune travelling about the country providing this service. In addition, they could conduct a lively trade on the side selling the pieces of bone removed during trephination. There may even be services provided today that have little or no scientific basis but are financially rewarding.

Throughout these early times only those people who could afford it really had any access to health care. In the United States, with our strong foundation of laissez-faire, provision of medical care remained an individual obligation. In other countries, as medicine became a more organized profession, government became fis-
cally involved. Our federal government's first involvement in providing funds for medical care was not until the passage of the Social Security Act in 1935. This provided financial aid for maternal and child care as well as child welfare funds. In 1946, further governmental involvement was marked by the passage of the Hill Burton Act, which greatly aided hospital construction.

Medicine, the government, and money were inseparably joined for better or worse in 1965 with passage of the Health Insurance for the Aged Act. Before this, persons without insurance or financial means were generally taken care of as charity cases by hospitals and physicians. The advent of Medicaid and Medicare made money available where it had not been previously. With these two programs, the government made it profitable to provide as much care as possible to all people. In his book, A Sacred Trust, Richard Harris stated that this act caused medicine to lose sight of its sacred trust and place self interest above the needs of patients. In addition, medical care was and continues to be based on payment for acute care with little or no funds for preventive medical care.

The 1980's saw an introduction of a number of legislative acts attempting to limit the increasing cost of health care. These included the Consolidated Omnibus Budget Reconciliation Act, the Tax Equity and Fiscal Responsibility Act, Diagnostic Related Group payment, and the Physician Payment Review Commission (PPRC).

In 1986 the PPRC made a recommendation based upon the February 1979 report by Doctor Hsiao that the Resource Based Relative Value (RBRV) system be developed to provide uniformity and stability to medical fees. This recommendation was made to HCFA despite the fact that previous relative value systems attempted by such groups as the California Medical Society had been disallowed by antitrust action. The California relative value scale had been gaining wide acceptance and was providing uniform billing for service. The California system provided relative value scales for services within a single specialty. It did not attempt to cross-link service values across specialty lines as proposed in the Harvard/AMA RBRV system.

Interestingly, the American Society of Internal Medicine and the American Medical Association publicly supported the PPRC's recommendation. It was the belief of these two groups that procedural medical services were overcompensated and that cognitive services were grossly undercompensated. A system that would increase the payment for cognitive skills at the expense of technical skill was believed by them to be highly desirable. The American College of Surgeons was not interested in direct involvement in this endeavor.

or. The College objected to the Harvard/AMA study because of the study's methodology and because control of the study was outside of medicine. Additionally, the college did not believe that technical skills were uniformly overpriced.

Because of the Consolidated Omnibus Budget Reconciliation Act, however, which required Health and Human Services to develop a relative value system, the work proceeded in order to meet legislative deadlines. This study was conducted by the Harvard group headed by Doctor Hsiao. The study looked at 17 select medical and surgical specialties based upon the amount of Medicare dollars spent and the number of doctors in each group. Responding to the request of the PPRC, the American College of Surgeons recommended that surgical specialty societies recommend surgeons to participate in the technical consulting groups for this study.

My involvement in RBRVS study was as a technical consultant in general surgery recommended from the Midwest Surgical Association. Our consulting group consisted of 11 surgeons from the major general surgical societies, with balanced distribution from academic, group, and private practice as well as geographic locations. Following a mailed survey in which we were asked to assign time values to a list of medical services, our group met in Boston with Doctor Hsiao and his team. The purpose of the meeting was to further discuss concerns of the study group and to determine if reliable values for the different Current Procedural Terminology (CPT) services could be determined. At the first session of the meeting, Doctor Hsiao explained the history of the RBRV system and its goals. It was his hope to establish a standard value for a CPT service determined on resource-based value rather than historical fee-for-service value, regardless of who provided such service. Once this was done in each of the 17 selected groups, cross-linkage valued service would be identified in order to provide a single value system for all medical services regardless of specialty. It was acknowledged by the Harvard group that this system did not address the value of the service provided nor did it address intensity of service of the provider.

The Harvard group believed the RBRV system was necessary to control the cost of medical care provided to the Medicare recipient because the competitive marked place function had not worked for medical services. The failure of the free marketplace competition to drive costs down is thought to have failed because: 1) insurance coverage decreases patient's concern about fees, 2) the patient does not have the knowledge or ability to choose the most cost effective care, and 3) legal restrictions define who can provide care, thereby giving physicians a monopoly on health care.
It was the task of the consultant group to arrive at work values for a number of services based upon the standard reference point of inguinal hernia repair on a healthy 45-year-old male. In addition to the technical consultants, other surgeons were surveyed by mail to help develop the relative value units for selected services as listed in the CPT-4 code. The ability to have reproducible values by both written survey and direct meetings was confirmed by statistical analysis. Because of time constraints, many services in the CPT-4 list would not be assigned values but would be given values by extrapolation from similar families of services. It was also acknowledged by the Harvard group that if the reference point selected was different than inguinal hernia, the resultant values would be different.

They also explained that the upper value given a group of similar services tends to compress the rest of the values as all lower ones tend to push up against the highest value.

Analysis of the written surveys showed most consultants agreed on service values 90 per cent of the time. Only in a few instances did they differ by more than 15 per cent. Through open discussion, we were able to arrive at a consensus value for those values where there was not close agreement. The work values determined were to be based upon: 1) time, 2) mental effort and judgement, 3) skill and effort, and 4) stress. Once the total work values were determined, they were to be placed into the formula \[ \text{RBRV} = (TW)(1 + \text{RPC})(1 + \text{AST}) \], where TW is total work, RPC is relative specialty practice cost, and AST is the index amortized value for the opportunity cost of specialized training. The consulting group did not deal with the entire formula, which has been subject to criticism, nor did we deal with the behavioral offset factor imposed by HCFA.

Our task was involved with neither money amounts nor statistical manipulation of the practice or training factors. We only determined work values for selected CPT-4 services. This involved five surveys.

I will attempt to briefly summarize the American College of Surgeons' concerns and objections to the RBRV system. One area of concern has been evaluation of time and intensity of services provided. It should be noted that the survey did ask us to rate time and intensity as separate components of the determination of work. In addition, the work model addresses skill and stress in both pre- and postoperative care as well as performance of an operation. One difficulty in this type of task is we often do more than one job at the same time. This complicates assignment of a static time period per task performed during a day. For example, while scrubbing in preparation for operations one may also be mentally reviewing the case, operative technique to use, and preparation for postoperative care.

Whether the survey adequately assessed such items as scrubbing, preparing the patient, and draping in relation to a specific operation could be argued.

The dollar value component used to convert the RBRV to real dollars is open to question and adjustment based upon whether one agrees or disagrees with the historical data used by HCFA. The behavioral offset factor has also been a subject of great concern. It has been pointed out that physicians are unable to increase their volume either because they are already working maximally or there are simply not other patients to see. However, numerous articles in medical journals detailing how to calculate the needed volume increases in one's practice in order to maintain income or how to "game" the system have not helped the medical community's position.

The ultimate outcome of the effect of the RBRV system will in great part depend upon HCFA's willingness to modify and fine tune those areas that are not correctly valued. HCFA has acknowledged the need to do this so that all values are fair. Only time will determine if these adjustments occur. Time will also determine if the predicted behavior offset value was realistic.

Participation in this study taught me several things. In general, it demonstrated that despite the goodwill of most physicians, altruism is not a universally held trait. Many physicians expressed the belief that other specialists' fees were too high while theirs were either just right or too low. Furthermore, "if I can get more money while you get less, the new system must be a good one." This feeling of animosity within the profession was most pronounced when fees were compared across specialty fields for the same CPT-4 service. In that respect, the basic assumption of the Harvard study may be valid in that the patient has no way to comprehend the current "fee for service" fee schedule. The RBRV system, although still not answering quality issues, would at least level the fees for the same service regardless of provider.

A second common phenomenon noted was surgical "talking trash." If one describes a service to a peer, surgeon-to-surgeon, the service is often described as how brilliant, fast, good, and easy one made it look. If, however, the same service is described to a nonsurgeon, it becomes how hard one worked, how long, how much skill and brilliance, and how little one was paid for the service. For patient and physician alike, it does then become desirable to replace our present system with something more rational. The intent of the RBRV system is, I believe, a basically sincere attempt to bring some sensibility to the overall fee schedule.

The system is not without its faults, and modifications will need to be made in order for it to gain favorable acceptance. Throughout the process, however,
one must not lose sight of the fact that in addition to determining the resource-based relative value of medical services, the ultimate goal is to control cost. Therefore, we should not be discouraged or disappointed if some fees are decreased. Those who assume it will only be the other person's fees that decrease, however, will probably be surprised.

One area that assumes much more importance to physicians in the new system is the CPT-4 code. We need to understand where a service fits in the code to make certain there are proper codes available for the services we provide. The codes available for some services such as repair of a laceration are very detailed while those for liver resection are few and very broad. The RBRV values will be more realistic as the CPT-4 codes become more meaningful.

So far the RBRV system has shown that the work-

per-unit time for typical invasive services is rated at 5 to 6 times greater than the work-per-unit time for evaluation and management services. Since surgeons spend only about 25 per cent of work time in the operating room, the overall effect of the RBRV system should not be excessively detrimental except for those services that were, in fact, over-valued. The final lesson is that what began as a reasonable proposal, i.e., placing a relative work value on services, can become distorted by statistical manipulation so that the final product, money, may be much different than anticipated. However, this final result does not necessarily invalidate the initial study.

I wish to thank the membership of the Midwest Surgical Association for allowing me to represent them in the Harvard Study and especially thank you for the honor of serving as your President this past year.