THE PRESIDENTIAL ADDRESS

Quality care: ongoing or outgoing?

by William A. Altemeier, MD, FACS, Cincinnati President of the American College of Surgeons

he American College of Surgeons has had a distinguished history of leadership and service dedicated to the advancement and integrity of the practice of surgery. The objectives of the College as stated in its Articles of Incorporation are: "To maintain an association of surgeons, not for pecuniary profit, but for the benefit of humanity by advancing the science of surgery and the ethical and competent practice of its art."

Since 1913, the College has played a dominant role in defining problems facing surgeons and surgical practice, in improving standards of patient care, and in marshalling all available knowledge, experience, and other resources to eliminate disease and alleviate human suffering.

In performing its role, the American College of Surgeons has had to be ever mindful of the changes brought on by different times and developing circumstances. Presidents of this College have traditionally selected problems related to their times in office and have interpreted the significance of events in light of their own experience and knowledge.

Today, surgery is beset by many problems producing great confusion and seriously threatening the quality and progress of surgical care. For some time I have been concerned about these problems, and I welcome this opportunity to bring some of them before you now. I believe the time has come to consider the quality of care we can provide and some of the current forces that are threatening it.

Today there are more than 42,000 Fellows in the College. Each of us has spent much of his or her lifetime at great personal expense in money and effort to obtain the education, necessary skills, and valuable experience to provide high quality of care. Many of us have also contributed much of our time and effort to the advancement of surgery through research that has improved, extended, or even revolutionized surgical care. Each of us has been carefully screened for our education,

surgical training, experience, and skills. Each has been dedicated to the best care possible for his patients.

The socioeconomic and political turmoil we are passing through has introduced forces that pose real threats to the quality of surgical care for the American public. I have selected several of those forces for my discussion:

- Rising medical and surgical costs and their causes.
- Growing political, economic, and third party insurance company pressures diverting surgeons' activities from patient care.
- Malpractice problems and liability in surgical practice.
- Research influences on surgical practice.
- Responsibility and accountability for quality care—can we deliver it and can we affort it?

Rising medical and surgical costs

One needs only to follow the frequent discussions in the press, on radio, and on television to realize that the public is being led to believe that physicians, particularly surgeons, are primarily responsible for the rapid rise in medical costs. As I have followed these discussions and have given them considerable thought, serious questions have come to mind concerning whether or not the statements were true. If not, what are the more important causes; if so, what can we do about it to correct and control the problems.

Two questions arise:

- What are the most important causes of the rising costs of medical and surgical care in the United States?
- Will rising costs affect the quality of the surgical care we provide?

Facts that provide answers to the questions and explain the controversy over the various causes and their relative importance have been difficult to assemble. However, the evidence I gathered from many sources and reports indicates that the factors responsible are multiple and complex.

". . . annual health expenditures increased elevenfold in 26 years and more than doubled in the last six years. Some estimates indicate that the amount will soon increase to \$156 billion."

Reportedly, the amount of money spent in 1976 by the United States government on hospitals, physicians, and drugs was \$139.3 billion as compared to \$69.2 billion in 1970, \$25.9 billion in 1960, and only \$12.1 billion in 1950. Thus, annual health expenditures increased elevenfold in 26 years and more than doubled in the last six years. Some estimates indicate that the amount will soon increase to \$156 billion. Looking at it in another way, the 1976 expenditures were approximately 8.6% of the Gross National Product compared to 4.6% in 1950, 5.2% in 1960, and 7.2% in 1970.

According to Statistical Abstracts published by the U.S. Social Security Administration, the United States health dollar was used for a number of expenditures in 1976. The largest item, 39.8%, went for hospital care. Other items included physicians' services: 18.9%, nursing home care: 7.6%, drugs and sundries: 8.0%, dentists' services: 6.2%, construction: 3.6%, research: 2.6%, eye glasses: 1.4%, and others: 12.1%.

Hospital costs

Since the major cost item was the 39.8% spent on hospital care, the importance of defining the costs of the various items in hospital budgets becomes obvious. To this end, I have obtained data on the total number of U.S. hospitals, hospital beds, and patient admissions for 1950, 1960, 1970, and 1976 as shown in Table I taken from the "SocioEconomic Fact Book 1977" of the American College of Surgeons and the "American Hospital Association Guide to the Health Care Field, 1977."

The breakdown of hospital assets, expenses, personnel, and cost per in-patient day during the same period has been published in Table II (see page 14), taken from the same source as Table I. These figures show the staggering increases in hospital expenses and the number of hospital personnel per 100 patient census.

A closer look at the annual hospital expenditures published in a survey made by the Department of Commerce between 1966 and 1977 shows a progressive change in the percentage increase each year, varying from 9.65% in 1960 to 17.63% in 1975, and falling somewhat to 14.27% in 1976. Similarly the percentages of the Gross National Product increased from 1.8% in 1966 to 3.21% in 1975 and 3.29% in 1976. Inflation, the intensity and quality of care, population, utilization, payroll expenses, and nonpayroll expenses were all important factors. The percentage rate of increase in hospital expenditures was greater than the Gross National Product in each year except 1973.

The expenditures for employees of community hospitals evidenced an upward climb between 1972 and 1975-76. The percentage increase was greater (11%) in 1974-75 than in 1975-76 (8.0%). (Table III)

Table I
TOTAL U.S. HOSPITALS, BEDS, ADMISSIONS

	1950	1960	1970	1976
Hospitals	6,788	6,876	7,123	7,082
Beds (in thousands)	1,456	1,658	1,616	1,434
Admissions (in thousands)	18,483	25,027	31,759	36,776

Note: Total hospitals include the following: federal, non-federal psychiatric, nonfederal tuberculosis and other respiratory diseases, non-federal short-term general and other special.

Average Cost to

Hospital per

In-Patient Day

		Table II		
	HOSPITAL AS	시간 경기 기가 있는 사람이 모든 모든 이 없다.	(19) [10] [10] [10] [10] [10] [10] [10] [10]	SONNEL
	1950	1960	1970	1976
Assets (in millions)	\$ 7,791.00	\$17,714.00	\$36,159.00	\$64,029.00
Expenses (in millions)	3,651.00	8,421.00	25,556.00	55,655.00
Personnel per 100 census	84	114	196	NA

16.46

7.98

The overall increase in hospital personnel salaries reported between 1971 and 1976 was 43.0%. The greatest increase in 1974-75 was related to the lifting of wage and price controls and the initiation of the new minimum wage law in the spring of 1974. Various studies have indicated that from 70% to 80% of hospital budgetary expenditures are for salaries of non-professional personnel.

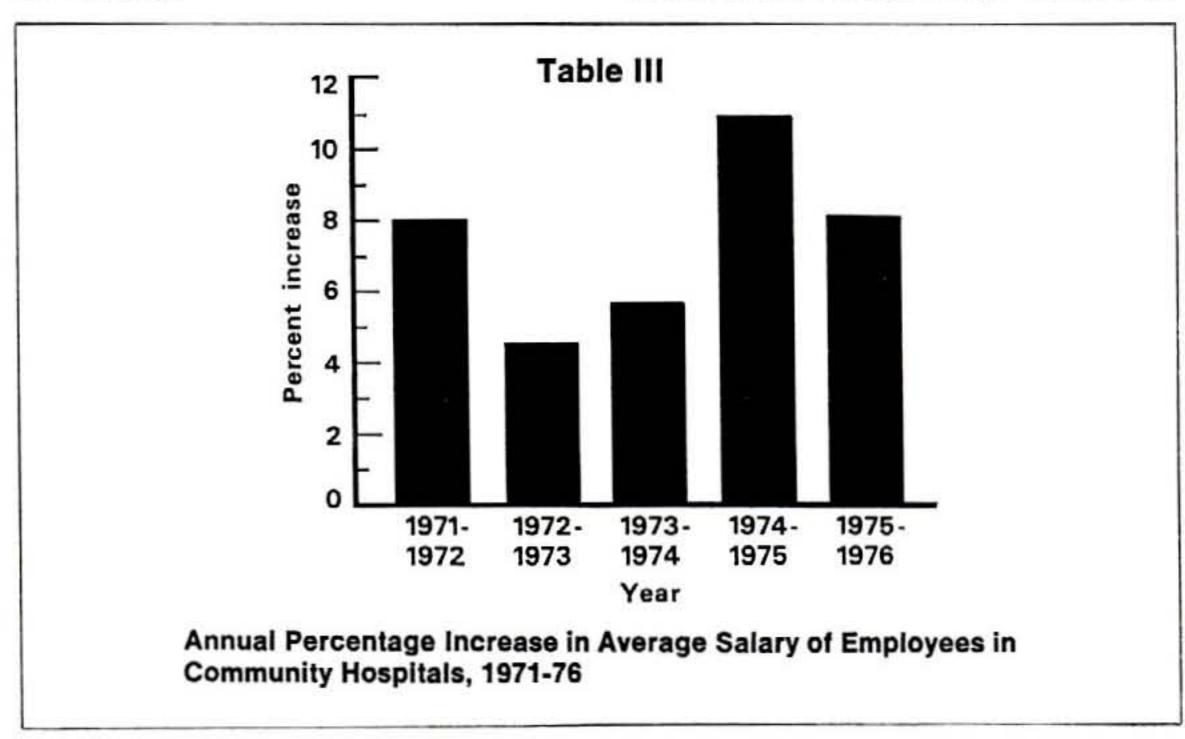
Hospital employee benefits accounted for more than \$3 billion, or 6.8% of community hospital expenditures in 1976 for each bedsize category. The Hospital Intensity Index, which measures changes in the quantities of services in a day of hospital care, has also shown that hospital expenditures have steadily increased during the past ten years, largely the result of both more services rendered and more intensive services rendered. It also reflects the amount of drugs and other supplies used.

53.95

NA

Inflation factor

By using the Consumer Price Index in conjunction with the Hospital Intensity Index, the inflation factor of hospital expenditures since



1966 was determined. Of particular interest was a report that inflation accounted for a larger proportion of the 1976 increase in hospital expenditures than did any other factor. Inflation represented \$2.23 billion, or 37.2% of the \$6 billion increase in community hospital expenditures. Similarly, inflation constituted the largest single factor in the increases in community hospital expenditures in 1973, 1974, and 1975.

Non-payroll expenses accounted for nearly as much of the 1976 expenditure increase (\$2.16 billion) as did inflation. The additional non-payroll expenses increased community hospital expenditures more in 1975 and 1976 than in all earlier years of the tenyear period studied except 1967 and 1972. Part of the non-payroll expense increase was attributed to the greater quantity of supply purchases. It also reflects those price increases that hospitals had to pay for specialized supplies, equipment, and services. Inflation and non-payroll expenses, therefore, accounted for more than 70% of the increase in community hospital expenditures in every year between 1973 through 1976.

Two other factors accounted for about one-fourth of the 1976 increase in community hospital expenditures. Utilization and population variations represented slightly higher percentages of the increase in 1976 than in 1975. Population variations included both increases in the overall population and shifts in age within it. The age factor was shown in a review of personal health expenditures prepared by the U.S. Department of Health, Education and Welfare for the years 1967 to 1976, indicating that expenditures varied considerably with the age of the patient. The greatest expenditures were for hospital in-patients 65 years of age or older -42% in 1967 and 45% in 1976. A significant change in the U.S. population has occurred; those 65 years and older have increased more than 50% from 6.8% in 1940 to 10.3% in 1974. This age group has a higher incidence of cancer, arteriosclerotic and other cardiovascular diseases, and metabolic diseases.

I believe we can anticipate an even greater escalation of hospital costs in the next ten to fifteen years as members of the bumper crop of babies born in the late 1930s and the 1940s reach middle age. This factor should be considered in planning the number of hospital beds for that period.

Physicians' fees

To assess the physicians' responsibility for health dollar expenditures in hospital practice, I have turned to the Statistical Profile of the Nation's Hospitals published as a statistical complement to the American Hospital Association Guide to the Health Care Field and to the statements of the National Association of Blue Shield Plans on health care costs submitted in 1976 to the Council on Wage and Price Stability by Lawrence C. Morris. Stressed in this statement is the complexity of the types of expenditures for physicians' services as well as those for other hospital administrative and supporting personnel, drugs and supplies, capital improvements, and other things. Blue Shield's records indicate that physicians received approximately 18.9% of the health care dollar.

Surgeons' fees and incomes have been in the public spotlight for several years, but it has been difficult to obtain data on the changing pattern of surgeons' fees for various operations. According to figures published by Medical Economics in its Annual Physicians' Survey, median surgical fees for some standard operations have increased during the past 12 years as indicated in Table IV (see page 16).

Explanations for these increases have included the inflationary trends of overhead, skyrocketing malpractice premiums and other surgical expenditures. Other manifestations of great increases in surgical fees are seen in some of the newer operations, such as renal transplantation operations; coronary bypass procedures; total hip replacement operations; microsurgical procedures in neurosurgery, plastic surgery, and otolaryngology; and others. The fees charged for such procedures are often considerably higher than fees for older established procedures.

A number of published studies have emphasized the fact that physicians and surgeons perform two functions other than services for fees that contribute to the cost of health-care delivery:

- They order various expensive diagnostic tests or therapeutic regimens for their cases.
- They are required to devote considerable time and effort filling out insurance claims and writing letters documenting or certifying diagnostic or therapeutic procedures. The cost of paperwork is paid directly or indirectly by the patient.

This service is consuming more and more of surgeons' time.

Many proponents of health-care plans have concluded that an effective way to reduce medical care costs and related inflation would be by controlling surgeons' incomes and, particularly, surgical fees. Between 1947 and 1970, physicians' annual salaries are reputed to have increased fourfold. Much of this increase has been tied to the rapid growth of third-party payment plans. Physicians thus became able to charge fees and collect the major part of them for services rendered to many poor patients.

The growth of comprehensive insurance coverage has both added to the physicians' income and stimulated patients to seek medical help much more frequently and for conditions which ordinarily would have gone untreated.

Growing socioeconomic factors

In a previous address in 1969 entitled "Crisis and Apathy," I pointed out that some segments of our population are becoming increasingly aware of the availability and cost of medical services. This awareness has grown, and now we clearly must recognize that health care has become a political vehicle for possible changes in social ideas and goals, the outgrowths of union collective bargaining, federal government action, and consumer choice. Thus, the health-care system is being pressured by these changes in addition to those of inflation and rising hospital costs. Emerging from this awareness has

been the public's insistence on a greater supply of primary physicians, better access to surgical care, and maintenance of the quality of that care. Many of the social and political plans that have been developed appear to have resulted in confusion and have, in turn, contributed to the growth of medical costs. Such factors have included:

- The federal policy to expand the supply and accessibility of health-care services. This policy has been a great factor in increasing health costs through a greater supply of physicians and a growing demand for their services by the public.
- The government's Hill-Burton program, which aided in the construction of 40% of the beds in non-federal short-term hospitals in 1974. More than \$15 billion was estimated to be required in 1974 for the operation of Hill-Burton supported beds.
- Through federal support of the building and education programs of medical centers, the number of physician graduates has more than doubled since 1958, and by 1985 will have more than tripled. The government's share of the financial support of medical schools' total annual budget rose from 0.4% in 1945 to 53% in 1968 and was 41% in 1974.
- The average medical school increased its full-time faculty from 70 to over 250 during the same period, and almost 50% of these received some or all of their salaries from federal research funds.

Table IV	
MEDIAN FEES OF GENERAL SURGEON	S
-SELECTED PROCEDURES AND SELECTED	YEARS

	Median Fees			Percent Change				
	1965	1970	1975	1977	65-70	65-75	75-77	65-77
Appendectomy	\$175	\$200	\$275	\$325	14.3	57.1	18.2	85.7
Cholecystectomy	275	NA	450	500	NA	63.6	22.2	81.8
Inguinal Hernia (Unilateral)	150	NA	270	315	NA	80.16	16.7	110.
Gastrectomy (Subtotal)	400	NA	600	700	NA	50.	16.7	75.

"Research has improved care and decreased costs on one hand for some diseases, but increased costs on the other hand by making available new and often more expensive services."

Malpractice liability effects

Recent studies show that in 1975, malpractice insurance accounted for 8.1% of physicians' average total medical practice expenses compared to only 2.4% in 1973. While there is some evidence that this problem is leveling off and decreasing during 1977 and 1978, most areas in the United States are still involved in the "malpractice nightmare." The Continuing Survey published in 1976 by Medical Economics has shown that only half of 6,600 physicians paid an average malpractice premium of no more than \$3,000 and only one in 70 paid \$25,000 and up. For general surgeons the median premium for 1974 was \$2,600, \$4,000 for 1975, and \$6,000 for 1976. The median premium cost was higher in some high-risk surgical specialties, anesthesiology, and radiology.

In addition to the obvious effect of directly increasing the cost of surgical care, the pressure of possible malpractice liability has increased costs indirectly. This pressure has also been taught to medical students and house officers with resulting rising costs for the surgical care provided.

The costs of malpractice insurance coverage has also become a major item in the hospital budget. This pressure on institutions has led to excessive hospital malpractice premiums, expansion of administrative staffs, the formulation of anti-risk requirements, and the development of large security forces and plans to protect patients and employees.

Research

As mentioned earlier, nearly one-half of the full-time faculty members of medical schools received part or all of their salaries from federal funds. The research orientation produced by these funds has had its impact on medical and surgical costs. It has increased the use of sophisticated and expensive medical technology for specialized workups. Examples include specialized x-ray studies, arteriography, radioisotope scans, echograms, endocrinologic assays, and CAT scans.

Another example has been the emergence and development of new surgical operations that have recently been introduced into clinical practice. As I indicated earlier, these operations have been complex, time-consuming, and expensive procedures. Examples are total hip replacements, microsurgical procedures in neurosurgery and plastic surgery, renal and other transplants.

Federal expenditures for health research in 1976 amounted to only 2.4% of the total cost of medical care. The majority of these funds have been allocated by the National Institutes of Health. Advances in diagnosis and treatment realized from these expenditures have contributed significantly to the cost of medical care. Such matters are difficult to evaluate, however. Research has improved care and decreased costs on one hand for some diseases, but increased costs on the other hand by making available new and often more expensive services.

For example, the Study of Surgical Services in the United States sponsored by the American College of Surgeons and the American Surgical Association published a list of specific disease categories which had been affected by certain research contributions. The study indicated that direct costs of treatment increased \$121.1 million in 1970 over what could have been expected in 1960, had not technological advances been made during the decade. At the same time, the same expenditures resulted in an economic savings of \$2,184.5 million in mortality costs and of \$192 million in morbidity costs. The ratio of indirect cost savings to increases in direct expenditures was thus estimated to be approximately 20 to one.

Certain financial restrictive polices of the federal administration initiated in August 1971 have tended to de-emphasize medical research by withholding or reducing federal funds for the support of approved, ongoing, and projected research.

Such governmental policies must be questioned. History has shown that the most significant improvements and advances in health care have come from research. One need only look backward in time to the products of such research to understand their significant impact on the delivery of patient care. Examples are the development of the microscope, the germ concept of disease, the antiseptic and aseptic principles of surgical practice, small pox vaccination, antitetanus

"... no simple plan for controlling medical and hospital practice costs can exist unless an effective method is developed by Congress for controlling general inflation . . ."

toxoid, the Salk and Sabin vaccines for poliomyelitis, the discovery of sulfonamides and penicillin, and many others. I am firmly convinced, therefore, that the real hope of the world for improved and cheaper delivery of health services lies in research and its products.

Quality care—Can we afford it?

Every thoughtful individual must realize that high quality surgical care is of great importance to the medical profession and to the American public, and, therefore, must be concerned with the threat of inflation and rising medical care costs to the high standards of quality surgical care.

The complexity of the numerous factors contributing to the inflationary spiral makes it apparent to me that no simple plan for controlling medical and hospital practice costs can exist unless an effective method is developed by Congress for controlling general inflation and the direct and indirect costs of increasing salaries of non-professional personnel, equipment, and supplies, as well as current living expenses. If surgeons' fees and incomes are frozen or controlled without freezing other salaries and inflationary costs, the high cost of medical care delivery will continue and increase further. In this regard, the U.S. Bureau of Economic Analysis published statistics in 1977 tracing different expenditures of personal income between 1950 and 1975 (Table V).

Of interest to me is the fact that the amount of personal spending by Americans increased from \$192.0 billion in 1950 to \$973.2 billion in 1975. Of special interest has been the report that Americans spent 23.0% of the 1975 amount for food, drinks, and tobacco whereas their expenditures for medical care were only 8.9%. The figures suggest that we are spending large amounts for tobacco and alcohol which in turn contribute to the increased incidence of cancer of the lung, other types of cancer, arteriosclerotic and heart diseases, trauma, cirrhosis of the liver, and various metabolic diseases-some of the leading causes of disease and death in the United States and major expenditures of the health care dollar.

All of these factors bring me to two other considerations: "What about the quality of health care-can we afford it?" and "What

	T	able V						
PERSONAL SPENDING, BY PRODUCT								
	1950	1960	1970	1975				
Total Consumption (in billions of dollars)	\$192.0	\$324.9	\$618.8	\$973.2				
Food, Beverages & Tobacco	30.3%	27.1%	23.8%	23.0%				
Housing & Household Operations	26.5%	29.0%	29.4%	30.1%				
Transportation	13.2%	13.1%	12.6%	12.9%				
Clothing, Accessories & Jewelry	12.3%	9.9%	9.0%	8.4%				
Recreation	5.8%	5.5%	6.6%	6.8%				
Medical Care	4.7%	6.2%	8.1%	8.9%				
Other	7.2%	9.2%	10.5%	9.9%				

"Before the public gives up [advances in high-quality care] I believe they will insist on accountability by government and surgery for quality care as well as any factors which threaten it."

about our accountability for the quality/cost effectiveness of surgical care?"

I could easily be trapped into forgetting that dollars are not the only measure useful in developing answers to the question of quality care. Obviously, there are fiscal costs which society must consider in any anticipated change in health care. Any consideration of change must include items related to availability, effectiveness in controlling or curing diseases, provisions for progressive improvement in surgical care through research and planning, and freedom of patients and physicians to operate in a pluralistic, freechoice system.

Five years ago, some proponents of national health insurance claimed that 40 million patients in the United States were without basic medical coverage. Today other proponents claim the number is 24 million, nine million of whom are below the proverty line. I have been unable to obtain factual data to support either claim, but this question should be settled and an answer obtained. The latest estimate I have been able to obtain is 13.8 million patients.

There is little doubt but that the quality of surgical care rendered by Fellows of the College is of high quality and that it has been progressively improved through research, development, and experience. But what about its cost? Can we afford it? Cost estimates for the next ten years are very "soft" and tentative. If inflation and hospital costs continue to escalate at the same alarming rates, the quality of surgical care will soon be affected and will be priced out of the quality market. Moreover, this nation cannot afford national health care plans if inflationary costs continue to escalate. Before cost restraints within hospital practice can be realistic and effective, governmental measures to control inflation will be necessary.

The affordability of high quality care in the context of some limitation of our national resources must be included in any consideration of what services will have to be omitted because of the cost of continuing inflation or what priorities will have to be modified in favor of a national health plan.

From a plethora of reports and informa-

tion concerning inflation and the costs of hospital and medical care, one rapidly develops a concern for the complexity of the problems responsible as well as a sense of inability to answer our question about whether or not we can maintain a high level of quality care. The public has been educated as to the great degree of technical skills and procedures that are available for the prevention, control, or eradication of surgical conditions and the improvement of the highly valued "quality of life." Before the public gives up these advances, I believe they will insist upon accountability by government and surgery for quality care as well as any factors which threaten it. PSROs, utilization review committees, Medco peer review, cost containment committees, certification, recertification, and disease audits are outgrowths of public, governmental, and professional efforts to provide responsibility for quality care, accountability for expenditures, and relative cost competitiveness for the health dollar.

It is important that we cooperate and collaborate in these efforts, but we must be vigilant in protecting the public and in providing excellent quality of surgical care, the relief of symptoms, and the improvement of the quality of life.

". . . this nation cannot afford national health care plans if inflationary costs continue to escalate."

On the other hand, we must resist any changes which would threaten the delivery of quality care through the introduction of unilateral, ineffective, unacceptable, or otherwise undesirable methods of health care delivery that would threaten the professional and personal liberties of the patients and their surgeons.

We must guard quality surgical care and keep it ongoing, not outgoing!