Medicine, its Marketplace, and the American Dream

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Dedicated to Arlene, whose honest voice sustained this work.

Preface

As a veteran physician specializing in infectious disease I see health care from the inside looking out. For me the shortcomings of its economic organization translate directly into human consequences. Elderly patients whose prescriptions remain unfilled because Medicare does not cover them, or young families who forego needed treatment because neither they nor their employer can afford to purchase health insurance are but two of the systemic problems that mock our nation's prosperity. It is from this vantage point that I view health-care reform. But what are my qualifications? They stem from the variety of my experiences as a physician. I taught medicine at McMaster University when it was an innovative new medical school in Canada.I worked in the New York City Health and Hospitals Systemas Chief of Infectious Disease in Harlem Hospital. I am now inprivate practice in suburban New York. In my years of teaching and practice, I've witnessed the beginning of socialized medicine in Ontario, Canada; experienced the frustrations of practicing medicine in an underfunded inner-city community; and now I am observing the disintegration of medicine as both government and managed care focus on health-care cost in an effort to protect their own self-interest.

In early 1991, the mounting antipathy toward the medical profession prompted me to write about health care. This first attempt was an introspective exploration of the practice of medicine, as I then understood it. In the course of this exercise I came to a number of conclusions, many of which I had not anticipated. It became clear that the practice of medicine as a cottage industry was too inefficient to cope with the complexities of modern medicine. The future of health care depends as much upon how physicians organize themselves as it does upon the method of its funding. What I see as the logical direction for medicine to follow bears little resemblance to the way I now practice. The conclusions of this first attempt culminated in a submission of a proposal for health-care reform to the Clinton administration. I returned to my writing when the distortions in healthcare

funding became too painful. Over this past century the success of medicine and its science induced a shift in the way people view their own mortality. People now expect to survive even the most severe illness. Yet their access to care is limited because health-care reform focuses entirely upon the political and business ramifications of its cost. Both business and government take for granted that it is proper for them to define the limits of care available to patients. This book was written because I believe it is time to challenge this assumption.

There is another underlying theme in what follows. Economic solutions in this country ought to reflect the basic principles upon which it was founded. The very character of Americans can be traced to the Declaration of Independence. It is worth the effort to redefine our health-care system in keeping with our traditions of equality, freedom, and the pursuit of happiness.

Chapter 1: The Wayward Dream

There is something surrealistic about being a physician at the turn of this millennium. The cornucopia that is medical science seems to spill forth an endless series of revelations about the very nature of man. The secret to our construction, locked in the spiral of our genes, gradually yields its tale. As scientists record each genetic sequence in our chromosomes, the chance to unravel the secrets of our past becomes more real. Population geneticists already possess the ability to track the historic migrations of human populations. Soon careful dissection of each genetic mutation will determine how subtle variations in our immune systems may explain the wide differences in human response to disease. There is good reason to believe that medical science is on the verge of exponential growth in the understanding of our cellular biology. The possibility exists that by the turn of the next century virtually every mechanism of human disease will be understood. The implications of this explosion in knowledge on the potential to understand and cure human disease are almost infinite.

Today physician skills include the ability to cure diseases that killed so easily only a few short decades ago. Typhoid fever, smallpox, and Hodgkin's disease each no longer presents a crushing mortal threat. Soon they will be joined by other diseases, to drift into the background of our consciousness, remembered only in the abstract as threats to our existence. After all, how many of us remember the last polio epidemic? Yet despite this success, the physician finds his profession's reputation tarnished. Rather than cherish the physician's considerable ability to cure disease, society focuses on the cost of care. People not only resent paying their physician, they also resent his apparent economic suc-

cess. Employers complain about the burden health insurance places on their business costs. Politicians, recognizing an opportunity, compete with one another to produce an economic solution that complements their own particular set of political beliefs. At a fundamental level, it is apparent that the modern physician is judged not against his use of modern science but upon the economic impact of that science on his society. If this is the new standard, we as a society must re-evaluate our expectations.

We like to think of our physicians as loving and compassionate. During the Clinton health reform era, the television media went to great lengths to find physicians who routinely made house calls. They were portrayed as the last vestige of the compassionate practice of medicine. By inference, today's physicians, despite striving to apply the best of medical science to their practice, were disparaged as dispassionate and cold. In human terms it is doubtful that physicians, then or now, differ in their ability to be good and compassionate people. But it served a political purpose to create and exploit a different public perception. House calls are part of the folklore of this country. They evoke a vision of the family doctor, black bag in hand, riding out into the countryside to visit a sick patient. This image ignores the observation that his black bag held little more than some digitalis leaf, opium, and a few cathartics. But it is the absence of modern science that transforms this physician's ability to communicate his compassion to his patients into the most important ingredient in that visit. Should we be surprised that to practice medicine today requires a different balance? House calls exemplify an inefficient and antiquated economic model. However charming and romantic these traditional doctors may seem, to judge today's physician against this model is an obvious distortion that belittles the dedication of the contemporary physician. Yet politicians exploited this simplistic image in an effort to control the health-care system. In the process they sought to discredit today's physician along with the complex medical system that evolved with him. To do this they created a stereotype of a cold dispassionate profession, overcompensated at society's expense. The campaign encouraged Americans to conclude, despite their personal trust of their individual doctor, that the profession is at the root of the problem. As with any stereotype, the denigration is intended to emasculate its target in order to facilitate its exploitation.

Perhaps we should reexamine the origins of this apparent change in perception of the medical profession. It is counterintuitive to assume that the contemporary physician is less human than his earlier counterpart. It is unlikely that the emotional pain he endures when his patient dies is less sincere. But his pain is measured in a very different world. As science pieces together the complexity of our human biology, the physician's expecta-

tion of himself is, of necessity, directed toward a more objective standard. Unlike his ancient predecessor, today's physician must apply his art to the inner complexity of each cell. There is no precedent in human history for the responsibility this entails. Yet each physician accepts this challenge as part and parcel of the Hippocratic Oath. The impact of this acceptance on the daily practice of medicine is profound. Now the profession demands that the physician focus his attention upon diagnosis and treatment of disease. The urgency of this focus easily displaces his predecessor's preoccupation with the desire to console his patients. However, this shift does not excuse today's physician from expressing his compassion. But this compassion must now be presented in the harsh light of scientific reality. This is not easily accomplished. The patient is often ill prepared to hear his own mortality so clearly defined.

This brings us to a parallel factor affecting the practice of medicine. As science and technology advance, so too does the sophistication and therefore the expectations of the general public. Unfortunately, these expectations may be based more upon the hyperbole of scientific hypothesis than current reality. In short, the patient's perception of science, upon which his trust is based, may exceed existing knowledge. But this presumption encourages the belief that somewhere the answer must exist. The physician's failure must then reflect upon his competence. The complexity of the patient's problem does not factor into this perception. This growing public demand for an infinite perfection must ultimately exceed the profession's ability to deliver. This discordance, if not seen in perspective, may seriously damage our ultimate ability to realize medicine's full potential. Seen in broader context, however, it is all part of the fabric of change. If we are to maximize our benefit from this change we need a clearer understanding of the evolving complex relationship between medicine and society.

In the current political climate, the problem is not about the acceptance of medical science, but about its economics. What is so different about these economics, then and now? Could it be that we revere our folk hero physician not so much for his medical knowledge but for the fact that we stood on common ground with him when we negotiated his fee? The patient paid his physician entirely out of his own resources. This was a real price that all parties understood. It was determined by easily recognizable principles of supply and demand. The humanity involved in the exchange between physician and patient was immediately acknowledged by a mutual agreement upon its economic value. The physician-patient relationship had a legitimate, definable price.

Can we say the same thing today? The answer is no. In most instances, a third party makes the actual payment for medical services. Insurance, as a means of paying for health care, removes the physician and patient from the responsibility to negotiate a mutually acceptable price. Consequently neither physician nor patient has any understanding of the other's economic need. The mutual understanding inherent to the original concept of fee-for-service has eroded away. It is no longer possible to determine a legitimate price. The emergence of health insurance created a complete dissociation between the market forces of supply and demand. The consequence of this dissociation on the practice of medicine in particular and on society in general is enormous.

How did this economic dissociation come about? It began as a well-intentioned solution to a growing problem. The productive focus of the scientific method upon the problems of human disease by the great pioneering scientists of the 1800s was its genesis. By the mid-1930s the accumulation of scientifically valid methods and therapies reached a critical mass. The discovery of insulin for the treatment of diabetes, penicillin for the treatment of infections, and safer methods of anesthesia to permit more complex surgeries, are but a few of the many advances that contributed to an ever-broadening range of available medical treatments. It became apparent that for many diseases, the moral and economic decisions were no longer simplistic. To sit passively at a loved one's bedside and pray for a favorable outcome when their pneumococcal pneumonia reached its "crisis" ceased to be acceptable. The availability of successful active interventions made the passive acceptance of death an unacceptable alternative. This basic fact is the fundamental driving force behind the inevitable changes in medical economics that followed. We will all choose life at every discernible opportunity. This choice propelled medicine forward into an age of immense promise from which no reasonable person would wish to retreat.

Yet there was no clear economic path to its realization. As the overall cost to society grew, economic and political considerations led to progressive reduction in the funds available to health care. Justification centered upon the concept that medicine was primarily a cost center to society and did little to foster economic productivity. This was buttressed by the growing political acceptance of the concept of universal health care. To its proponents this goal clearly required direct government intervention. As the pure dollar cost of medical science swept across the economy, these concepts hardened. Medicine became the economy's ugly duckling. An inevitable economic clash occurred. Convinced that medicine imposed a drag upon the economy, the value of health was discounted in favor of more acceptable concepts of the society's economic good. The implementation

of these concepts had far-reaching consequences. External management of health care became the norm. Controls on access, the search for waste and overspending, and the notion that the medical profession was overcompensated for its work were all logical extensions of these twentieth-century perceptions. But if these economic assumptions are wrong then the corrective measures taken may actually be destructive. Fortunately, a new sense of the economic worth of medicine to our society is beginning to emerge. Surprisingly, the economic community's desire to guide public policy is its source. The community's immediate objective is to develop better ways to measure the cost of health care. But their conclusions begin to illuminate some basic fallacies in the assumptions that drive our current health-care system. Two economists, David M. Cutler and Mark McClellan[1], writing in Health Affairs, did a cost benefit analysis of technological advances in five common conditions: heart attacks, low-birthweight babies, depression, cataracts, and breast cancer. They recognized that the cost benefit of a technological advancement might result either from the direct substitution of a new for an old technique or from a "treatment expansion effect," as the reduced cost, clinical safety or increased clinical efficacy of a new technique takes hold. As a treatment gets better, more people receive it, thus leading to an expansion of health care within the population, often at no increased cost. The economists reach the startling conclusion that "the benefits from lower infant mortality and better treatment of heart attacks have been sufficiently great that they alone are about equal to the entire cost increase for medical care over time." They also conclude that "medical spending as a whole is clearly worth the cost." They also make the crucial observation that "the focus on reduced medical spending is because spending, and not health outcomes, is what is currently measured." Implied in these conclusions is the recognition that the improvements achieved by medical science in the care of hundreds of other conditions all accrued to society as a total freebee. If the effort to produce better results in just two conditions can reap such huge benefits to society, the concern over waste and overspending seems trivial and mundane. Our current view of medical economics is absurd. The problem in health care is not its cost. We would do better to focus our efforts on access and organization.

There is another factor that suggests health care's value to our general economic well-being. At the beginning of this twenty-first century we are mired in a long recession. Amidst the economic gloom, health care shines as the most stable segment of the economy. Some economists even believe that its strength will lead the economic recovery. This should not be a surprise. Good health is a basic desire of people in this or in any other society. Demand for health care will persist even in difficult times. In the final analysis, our society's strength comes not from how high we build our buildings but from how well

our people live. Yet many economists measure the worth of an industry by its productivity. It is the goods produced rather than the services provided which these economists value most. Since they regard health care to be largely a service industry, it is considered to be of low productivity. They believe that it contributes little to investment or consumer spending. This denigration of the contribution of medicine to economic prosperity seems totally misplaced. Among other factors, productivity requires a healthy work force. Incremental improvement in workers' health therefore must be reflected in improved productivity. As people live longer, healthier lives they contribute greater periods of productivity uninterrupted by illness, infirmity or death. A long-lived, healthy population makes us a stronger, more productive nation.

This confusion over medicine's economic productivity speaks to the core of the problem. How can economists view medicine as productive when it is positioned as a cost center to business? Business pays the bulk of the health insurance cost in this country. This fact obscures medicine's economic contribution. This is a fundamental problem. Rather than create economic models to facilitate current public policy, we might do well to reexamine the fundamentals of the medical marketplace.

Chapter 2: The Paradox: A Priceless Expansion

As medical advances accumulated, costs multiplied. Each new diagnostic test, surgical procedure or effective pharmaceutical therapy, turned previously simple illnesses into complex and often expensive medical experiences. Fewer and fewer people could afford serious illness. Inevitably, some means of averaging cost over large groups of people had to emerge. Indemnity insurance filled the void. But its creation inadvertently introduced a unique economic phenomenon; that I can best illustrate by an incident in my childhood.

One summer, as a child, I visited my grandfather in a rural Canadian village. Its one distinction was its main street, a short piece of paved road that returned to gravel at either end. To keep me amused, he would send me across this road to the general store. There I was allowed to pick whatever I desired. Each time I left, the storekeeper wrote something in a little black book. It was wonderful! I had access to all the candy in the world. I went back many times. Such was my innocence that at summer's end I told my grandfather that I wished my father had a little black book, too! As I grew older, I realized that black books are not open-ended gifts, but bear real consequences. We look upon indemnity insurance as if it were my grandfather's little black book. We see it as both open-ended and generous. At its inception the medical indemnity insurance industry accepted at face value that it was insuring the physician-patient relationship. It assumed that this was a stable economic unit. In the beginning this was essentially true. But medical science was about to enter an age of accelerated growth. The physiologic and pathologic mechanisms unique to each organ system began to yield their secrets to the trained scientific mind. These new areas of knowledge further evolved into the various subspecialties in clinical

medicine. Endocrinology, Cardiology, Pulmonology, Gastroenterology, Neurology, Nephrology, Rheumatology, Oncology, Neonatology, Infectious Disease, Immunology, Ophthalmology, as well as all their surgical counterparts, came into existence and then refined and expanded their particular areas of expertise. This knowledge empowered physicians to achieve unprecedented levels of understanding and control of disease. The prosperity we enjoy at the beginning of this millennium is fueled in no small measure by the technology this scientific endeavor has spawned.

Initially, the indemnity insurance industry responded, as generously as my grandfather, to each medical advance. Just as he had done, they paid whatever bills they received. They covered the broadening risk by charging more for their insurance. Their actuaries recalculated their costs and projected new prices. The bottom-line effect of this recurrent averaging of cost by indemnity insurance was to create an open-ended payment system that eliminated any economic resistance to change or innovation. The price of medical care was no longer tied to the physician-patient relationship, but to the rate of expansion and application of new medical technologies. But there was a darker side to their business plan. To be viable, the insurer had to convince large groups of people to subscribe. This was most easily accomplished by selling the concept to businesses. This decision to sell to business sealed medicine's fate. Now neither patient nor physician was being asked if this averaged price was fair. The dissociation of price was complete. For medical care, these basic insurance decisions destroyed all vestiges of a verifiable price determined by supply and demand. Without a verifiable price it is virtually impossible to devise a rational economic solution to the problems facing health care today. This is the fundamental flaw. To correct it we must first explore those factors that compounded its complexity and then unravel its rational resolution.

Health insurance funded an enormous medical revolution. Today, few individuals can pay for their own care when faced with the overwhelming expenditures associated with significant illness. Averaging of cost by health insurance overcame this factor. But the impact of indemnity insurance on the medical technology and pharmaceutical industries was of far greater significance. These industries would not have made such enormous capital investments without the serendipitous reassurance of return provided by indemnity insurance. The constant escalation of premiums in response to increased cost by insurance companies led to a passive accommodation of the fiscal growth of modern medicine. So successful was this expansion that it established in the general public a taste for, then an expectation of, excellence in medicine. This public demand would not exist had it not been fueled by indemnity insurance. In retrospect I cannot conceive of any other viable

funding mechanism. Government would never initiate, let alone sustain, such a breadth of expansion in medical care. In fact, government has been a reluctant partner in this growth. Funding for the National Institute of Health (NIH) is, and always has been, a constant political battle. Along with sex and procreation, one of man's strongest instincts is the desire to stay alive. It is hard to imagine, therefore, that anyone would argue that this expansion of medical care should not have occurred. It is also difficult to imagine that anyone would not want it to continue. It is, after all, in everyone's best interest. Given this common desire, perhaps we should re-examine some of our basic premises. In the process we may find our way to a better answer. We can begin by identifying the negative effects of indemnity insurance.

The open-ended funding provided by indemnity insurance would seem to be a desirable solution. It clearly provides an ongoing expansion of revenue, but it fails to provide accountability. Without any legitimate resistance to spending, the purchase of new technologies lacks the discipline of a true marketplace. Furthermore, indemnity insurance evolved in the context of medicine as a cottage industry. This arrangement served well in the past to permit the inflow of new knowledge and technology. But such a diffuse system is ultimately wasteful of resources, especially in the face of a massive influx of new technologies. Fee-for-service encouraged small practices to buy whatever technology they felt was appropriate to their own needs. Undoubtedly, from each practice's point of view, these purchases are necessary. But from a broader vantage point, it clearly encourages reduplication and consequent waste of investment dollars. A coordinated approach to the needs of the community at large is clearly beyond the capability of such a system. If we factor in the demands on future investment that will result from an age of accelerated growth, it is not hard to predict the ultimate failure of this system. But it did, for a time, provide a mechanism to fund change. At its zenith, obsolescence was not one of its shortcomings.

Indemnity insurance creates a medical care system without a definable price. To state this another way, the problem is not that medical care is too expensive, or that physicians are overpaid, but that no one can prove it. In this priceless system no one takes economic responsibility for all aspects of care. The original fiduciary responsibility between physician and patient has long since disappeared. Although fee-for-service still persists, it exists in name only. Under indemnity insurance, changes in fees are absorbed by the insurer and then passed on immediately to the purchaser. In all likelihood, this purchaser will be an employer rather than the actual patient. As the system evolved, employers increasingly

assumed the real fiduciary responsibility. It is not surprising, then, that eventually the appropriateness of this model came under scrutiny.

To paraphrase Churchill, the storm had gathered. The pentup energy of this economic anomaly culminated in the Clinton presidency's foray into health-care reform. This effort collapsed beneath the weight of its own political machinations. But the essential question remained: could business continue to bear the cost of this medical expansion? As costs rose, not unexpectedly or unreasonably, business interests objected. After all, by purchasing medical indemnity insurance, business was in the unenviable position of essentially funding a whole sector of the economy out of their revenue. The logical solution for business under these conditions is to assume full fiduciary responsibility: if they pay the price they have the right to control the cost. Managed care evolved as the response. But there are real consequences to this evolution. Business now assumed full fiduciary responsibility for a health-care system whose price was already dissociated from the actual delivery of medical care. Business then carried this one step further by redefining medical insurance as a business cost center. This is a pure business decision. Within this new context there is no frame of reference to the clinical implications of this business decision. It is a business solution to the cost consequences to business of the physician-patient relationship. Therein lies managed care's weakness. We all have too great a respect for our own lives to accept permanently so cold a conclusion.

Implied in this assumption of fiduciary responsibility for health care by business is a disturbing corollary, which effectively eliminates medicine as an equal partner in economic society. The whole medical-industrial complex—physicians, hospitals, pharmaceutical firms, technology firms and all the other aspects of business endeavor necessary to the delivery of medical care— is subservient to business. This is not a healthy situation. Our society has entered a period of accelerated change. The economics of accelerated change require flexibility and adaptability. In the course of its own struggle to adapt, it is unlikely that business will permit a subservient industry to siphon away its own resources. Benevolence is not a characteristic of bottom-line business. Medicine will be stifled under these circumstances.

As the economics of accelerated change take hold, we need to reassure ourselves that society maintains appropriate priorities. We live in society so that we may survive and prosper. Accelerated change is valueless if medicine cannot keep pace. Life itself is at stake. The paradox is that this "priceless" gift of expanded medical knowledge has oc-

curred in a “priceless” vacuum. The challenge is to find a productive solution to this paradox.

Chapter 3: The Goals of Health Care

In order to gain a basic understanding of the problems we face, we need to define clear, acceptable criteria for a workable healthcare system, then apply these criteria to those solutions that currently exist. In so doing we may identify their shortcomings. Out of this review we' ll hopefully gain useful insight that will point to a rational solution to health care's problems.

The most crucial component in a workable system is universal care. Every citizen must have access to quality medical care. This goal is a fundamental challenge to our society. The manner in which we choose to resolve this issue will cast a long shadow across the future of the American Dream. In this country we have a complex set of expectations that are unique in the world. We believe in the rights of each citizen. Equality, liberty, and the pursuit of happiness are the philosophic bedrock upon which this country functions. In the attempt to establish a particular equality, such as universal health care, we must be mindful of the delicate balance required to sustain all our freedoms. No other nation faces this particular challenge.

A system must also provide an ordered, timely replacement of equipment and techniques. For a health-care system to remain current, the rate of depreciation and replacement of its fixed assets must be in keeping with the current state of the art of those systems. For this to be done responsibly, it must neither result in the frivolous replacement of one piece of equipment for the latest, jazzy model, nor be so belated that the system deteriorates as a consequence of insidious obsolescence.

For the future of health care to remain secure, the method of funding must provide sufficient profit to allow for continued investment in new technologies and research. In this age of accelerated change, the rate at which old knowledge is replaced by new concepts will clearly shorten. The funding of medical care must allow the profession to keep pace with each advance in medical knowledge. Successful funding of health care must facilitate treatment expansion. Without this, the provision of universal care becomes a hollow victory.

Underlying all these criteria is the issue of responsibility. A rational health-care system ought to place the responsibility for the outcome of a particular decision into the hands of those who make it. Ultimately, health care deals with the life of each individual citizen. Any decision that affects health care impacts that life. Solutions that fail to achieve this goal invite a dispassionate system that borders on the cruel.

Finally, our health-care system must make fundamental economic sense. The economic laws of supply and demand will continue to apply no matter what solution we choose. If we do not align these forces appropriately, health care will be driven onto the rocks of economic and social disaster. Surely the health of future generations warrants the effort to get it right. We must have a rational price for health care. With this outline of the basic parameters of a successful health-care system, it is time to examine those solutions that already exist.

Chapter 4: The Original Model

Picture health care at the dawn of the twentieth century. Physicians, still in solo practices, catered to the wealthy and to the growing middle class. Care for the poor depended upon the social commitment of the individual physician. Urban areas established charitable hospitals for the poor. With no reason to seek alternatives, the wealthy preferred to be cared for, and to die, in their own beds, at home.

At about this time the first glimmer of excitement over the possibilities of modern medicine began to spread through the profession. Sir William Osler published the first comprehensive textbook of medicine, which assembled all the concepts of medicine that were then considered to be valid. As a consequence, his work firmly established the scientific method as the bedrock of modern medical education and practice. First, at McGill University in Canada, and then again at Johns Hopkins University in Baltimore, he fostered a tradition of rigorous scientific investigation and at the same time codified the moral and ethical behavior expected of a modern physician. From that point forward the system evolved, bearing the stamp of his particular ethic.

Principles of good medical practice were now taught based upon a uniformly accepted scientific method. Apprenticeships disappeared. Education became centered in medical schools. Charity hospitals assumed new roles as teaching hospitals, and became the focal point for the application of better methods of medical practice. Medical students understood that pursuit of this education required dedication and sacrifice. Included in this arrangement was a quid pro quo. In return for medical training, the young physician pro-

vided care to the poor. There was an additional price to be paid. In exchange for post-graduate training these institutions expected the doctor to work without pay, and to remain unmarried until he had completed his obligation. This Puritan standard bore Osler's unmistakable imprint.

This link between education, medical practice and service to the poor was, in fact, an early attempt to provide medical care to the whole population. Its origins derive from the ethical concepts contained in the Hippocratic Oath. Its modern interpretation owes much to the strong moral and ethical leadership of the founders of modern American medicine. The presumption of responsibility for the health and welfare of the poor was fully accepted in the practice of medicine long before its emergence on the political agenda. This Puritan ethic is the baseline in our medical social conscience. If we are to understand fully the problems in health care today we need to flesh out the details of this early attempt at social responsibility in America. How was it organized?

Its foundation rested upon the profession's sense of responsibility for the poor. Once fully trained, each physician accepted the premise that upon entering practice he would undertake the obligation to participate in a hospital clinic dedicated to the poor, in exchange for hospital privileges. In this way the expertise of the finest physicians was available to even the poorest patients. Wherever a doctor might decide to practice, this commitment of service to the poor was ingrained in his basic ethic. On the other side of this equation, the patient accepted a quid pro quo: he agreed to be a teaching patient. However paternalistic, this system met the basic requirement: that a mutual responsibility for the provision of health care exists between the physician and his patient. However charitable in its intent, this laissez-faire system suffered from a basic weakness. Its distribution, subjective by nature, was too random and arbitrary to be effective. The basic unevenness of this economic approach was exposed by the relentless expansion of successful medical therapies. Their mounting cost inevitably overwhelmed a system based on benevolence. When viewed in the context of community hospital budgets of $12,000 per year in 1900, the magnitude of the problem becomes clear. It was this fact that ushered in the next phase in the evolution of health care. But, for the first half of the twentieth century, physicians bore the full weight of responsibility for the care of the poor in this country. The legacy of this commitment frames much of medicine's response to change.

This early-twentieth-century configuration of medicine is embedded in our folklore. It is by this standard that most people judge the quality of their health care. We should therefore evaluate this system against our basic criteria. Without the intervention of sci-

ence, the paucity of effective therapies rendered the quality of care available to the rich and poor virtually indistinguishable. In this setting the concept of universal coverage is of little consequence. As the scientific method created a more complete understanding of human disease, the desirability of access acquired real meaning. In the process, medical care took on costs over and above the mere labor of a physician. Dependence upon charitable contributions inevitably became an inefficient method for institutions to meet their own objective of providing care to the poor. Furthermore, this financial limitation gradually widened the health-care gulf between rich and poor. The emergence of this gulf gave impetus to the concept of universal care.

A charitable model of health care could not possibly sustain the demand for investment required by the explosive expansion of modern medicine. It was woefully inadequate as a means of funding either the replacement of old equipment or the incorporation of new techniques and therapies. This inability to sustain investment was one of the primary factors that precipitated change.

In this laissez-faire world, individuals felt little challenge to their rights. They understood and accepted their relative social status. The rationale upon which they based their means of access to health care was self-evident. In this context, the daily economic responsibility for decisions in health care reverberated between the physician and his patient. It was a pure system with a true price.

This evolution of medicine through the first half of the twentieth century marked a watershed in medical practice from the ancient standards of medical care into the modern era. It should come as no surprise that the second half of the twentieth century was characterized by chaotic upheaval that touched virtually every aspect of medicine. Before we can begin to reassemble a coherent approach to medical care in this country, we must first attempt to understand each fragment of its disintegration.

Chapter 5: Opening the Door

Above all else, we humans cherish our lives—a desire that borders upon a greed for immortality. Demand in health care is driven by this human desire. We should not be surprised therefore that funding medicine is an economic problem of Faustian proportions. This reality is fundamental to understanding both the economics and politics of health care. As an open-ended means of funding, indemnity insurance unleashed this desire.

By the 1940s the cost of serious illness produced its first economic ripples. The budgets of ordinary people were no match for the challenges. By then a parent's terminal cancer or pneumonia could wipe out a family's entire life savings. To solve this problem the insurance industry introduced the concept of averaging medical cost over large populations. Implementation of this concept required assimilation of a complex set of actuarial assumptions. Out of this analysis the insurance industry concluded that the risks they assumed must be spread over a controlled population. If they predetermined the characteristics of a given group of insured patients, they could minimize the risk of unexpected fluctuations in the severity of the illnesses they encountered. Any worsening of their risk would then be absorbed by increased premiums. Like any start-up business, insurers identified the best market to target. Since they needed large groups of similar-risk individuals, it was logical for them to sell the concept to businesses and unions. These populations also happened to be the most vigorous members of society. Thus indemnity insurance was born. The configuration of this new financial tool totally altered the dynamics of health care.

Risk pools essentially divided the population into finite groups. In social terms it became a mechanism for exclusion. The very nature of the business plan pre-selected those who worked. As a result workers had easy access to medical innovation. Those who had neither access nor the incomes to purchase insurance were left behind. A sharp medical divide emerged between working people and the poor. Random benevolence, characteristic of the previous laissez-faire system, was replaced by clear economic distinctions. These boundaries still define the essential problem in the distribution of health care. It is not by coincidence that it also parallels our social structure. Over time these boundaries became the framework around which the concept of universal care took shape.

On the other hand, indemnity insurance facilitated a smooth expansion of medicine into the modern era. By continually readjusting premiums in response to escalating cost, the indemnity insurance carriers surreptitiously provided an ongoing source of cash for reinvestment. In this open-ended system, fee-for-service payments represent, in economic terms, the final return on the initial investment in medical science. Unfortunately, as we have already seen, without a price, it lacked the discipline provided by a true market. Nonetheless, this experience clearly identifies the benefit to society of providing sufficient money in the health-care system to allow for investment. But for nearly half a century, indemnity insurance funded the scientific growth and expansion of medicine.

Before going any further we need to explore the various factors that contribute to the escalating cost of medical care. This escalation is framed, both by growth in medical knowledge and by inflation. To put this in perspective, the yearly budget for a community hospital in 1900 was less than $12,000. By the year 2000 an active community hospital had a budget in the neighborhood of $100 million. In this span of time, new diseases were defined. Pharmaceutical companies produced new drugs that were often, in turn, replaced by the next generation of effective therapies. Safer methods of anesthesia encouraged bolder approaches to surgery culminating in the ability to transplant and replace many human organs. The list of medical advances seems to be endless. Each new disease, drug, or surgery, begat new reasons for medical intervention. The role of the physician in the life of his patients took on new meaning. This expansion, driven by medical science, is a fundamental multiplier in the escalating cost of medical care.

But contained in this expansion is another dimension— physicians began to spend more years in training. Each decade witnessed the emergence of some new body of medical knowledge that warranted concentrated study, and ultimately the recognition of a new subspecialty. These doctors entered the competitive world, equipped with a sophisticated

understanding of a complex body of medical knowledge, which they had, on average, spent 10 years of their lives acquiring. They were proud of their achievements, and expected, at long last, to enter the mainstream of American life. They set fees commensurate with the cost of living at that time and their estimate of the value of their expertise. We have already seen that indemnity insurance had removed the litmus test of supply and demand from their decision. It is, however, a peculiar characteristic of physicians that once established, they seldom amend their fees over the course of their years of practice. Physician fees were a function of the time at which they entered practice rather than an accumulated product of the self-granting of a yearly pay increase. The inflationary pressure created by physician fees was almost entirely due to the increased demand for their services.

Despite the benefits reaped by society as a result of the open-ended funding provided by indemnity insurance, there is an underlying feeling that it is in some way un-American. There are several ways in which this is true. First of all, in the best of American business traditions, the laws of supply and demand ensure a fair and equal opportunity for all those involved in the transaction. By selling health insurance to business and union entities, the insurance industry bypassed the physician-patient relationship, thereby creating a dissociation of price that robbed the transaction of this economic honesty.

The real challenge to the American Dream has a more subtle origin. By virtue of its design, indemnity insurance divided citizens into distinct groups. This distinction was based upon the intricacy of the fine print contained in their contracts. Differences in benefits created a capricious stratification of the population that had little relevance other than to the insurance industry itself. Those without access to indemnity insurance were unceremoniously dropped to the bottom of the healthcare pile. They were effectively denied this particular piece of America's promise. In health care, the playing field became a discontinuous landscape in which liberty, equality, and the pursuit of happiness were lost in the glow of medicine's newly found promise.

In such a priceless system, responsibility knows no master. Despite the easy funding of medical advances and replacement of obsolete systems, the fragmentation of fiduciary responsibility created an unbridled maverick system. It was a wonderful ride with a predictable end.

Chapter 6: Owe Canada

In the midst of the political frenzy of the 1990s, our politicians took a hurried look across our northern border, seeking inspiration from Canada's health-care system. Attracted by the twin prizes of universal coverage and centralized control, they envied Canadian socialism. For many, its special appeal lay in its philosophical connection to the social conscience of the nineteenth century. Despite this fascination with Canada, the first practical application of socialist philosophy to medical problems actually emerged in Great Britain. The end of World War II sent shockwaves through the social structure of Europe. Despite his wartime leadership, England's first postwar election resulted in Winston Churchill's defeat by a socialist labor leader, Aneurin Bevan. His government, committed to creating a new social order, nationalized England's heavy industry, altered the tax structure to remove accumulated wealth from the rich and, lastly, nationalized medicine. This latter event requires careful examination.

To the Labor party, socialized medicine meant equality. Universal coverage, both funded by taxation and defined by government policy, created the essence of a socialist society. The government assumed ownership of hospitals, dictated the distribution of health care, and established its price. The cost of all services became a function of government decree. This government believed that ensuring the provision of services to all its citizens met the basic definition of equality. But it is a definition based upon provision of services, not human activity. It requires the conscription of those who provide health care. If government dictates the price of a service, then those who provide that service become indentured servants to that government. In its zeal to level the class society in Eng-

land, the labor government imposed tyranny upon medicine. In the final analysis, socialized medicine is a one-dimensional definition of equality. Everyone is included but only on terms dictated by government.

At the inception of socialized medicine in both Great Britain and Canada, these governments provided payment for all known services. Certainly, in Canada, the first step was to disband the health insurance industry by assuming fiduciary responsibility for all services. Initially they had sufficient tax dollars to meet the requirements of the existing health-care system. Yet by the year 2000, both systems abandoned chunks of their original system. In Canada, many services, originally covered, are no longer included in their plan. Today, Canadians pay for prescription glasses and many other previously covered services. Great Britain now allows the privatization of hospitals and a limited option for private practice. Moreover, both countries rely heavily on rationing services. As an example, Canadian orthopedic surgeons are allowed to perform only a specified number of hip replacements each year. Since hip replacement, a major surgical procedure, will restore a crippled human to normal function, there is a legitimate level of demand for this service. Consequently, each orthopedic surgeon performs his prescribed number of procedures in the first six months of the year, and pursues other interests for the remainder of the year. Many come to the United States to work, or provide humanitarian service in underdeveloped countries, or simply take the rest of the year off. They are replaced in Canada by surgeons who spend the last half of the year fulfilling their quota. This attempt at rationing results in a rather lunatic response: twice the number of orthopedic surgeons performing the required number of hip replacements. In the province of Ontario, CT scans are rationed. As each district meets its quota, patients who need this radiological study must travel to another district that is still below its quota. By year's end, a substantial number of Ontario patients can only obtain this study by crossing the border into the United States where they pay cash. During the Clinton era, a point of contention was the indication for, and accessibility to coronary bypass surgery. The waiting time in Canada for a restricted number of procedures was anywhere from three to nine months. Economists1 now claim that the net benefit of this and other related technological procedures in the treatment of heart attacks is as much as seven times its cost. This is an enormous health benefit to society. Yet government policy denied or delayed access for many Canadians.

But why should this be necessary? Both the Canadian and British governments, by definition, have total control of cost. From the beginning, each established the price of every known service. Therefore blame cannot be assigned to excessive pricing. Nor can

over-utilization of services, by physicians or any other provider in the health-care system, be the source of the problem. The government has complete control over these issues. Then how could these systems possibly fail? Why can these governments no longer afford to provide as comprehensive a medical program as that which existed at the beginning?

Perhaps the orthopedic surgeon's problem with hip surgery is a good place to begin to answer this question. When both governments first introduced their programs, hip surgery was in an early stage of development. Its primary purpose was to repair potentially fatal acute fractures in elderly patients. Since then refinements in total hip replacement led to its acceptance as a routine procedure, not only to save elderly patients with fractured hips, but also to relieve thousands of their crippling arthritis, and to restore many young patients to active productive lives. It is now the standard of care. In contrast, the CT scan is a recent invention that has become an essential tool in the practice of medicine but it did not exist when the medical system became socialized. Therefore, these governments could not foresee the need to include these services in their initial calculations. Compound this problem by the addition of chemotherapy for malignancy, new antibiotic therapies for infection, and, indeed, an ongoing procession of scientific advances that each become commonplace in medical practice and it becomes clear that socialized medicine is ill equipped to accommodate any unforeseen escalation in cost. But medical science is dedicated to revealing the unknown.

It is untenable to blame inflation alone for the financial shortcomings of socialized medicine. The transparent fact is that these governments ration or eliminate services because they are unwilling to fund medical advances out of tax dollars. Yet it should be equally apparent that each medical advance is a direct result of investment. For a pharmaceutical company to develop a new drug, a hospital to provide a new procedure, or a physician to study a new technique, they must all invest to achieve their goal. In socialized medicine, the bottom line is met by limiting investment. When forced to accommodate innovation, government's only alternative is to cannibalize the system.

We have now identified a fundamental flaw in socialized medicine; under this system, government, with total control, funds health care entirely out of tax dollars. Consequently, medicine becomes a political commodity. It must compete for funding with every other tax-supported program. In such a forum, the political decisions that impact investment in medicine are divorced from the needs of patients. To put it in grotesque terms, politicians barter heart transplants for stealth bombers. No matter what the political rhetoric,

when governments deny money to health care, it is a specific denial of money for investment. Limitation of investment in any business is a prescription for failure. Without investment, either to replace depreciated equipment, or to produce new products, a business will die. In medicine, to allow obsolescence of equipment, or to fail to provide the most advantageous medical treatment, strikes at the heart of humanity. Should such a situation persist, the individual must ultimately question the value of his society. Rigidity becomes the prime characteristic of such a system. This is the inevitable outcome when governments dictate price. To understand, we must examine the mechanism by which price is established in socialized medicine. To fund any program a government depends upon taxation. It develops and defines a program, predicts its cost, and then votes it into law. This process creates a de facto price. No other process or market force will change the amount of money available for that program. Of necessity government must define each program in universal terms. This centralized decision-making by government precludes individual practitioners or communities from adjusting the services they provide to meet local need. An unfortunate paradox arises. Although all have access to health care, the system becomes so inflexible that it cannot meet their many disparate needs.

Under socialized medicine, the government determines the rate of investment in the system, the availability of services, and may even dictate a specific choice of therapy. The government has total control of, and therefore responsibility for, the quality of the health-care system it commands. The power of this bureaucracy is absolute. The physician, and therefore his patients, has no choice but to accept the government's parameters. Piecemeal protests cannot change the fundamental nature of the system. Moreover there are many who believe that to contemplate a total revision of the system is heresy. Lost in this political shuffle is the basic human reality; that it is the physician and his patient who share responsibility for each individual outcome. They have the greatest stake in whatever promise the future may hold. Might we expect them to seek meaningful change? Such a goal would require a massive political effort, not only to defeat a given government, but also to obtain a mandate to dismantle the system. Governments are protected from such an outcome by inertia. People feel protected by the mantle of government's paternal protection and remain blind to its inadequacies. They cannot miss that which they have never seen.

As an economic solution socialized medicine presents problems that are the mirror image of indemnity insurance. Socialized medicine guarantees equal access to all citizens. Indemnity insurance does not. On the other hand indemnity insurance seamlessly funds the incorporation of new techniques and therapies into medical care. Under social-

ized medicine the economic pressure caused by medical advances inevitably exhausts the will of government to keep up. Price, in socialized medicine, is a rigid factor created by law. In indemnity insurance, price is a fluid entity supported by competent actuarial calculations. Under socialism, ultimate responsibility lies with the government; while under indemnity insurance, there is none. Both systems ultimately place society in an untenable position. The inevitable accelerated growth of medical science in this coming century will render both systems obsolete.

Chapter 7: A Patchwork Quilt

In the United States, medicine is the quintessential example of the politician's patchwork approach to solving social problems. By the 1950s the accumulated discoveries of scientific medicine finally permeated through all segments of society. But with this success came an inevitable increase in cost. The demand for physicians' services, among other factors, reached an unprecedented level. As we know, the emergence of indemnity insurance provided access for those who were employed. But it soon became apparent that both the elderly and the poor were disadvantaged. However, political recognition of their problems led to the enactment of two quite separate and distinct pieces of legislation. This piecemeal approach created independent programs that function according to their own internal logic. Current proposals to provide health insurance for children or the working uninsured apply this same problem-solving technique. A coherent approach to health care is not a consideration. Instead, government continues to construct a patchwork quilt of political good intention.

For the elderly, the problem was straightforward. Once retired, no financial vehicle existed to protect them when they became severely ill. They often faced two choices: forgo medical treatment, or spend their life savings on what might prove to be terminal illness. It was not uncommon for families to be left destitute upon the death of their loved one. Clearly, this was a significant social problem.

In response, politicians passed the Medicare Act2 "a government-managed health insurance program for the elderly. Like Social Security, it is financed through lifelong pay-

roll deductions and employer contributions to a government fund. Unlike Social Security, linear actuarial tables based on age are not suited to predicting cost when exposed to the multifactorial growth and expansion experienced by medicine. We already know how expansion skewed the effect of indemnity insurance on medical economics. These same forces worked to the disadvantage of Medicare as well. But their resolution in this political arena led to very different outcomes. Because Medicare is funded out of tax dollars, political considerations dictate the government's ability to fund medicine. As the number and variety of medical treatments continued to increase, the inadequacy of the original financial assumptions in the Medicare Act became apparent. Medicare faced the ultimate politician's dilemma: tax or cut. Reluctant to increase taxation, the government chose to no longer pay for services at face value. An inevitable progression of events followed.

Government gave control of medical spending to its bureaucracy. No matter how complex the medical system became, this bureaucracy's only real tool remained its control of the money. The policy-making process that followed is by nature divorced from real patient need. Decisions are based upon statistical analysis, political and economic reality and the best guess of the bureaucrat's selected advisers. This economic detachment has subtle but far-reaching consequences. To understand this better we need to take a small digression.

When computerized tomography (CAT scans) became available, the New York State government rationed their distribution. This is a common bureaucratic tool to control cost. Its justification is based upon a concept of controlled regionalization of medical services. In this particular instance, once guidelines were established, the New York bureaucracy vigorously resisted any expansion beyond their initial allocations. Harlem Hospital, part of the Health and Hospitals Corporation in New York City, was not allocated a CAT scan machine. As a consequence, sick patients who required CAT scan studies were transferred to Columbia Presbyterian Hospital. These patients suffered from complications of drug use, hypertension, diabetes and gunshot wounds. Needless to say they were often not stable enough to warrant the risk of such a transfer. Despite repeated efforts, the government refused to grant Harlem Hospital the necessary Certificate of Need. It took the publication of an article3 that documented the loss of life attributable to that government decision to get a permit issued. It is no small irony that during this same period the New York Times published a picture of a CAT scan being hoisted to the second level of a city brownstone. A private practice, not subject to the same set of rules, purchased the machine. This episode highlights an important issue. To maintain quality in medicine, those responsible for financial decisions that affect medical care ought also to bear responsibili-

ty for the medical outcome. Without this accountability, every bureaucratic decision that delays or prohibits the purchase of new or replacement equipment contributes to the subliminal obsolescence of medicine.

Human error in medicine is of current public concern. Medication errors and timely recognition of abnormal laboratory test are some of the most obvious sources of concern. Most of these errors would be preventable if state-of-the-art medical software were in use. Indeed the next wave of accessibility and accountability in health care is poised to ride the wave of computer technology and the Internet. Progressive physicians across the country would welcome its application. Then why is it not the norm? Because there isn' t any money. Government and managed care have squeezed the system to the point that few institutions or practitioners are sufficiently liquid that they can afford to overhaul their existing systems. Most community hospitals are too encumbered with debt to consider embarking on such a major investment project. This is bureaucratic induced obsolescence at work. You cannot blindly reduce "cost" and expect health care to respond with a generous vision of its future.

Obsolescence in medicine ultimately becomes an exercise in what might have been. It's like walking through the remains of a Minoan city marveling at the excavated ruins, while remaining unaware of the treasures that may never come to light. It is a partial view of reality. It can be accepted at face value, or recognized as a fragment of the whole. In the case of medical obsolescence, the decay occurs in real time. Its erosion reflects our loss of faith that something else is possible. We cannot see a ruin if it was never built. The edifice remains invisible as long as the possibility of investment stays in the hands of those for whom the responsibility of medical care has no meaning. If we are to serve tomorrow well, our current effort must give equal weight to today's needs and the exploration of our future.

With this background, we can return to our discussion of Medicare. Confronted with budgetary constraints, the Medicare bureaucracy uses a wide variety of techniques to control health care spending. They set fees for services, ration their availability, eliminate or refuse to list services as reimbursable, and ultimately refuse to pay for services that were provided based upon their own bureaucratic rules. All these actions are by nature arbitrary since the bureaucracy is divorced from medical practice and gains nothing by considering individual need. But the Omnibus Budget Reconciliation Act of 1993 requires the Medicare bureaucracy to further reduce the Medicare budget. Convinced that physicians drive up costs, they developed a finely tuned chart review system to allow them to

audit physician's offices. The criteria are specific about the documentation required but subjective as to the interpretation of the content. They do not attempt to measure the quality of medicine provided. Armed with the further threat of criminal procedures for fraud, Medicare's auditors have imposed fines equal to ten times the cost of this program. It is their cash cow.

But there is something odd here. At least some economists believe that the whole expansion in medicine is justified by the cost benefit of just four conditions. Why must the government seek such deep reductions in the funding of health care if the benefit has been so great? Why seek criminal sanctions against the medical profession? These sanctions are about money, not medicine. The government's focus is entirely upon the reduction of its cost regardless of the relevance of its measure to the quality of care provided to its own clients. It is doubtful that any physician could withstand scrutiny by a determined auditor. That Medicare should embark on so egregious an invasion of the rights and privacy of both patients and physicians suggests that the government has saddled a beast it cannot ride. The government has not and clearly will not supply enough money to provide reasonable health care to the elderly. Their measures to ration care or to whittle down its cost have failed. As an external agency without any true relationship to the practice of medicine they see no other course but to seek to criminalize its practice. To exert fiscal control over medical costs, the government believes that it must intimidate, discredit and control the medical profession in order to succeed. The logical end game in this sequence is to so demoralize and humiliate the medical profession that it will cower under the pressure and accept its place as a civil service.

Some government policies assume a disturbing pattern. It is common practice for them to exclude modalities of therapy long after they become the standard care. They also establish marginal rates of reimbursement that discouraged the use of specific services. But more obviously they deny payment for many outpatient drugs. This policy effectively disenfranchises many elderly patients from receiving health care. After all, an appropriate diagnosis is meaningless if the patient cannot afford to purchase the required drugs. In point of fact, the cumulative effect of all these tactics is to compromise care for the elderly. The health-care system is cannibalized in order to satisfy budget needs.

Government funded Medicaid4 with grudging prejudice. In the political arena, health care for the poor was always a cause célèbre. However, once passed, the legislation became an orphaned policy. It had no effective political constituency. In the competition for tax dollars, Medicaid inevitably gave way to more worthy political objectives.

Medicaid initially paid the general practitioner his basic fees. At that time, general practitioners provided the bulk of care in this country, and it was assumed that they would care for the poor. But Medicaid fees never kept pace. New York State led this trend. In New York, neither inflation, nor complexity of physician training, nor even advances in medical science affected this initial fee schedule. Imagine the effect, in the year 2000, of such a static fee structure on the practice of medicine. Suppose a physician, who practiced medicine to the highest standards, restricted his practice to the care of the poor. At $20.00 per consult and $7.50 for each follow-up visit, he could not work enough hours in the day to meet the expenses of such a practice. Moreover, there would be nothing left for food, clothing or shelter for himself or his family. Indeed, it would be difficult, applying these calculations, to find any medical practice that would generate enough income to exceed their practice expenses. This is true for virtually every practicing physician in this country. Add to this the universal difficulty encountered by physicians when they attempt to collect their fees from the Medicaid bureaucracy and you will begin to understand the profession's frustration. Virtually every physician provided care to the poor for a significant portion of his life as part of his education. Most continue to provide free care to the poor in their private practices on a quid pro quo basis.

Imagine that you have a business associate who insists that you sell him your product at less than half its value, and then fails to pay for half his order after delivery. In addition you are sued by one of his end users of your product based upon a flaw that you cannot identify. When approached by that same businessman with a similar proposition to buy your product, what would you do? Question his integrity and refuse to do further business with him. To the physician, Medicaid is a dishonest program that, since its inception, has flagrantly stolen his services. The conversion of Medicaid to a managed care model does not alter this perception. Many physicians are so outraged that they refuse to participate, preferring to absorb the loss themselves whenever they care for the poor. More often than not, doctors do not bill for Medicaid services provided in conjunction with other institutional care because the bureaucratic hassle involved in collections is not worth the effort. In the process Medicaid receives pro bono care by default. Even so, Medicaid does not hesitate to project the image of physicians as thieves whenever an unscrupulous medical business abuses the system. It serves the politician's purpose to deflect criticism toward physicians rather than permit real scrutiny of their policies.

We need to examine some more general characteristics of these government programs. Both Medicaid and Medicare segregate patients based upon specific economic

characteristics. Therefore each creates a unique subclass of citizens within the fabric of the American Dream. The Medicare patient rightfully expects that his lifelong contributions entitle him to appropriate access to medical care. Limitations on that access by the government frustrate this expectation. When patients turn to their physician, they find him equally powerless to help. Fearing erosion of the financial security they believe they purchased from Medicare, patients rally around the concept that these entitlements are their right. Out of this belief the Gray Panthers emerged as a political constituency.

In the Medicaid program, the government callously exploits the political weaknesses of the poor. Righteous in their political claims of charity to the poor, they then relegate any meaningful commitment of tax dollars to the lowest priority. Protection of entitlements in the Medicaid program is, in turn, entirely dependent upon the political advantage such a strategy bestows upon its proponent. It can be claimed that this government program has worsened the plight of the poor by alienating the physicians who have traditionally been their ally. Furthermore, the poor are entrapped by their entitlements since their eligibility will be revoked should they begin to make even a meager living. If they are elderly they must divest themselves of all wealth before they become eligible. Their piece of the quilt is threadbare and offers little comfort.

Entitlement to Medicare and Medicaid creates two distinct classes of people in our society. For them, entitlements become a bulwark of defense against the inroads of a changing society. As time gradually erodes the economic and medical relevance of these laws to the real world, their beneficiaries become captive to that erosion. These laws dictate a medical and economic isolation that ultimately pits the poor and elderly against the rich and the middle class. All face different problems in obtaining health care that now become focused around the competition for tax dollars. This is government's ultimate definition of price. It is a political definition that disenfranchises both physician and patient from meaningful participation. The vast differences between these two programs create a health-care system that is the antithesis of universal care. Indeed, they reinforce economic class distinctions. They can only be regarded as an impediment to each citizen's rights to equality, liberty and the pursuit of happiness.

By actively diminishing the flow of money into health care, both Medicare and Medicaid are counterproductive to the need for investment in new technologies and treatments, as well as replacement of obsolete equipment. Bureaucrats who bear no responsibility for the medical outcome make decisions that affect investment. They are ultimately responsible to political reality and budget constraints. Once again, the price is not right.

Governments rely upon taxation as their source for money. It is a practice that dates back to the dawn of civilization. The central authority confiscates a portion of the productive output from successful members of society. Tax dollars, by definition, represent a subtraction from the productive aspects of society. Excessive use of taxation is regarded as oppressive. Governments, if they wish to survive, will avoid at all costs any appearance that they have crossed this line. In attempting to fund health care, the government faced a dilemma. They could not both fund a highly productive health-care system and escalate their subtraction from the rest of productive society. Left unchecked this new demand for health-care tax dollars would disrupt long-established political patterns of tax dollar distribution. Government dealt with this challenge through indiscriminate broad-based policies designed to limit expenditure and suppress productive growth in medicine. The flow of resources into health care was curtailed. But this definition of health care based upon competition for tax dollars establishes an inappropriate price for health care. Ultimately human life is bartered for political gain.

Chapter 8: Zero Down

Managed care is health care's worst nightmare. The dream begins with an apparent simple idea. Let's sell cheap health insurance to business! Obviously, business will love it. They will reduce their costs, become more competitive in the marketplace, and increase their profit margin. The insurance industry embraced the idea. They packaged the concept of managing the cost of health care and sold it to business. But the success of this dream depends upon the creation of a new market. In this market, the product for sale is a health insurance concept. As in all business, the price of this concept is determined by the balance achieved between both the buyer's and the seller's desire for profit. It is at this moment that the dream begins to sour. The sole motivation of the buyer—the business— is to reduce the cost of operation. His decision is divorced from any consideration of the quality of the health care purchased. After all, the contract he signs leaves that responsibility to the seller of the insurance. On the other hand, the seller's primary motivation is to keep the cost of his insurance product low enoughso that it will sell. He subcontracts the responsibility for the quality of that care to those he calls health-care providers. Profit depends solely upon his ability to keep the cost of health care below the cost of the insurance he sells. Now we see that the focus of both buyer and seller is to profit from a low price for health-care insurance. This is their legitimate business interest. Both profit by reducing the amount of money available to be spent on medical care. This managed-care definition of price need pay medicine no heed. Managed care's business motives, which are for profit, coupled with its conversion of the cost of medical care into a medical loss ratio, creates a sharp divide. This concept clearly identifies health care as a commodity. Here the nightmare begins. In this new marketplace, the forces of supply and demand are

all aligned. As competition in managed care intensifies, the only avenue open to sustain profit is to drive down the cost of medical care. The suppliers of health care, bundled together as a commodity, are reduced to the status of a cost center. As a consequence they have no effective leverage to affect price. The price goes down. There is no bottom. Medical care is in free-fall.

Success in managed care depends upon a well-executed business plan. The elements of this plan need to be understood. To offer managed-care health insurance, the price must be below the existing market value of that health care. To accomplish this, the owner must acquire economic control over the means of health-care production. Only then is he in a position to reduce price. The bottom line for the managed-care insurer depends upon his ownership of medicine. Unless he achieves this goal, he will not be profitable.

Clearly, the top priority for any managed-care organization is to neutralize or remove physicians and hospitals from any meaningful participation in the economics of medicine. This is surprisingly easy. All it takes is a shell game. The insurer makes it clear that he intends to build a large base of patient-clients by selling cheap insurance to business. It is considered axiomatic that business will purchase this product. Armed with the illusion that he will have control over a large block of patients, the insurer presents the physician with a negative incentive: sign a contract with the managed-care insurer or risk losing his patient base. But there is a much subtler risk that most physicians fail to recognize. The moment that contract is signed, the physician no longer owns that portion of his practice. Moreover, each signed contract brings the managed-care owner closer to his goal. Once enough doctors and hospitals in a community succumb to this threat, the managed-care owner has established effective ownership over their health care system. The illusion becomes reality.

The key lies in the very specific goals contained in these contracts. The owner must have the power both to progressively reduce hospital and physician fees and to dictate reduced access to diagnostic and therapeutic measures. He must control all decisions that effect the utilization of medical care. With this power he has total control over every economic aspect of medicine. The more ruthlessly he applies this control, the greater his profit. Once achieved, these goals establish his business plan. Recognize, however, that the linchpin to this power is the commitment by business to purchase employee health insurance. As long as this commitment continues, the business goals of managed care and business will remain perfectly aligned.

Upon what does a physician base his ownership that it is so fragile? The physician's primary contract is with his society. This contract dates back to antiquity, and its basic concepts are contained in the Hippocratic Oath. This oath, honored by society, is the foundation of trust between patient and physician. The physician's practice and therefore his income depend upon his patient's belief that he will honor that trust. This is what the physician owns. He has joined an ancient guild, a profession that claims his loyalty above all others. But the presentation of a managed-care contract challenges that ownership. Under managed care, patients will no longer be free to choose his services based upon trust. Their choices will be entirely dependent upon their employers' desire for business profit. If the physician believes that managed care will succeed, then he faces a difficult choice. With a signed contract he retains access to a specific group of patients for whom he can now no longer guarantee his ability to satisfy their trust in him. If he does not sign, he abandons these patients to a hostile competitor. Ultimately he succumbs, based upon the perception that his own economic survival depends upon his acceptance of managed care. The threat of the loss of access to his patients overwhelms all other considerations. He consoles himself with the belief that his own integrity will protect both himself and his patient. Belief in his own value system allows him to ignore any economic consequence. Out of such rationalization flows disaster. He fails to recognize the truth: that managed care has the power to destroy both his profession and his income. By taking advantage of this rationalization, proponents of managed care have led a generation of physicians, as the Judas goat leads lambs, to economic slaughter. Adherence to the values embodied in the Hippocratic Oath is meaningless if society accepts the business principle that all may be sacrificed to the bottom line.

Deeper analysis reveals a more subtle disintegration at the core of medicine. As physicians contract with managed care, they find themselves unable to fully honor their moral obligations to their patients. However minor the compromises imposed by managed care may be, they diminish the physician's ability to serve his patient according to his own conscience. Inevitably such incessant compromise must enter the patient's awareness. Sensing his physician's loss of control, the patient recognizes that he can no longer rely unflinchingly upon his physician's protection. As the patient's confidence erodes, he becomes more demanding, not knowing how else to deal with a growing sense of powerlessness. As managed care gains greater control, it drives this disintegration in trust, like a wedge, into the heart of the physician-patient relationship. When legislation is introduced to allow patients to sue their Health Maintenance Organization (HMO) for failure to provide services, it only serves to underscore the extent to which managed care has emasculated the physician. It now becomes clear that the need for trust in the provi-

sion of medical care is in the process of being transferred into the hands of consumer advocates. It is hard to imagine that such piecemeal delegation of responsibility for the delivery of medical care can possibly meet the interests of a diverse patient population. The physician's belief that his own personal integrity would serve as a firewall of protection against the inroads of managed care has proven to be as flimsy as the emperor's clothes.

Let's examine one example in detail. The most difficult task in the practice of medicine is that of the family physician. Whether as internist, family practitioner, obstetrician or highly trained sub-specialist, the skill required to perform this task is enormous. Not the least of these skills is the ability to recognize serious illness in the midst of commonplace complaints. Above all, it takes confidence and courage to do it well. The greatest joy in medicine comes when, after mobilizing whatever resources a patient needs, the physician witnesses his patient's return to health. In managed care, the insurer corrupts this skill. Under the guise of efficient medicine, the primary care physician becomes a gatekeeper. In the name of cost containment he now becomes the agent of the master, currying favor, as he trades away each piece of patient trust. The gatekeeper specifically gains in income by denying access to the full breadth of medical practice to his patients. Weighed against the uncompromising demand for profit in managed care, the gatekeepers demeaning role is starkly exposed.

To fully understand the economic effect of managed care, we must examine its impact on the economy as a whole. The original politically correct opinion was that the nation spent too much money on health care. Everyone accepted at face value that 14 percent of the gross national product was too much to pay. The argument further suggested that the burden of this health care cost unfairly penalized business. The cost of health insurance premiums impaired the ability of business not only to compete at home but also to remain competitive in international markets. Managed care was the appropriate solution to this major economic problem. The flaw in this reasoning is that in the process managed care introduced yet another inappropriate price. In medicine, the laws of supply and demand are satisfied essentially by a transaction between the physician and his patient. But in managed care, both the fiduciary and medical responsibility belonged to a third party. This is a unique development in the history of medicine. Although it has the effect of reducing businesses health care costs, it only does so by intensifying the problem. By reducing price to create its own profit, managed care now siphons funds out of another industry. It goes further than just the reduction of physician income. As there is less money available to purchase health care, ancillary industries begin to suffer. For medicine is not just an exchange between the physician and his patient but encompasses a whole medical

industrial complex for which that exchange is but the final act. Purchase of drugs, pacemakers, hospital beds and equipment and all the other thousands of items needed to take care of patients ultimately are paid for out of health care premiums. As managed care squeezes dollars out of medicine, investment in these industries will become scarce and ultimately disappear. Any prudent CEO of a major pharmaceutical or technology firm will recognize this trend. To sustain the pace of research and development crucial to his firm's competitiveness he must begin to seek cheaper means of production. Under enough financial pressure, he will relocate his company to another country. Consider the current state of medical science and technology in this country. The mapping of the human genome opens the door to an unlimited potential for curing human disease. Combine this with the revolution in electronic communication and computer technology and you have an enormous potential for growth. All this research requires investment. Such investment is attracted by the potential for profit. But that profit depends upon the ability of the end purchaser, that is to say, the patient, to pay for the product. As managed care continues to ratchet down on health care cost, the prospect of sustained investment in this country seems remote. Inevitably, the pace of development of new treatments will be slowed or delayed indefinitely. Even today, hospitals hesitate to introduce complex computerized systems for the exchange of medical information because they lack funds and cannot justify a sufficient positive effect on the bottom line. The essential components of this decision reverberate throughout the medical community.

Managed care is ugliest at the grassroots level. The formula for success created by the insurer translates into a peculiarly warped mode of practice. The drastic reduction in payment to physicians forces a reassessment of the costs of managing a medical practice. The most fungible economic variable is the physician's time. Virtually every other practice expense is controlled by outside forces. To continue to practice and still make a living, the physician must reduce the amount of time he spends with each patient. Failure to do so efficiently will ultimately bankrupt his practice and drive him out of business. This has, in fact, happened many times. But in turn this paucity of time available to patients frustrates their human needs. The whole basis of medical practice is thus warped by the needs of managed care. Managed care found a way to suck wealth out of medicine by cannibalizing the very time needed for its artful practice.

Banished from the dream is any thought of universal care. The first principle of managed care is to stratify patients into select groups. Only those who are employed warrant insurance. Conversely, the size and financial stability of the employer may further limit the individual's likelihood of obtaining coverage. Add to this the managed-care insurers'

self-interest in enrolling only the healthiest individuals and you have a system whose incentives encourage exclusion. It is an impersonal system built entirely upon competition for business profit that must, by its very nature, be divorced from the individual's search for equality, liberty or even the pursuit of happiness.

Health care is in free-fall. There is no bottom. It is a nightmare.

Chapter 9: The Economics of Sharing

All current methods of funding health care reach a common end point. The dissociation of price from the real intent of the marketplace leads inevitably to a disenfranchised population. So repetitious is this pattern that a rational economic solution hardly seems possible. To overcome this hurdle we must focus upon the basic notion that the primary purpose of health care is to satisfy the medical needs of patients. Rather than concentrate upon the distribution of money, we need to create a sustainable marketplace.

As previously noted, the problem began with the relentless expansion of medical knowledge. The impact of this growth long ago overwhelmed the economic viability of a simple direct exchange of money between the patient and his physician. Once people realized that medicine offered a real potential to protect their health and prolong their lives, they wanted it for themselves. This fundamental desire to protect their lives is at the core of the demand for health care. Such a demand is insatiable and relentless. But in this real world, choices must be made. The nature of these choices varies with every community and patient. The challenge is to link this diversity of need to direct economic responsibility. It is this link that is missing. In its simplest expression, market demand must be synonymous with patient economic responsibility.

In our analysis of existing mechanisms of funding health care, several cardinal themes emerge that need to be incorporated into any solution. One such theme is the reliance upon averaging of cost. All insurance vehicles and tax-supported health programs rely upon the concept of an actuarial calculation of the health risks of a defined popula-

tion. Given the recent history of escalating health care costs, coupled with our anticipation of accelerated growth of medical knowledge on into the future, it is difficult to imagine any other viable approach. Today, most individuals cannot pay out-of-pocket. The future offers little prospect that this will change. Unless we pool our resources, we will lose the opportunity to maximize the benefits of medical science for our population. The successful nurturing of medical science is in everyone's best interest. Critical to this growth is the need for investment to support the introduction of new medical treatments as well as to keep pace with obsolescence. Funds provided by pooled insurance premiums establish a stable framework upon which such planning can be based. But to sustain a viable future this must be done without creating an unacceptable conflict of interest.

Another theme is the recognition of a common flaw. None of the current funding mechanisms establishes a relevant and verifiable market price. In any business, price is determined by the legitimate interplay between the forces of supply and demand. A legitimate price, even in medicine, balances the need for investment, a fair income for the seller, and the buyer's desire for quality. Initial attempts to cope with the accelerating cost of medical care obscured this definition. But if health care is to satisfy the medical needs of patients, its price must accurately reflect the forces of supply and demand created by this need. The economic forces involved are easily identified. Harnessing these forces appropriately is a far more difficult proposition, but any viable solution must solve this problem.

A third cardinal theme is the desire to achieve universal care. Any overview of the patterns of health-care delivery in America today quickly identifies a patchwork of approaches to insurance that excludes many from meaningful coverage. The absence of a cohesive approach to funding serves to isolate different segments of the population into competing political forces. If the concept of universal care is to be successful, all the economic forces driving medicine must be aligned according to appropriate self-interest.

This brings us to the final theme. Encompassed in the concept of universal care is the notion that every citizen has a right to health care. But the Constitution of the United States guarantees equality and freedom to all its citizens. Unless a careful distinction is made between the individual's right to health care and the physician's right to the use of his own labor, universal care must inevitably curtail the physician's freedom. Despite their obvious good intention, the United Nations declaration of health care as a universal right ignores the individual rights of the physician. In a totalitarian state this does not pose a problem. But for the United States, confiscation of the physician's services is an

untenable position. No other nation so clearly defines the necessity for individual freedom. At least in the United States, no person's right can exist at the expense of another's labor. Any solution to the funding of health care must honor this distinction. How do we begin to build such a program? First we need to re-examine old concepts that seem immutable. Taxes have existed since civilization began. Over the centuries they have been levied: as tolls to pass over private lands; to wage wars; to extract tribute from defeated foes; to pay ransom for kings; but more typically today, to finance the affairs of a given state. However benevolent the objective may be, taxes always flow from the weaker to the stronger entity. We all accept as axiomatic that government collects taxes as part of the social compact that binds our society together. We trust, in this country, that government will use these funds both to preserve and protect society and to improve the lives of its citizens. But we never challenge the notion that our government, like all others, must actually confiscate this income in order to accomplish these societal goals. Health care provides an opportunity to explore a unique alternative.

Suppose the government, rather than levy taxes to sustain a large health-care program, was to designate a portion of individual taxed income for health care, but then forgo its collection? Instead they create a Universal Health-Care Tax Credit, which every citizen must use to buy health insurance or forfeit the credit, as tax, to the government. Suddenly we view the government from a different perspective. Now it achieves its objectives not through direct involvement, but by adopting a new strategy. Social goals are fostered by specifically directing personal income to the desired purpose. In this case, a slice of everyone's personal income is now reserved exclusively for health care. Simultaneously the government is relieved of any responsibility to manage so complex a business as health care. In fact, this action now requires the individual to be fiscally responsible for his own choices in health care. Voila, it is done!

How would this work? It begins with government's creation of a Designated Health-Care Income Tax Credit for each and every household, to be used exclusively to purchase health care. This tax credit will "lock-in" the individual's access to enough money with which to purchase health care. It also creates the unusual situation of a government that provides universal access to health care without ever touching the money. This in effect creates a Horizontal Tax: government surrenders the right to confiscate dedicated income, while the individual surrenders the right to its discretionary use.

A tax credit system does divide the population into two groups: those households with sufficient taxable income to cover the tax credit and those who are unemployed or under-

employed. A citizen whose calculated income tax equals or exceeds the Designated Health-Care Income Tax Credit will use the first portion of his calculated income tax to purchase health care. The excess tax is then paid to the government. Those households whose income does not require payment of sufficient income tax to cover this tax credit must direct all of their calculated income tax toward their obligation to purchase health care insurance. There will be a shortfall. It is apparent that both the underemployed and the unemployed will require a subsidy. But it is critical to the goals of universal coverage that each citizen has access to sufficient income with which to purchase his own health care. We will examine methods of creating this subsidy later.

The intent of this tax credit is to provide universal health care. To accomplish this we still need to average cost over large populations. It does not work if we allow each individual to deduct his or her own specific expenses to satisfy this tax credit. In other words, the actuarial techniques used by the insurance industry will continue to be required. It must be mandatory that each household use the tax credit exclusively to purchase health insurance. Some form of proof of purchase of health insurance needs to be submitted to the Internal Revenue Service (IRS) to justify the tax credit. Failure to purchase health insurance ought to result in forfeiture of this credit. Clearly, for the program to work, all citizens must submit an annual income tax declaration. The amount of the tax credit would vary, like insurance premiums, according to the actuarially calculated needs of the people included in the tax return. It stands to reason that theaverage health-care needs of a family of two adults and two children are different from the needs of a single adult. We currently pay actuarially calculated health insurance premiums based upon these types of differences. Such pooling of resources remains the most efficient way to fund health care. There are other concerns that come into play when considering the value of each year's tax credit. The fundamental principle behind the creation of a tax credit is to assure not only that all benefit by receiving care today but also that sufficient funds exist to sustain investment. The availability of such funds is critical if we wish our health-care system to evolve efficiently as medical science expands our understanding of human disease. Competing pressures within the political process may jeopardize this future. A tax credit subtracts from the gross federal budget. Future generations of politicians may attempt to curtail the tax credit in order to augment the amount of taxable income available for other government programs. Within the political process, it will be necessary to resist the loss of health-care dollars to pork barrel politics.

Creating an income tax credit accomplishes several goals. It allows every working citizen to purchase health insurance out of his own income without any negative effect on

his usual disposable income. He merely takes some of the dollars ordinarily sent to government as tax and purchases health care instead. At the same time the individual no longer depends upon an employer to purchase his health care. This is a fundamental shift in the economy. No longer is health care a cost center to be factored into the operation of any business. The many corporations that now pay substantial health insurance premiums for their employees will be relieved of this burden. At the same time small businessmen need no longer agonize over their ability to provide employees with health insurance. The ranks of working people who do not have health insurance will disappear. An enormous burden of worry will be removed from the shoulders of countless middle and low-income working people. Never again will they be without health insurance. The current government tax credit proposals do provide relief for the uninsured worker, but miss the implications for a broader resolution of the funding problems in medicine. By extending this tax credit to all citizens, the government achieves universal care in the simplest manner imaginable. In addition, it does so without the need to sustain a complex bureaucracy to manage the health-care system. Each individual buys his own.

But a tax credit leaves some people out. Under this proposed system the first portion of payable tax becomes designated for health care. But some people's income is so low that their calculated income tax is less than their tax credit for health care. The unemployed are at the extreme end of this spectrum. Both the unemployed and the underemployed require a subsidy. Our society will need to set aside sufficient funds to provide these people with health care. If we truly believe in universal health care, then this subsidy should be freely given. There is no need for a means test. If a household's calculated income tax is less than the Designated Health-Care Tax Credit, then that household should automatically receive the difference out of a general health-care fund. The same should be true for the unemployed. Both must be able to purchase, for themselves, the same level of basic health insurance that is available to every other citizen. The poor are as competent as the rich to make rational decisions to purchase health insurance.

In a certain sense the unemployed and underemployed require a subsidy because business is unable or unwilling to use their services. To survive, businesses must be able to control the size of their work force. But it can also be argued, not without debate, that business may best serve their interests by maintaining the health of this latent labor force. A healthy labor pool will more readily provide a productive workforce when new employment opportunities subsequently arise. It is in business' interest to be the source of tax dollars to this fund. But it is also reasonable to argue that this tax be on the same tax basis as that of the individual. We need to create a Dedicated Health-Care Income Tax

Credit for business, paid out of their tax dollars rather than from operating expenses. The amount of money required each year would vary based upon the unemployment rate and the number of under-funded citizens. This means that a new "unit" is calculated each year, which establishes a tax credit rate per employee. The rate would be the equivalent of the current Medicare payroll tax. Companies then calculate their income tax credit based upon their number of employees. For example, a company with 10 employees claims 10 units of tax credit that year. But this is a dedicated tax. It is deposited directly into a Dedicated Health-Care Tax Credit Fund. To smooth out the cost of wide fluctuations in unemployment, the actuarial calculation of this "unit" should set aside extra funds to be held in reserve to cover bad years. It helps both business and government if this unit remains stable through both good and bad times.

Access to this fund is automatic, based upon each individual's honest annual income tax declaration to the IRS. There are no other rules. There is no need for a bureaucracy. A well-designed computer program, managed by competent technicians and managers, should suffice. The funds can be privately managed or even husbanded by a newly created subsidiary of the IRS. To simplify matters, payments made from the Dedicated Health-Care Tax Fund must go directly to the insurer chosen by the individual. Consequently, the individual cannot use this subsidy to augment his disposable income. This eliminates any incentive for fraud. All sources of an individual's income must be reported, even by those living in poverty. Otherwise the Dedicated Health-Care Tax Fund runs the risk of being overcharged. But more importantly, there can be no hint of a means test applied to any poor person who requires assistance. We live in a society that will be increasingly dominated by the economic forces of accelerated change. Longitudinal studies of income currently demonstrate that a third of lower income families migrate in and out of poverty over any ten-year period. As the economics of accelerated change take hold, the need to provide financial support to people as their lives are disrupted will become even more clearly apparent. Such circumstances require a smooth transition both into and out of poverty. Qualifications for assistance based upon artificial ceilings on earned income should not threaten to lock the individual into poverty. It is more logical that the Dedicated Health- Care Tax Credit Fund should provide an automatic sliding scale of financial support. The intent ought to be to allow all citizens to purchase their own health care without fear of financial penalty.

The stage is now set to examine the profound changes that take place in the funding of health care as a consequence of a tax credit program. Every citizen is now entitled to sufficient funds with which to purchase health insurance. There is no means test. There is

no need to provide proof of poverty, or to spend down one's life savings. All individuals are entitled to health care. There is no need for a Medicaid program. Disbanding this program significantly reduces the government's need for health-care tax dollars. But this does not absolve society of its obligation to provide the poor access to quality care. Therefore the calculation of the Tax Credit must include actuarial assumptions based upon the higher morbidity among the poor. If this is not done fairly, the urban poor will continue to be denied their rightful share. The credit should be set high enough to allow the provision of quality medicine to citizens living in poor communities. A fair market requires a realistic averaging of cost over the whole population. This is a departure from the practices of the health insurance industry. It will also eliminate the paternalistic condescension of a program like Medicaid.

Secondly, the role of Medicare needs to be examined. The same income tax credit and subsidy system ought to apply to the elderly as well. But many citizens have a lifelong investment in Medicare that they cherish as an entitlement. For future generations, the Dedicated Health-Care Tax Credit transforms this entitlement into a lifelong guarantee of the right to health care. But in transition, Medicare recipients should not be disenfranchised. A consensus on an equitable solution to this problem will need to be developed. Medicare enrollees might choose to continue their benefits under Medicare. In this case the tax credit would be granted based upon proof of enrollment in Medicare. As a result, the elderly receive the Dedicated Health-Care Tax Credit as a tax break based upon their previous contributions to a government program. The elderly might also have the option to rollover all previous Medicare contributions into Social Security. They would then purchase their health care with the Health-Care Tax Credit. If their taxable income were not sufficient to cover the tax credit, they would then receive the subsidy. There is another possible option. Eligible Medicare recipients might opt to use their Medicare funds to purchase long term care insurance. The application of previous Medicare contributions toward long term care need not imply that the government should enter the long-term care marketplace.

Citizens under the age of 65 should cease to contribute to Medicare. Previous contributions might be credited to Social Security, deposited into a personal Investment Retirement Account (IRA) or applied toward long-term care Insurance. Upon retirement, they would continue to qualify for the tax credit based upon their income and would consequently be eligible for any appropriate subsidies. An incidental benefit to the individual is the disappearance of the Medicare payroll tax. This will increase disposable income for most taxpayers.

Should age be factored into the actuarial computation of the health-care tax credit? In keeping with the concept of equality, the health-care credit should remain constant for all age groups. In this way, healthier young populations receive a proportionately higher tax credit during their productive years to counterbalance the increased cost of health care associated with old age. To require the elderly to pay higher premiums to compensate for this increased cost will result in a burdensome increase in the need for subsidy payments. After all, these higher premiums will occur at a time when most elderly people are living on fixed incomes. As a result, a larger percentage of them will have a taxable income that falls below the level of this required health-care tax credit. This will place an unnecessarily heavy burden on business to provide adequate tax credit funds.

In this new marketplace businesses realize a tremendous benefit. Money currently spent on health-care insurance is freed up, creating cash. Companies will have new options. They may reduce prices to become more competitive. Alternatively, they could reinvest funds into research or purchase of new equipment to foster growth. Lastly they could distribute this windfall to their owners as dividend profit. Any one of these outcomes will ultimately lead to increased profit and therefore taxable income for that business and its employees. The government will recoup part, if not all, of its apparent revenue losses through the increased productivity of the society at large. When Medicare is phased out, the matching Medicare payroll tax now collected from business will no longer be required. These funds will then be available to cover part, if not all, of each business's obligation to the Dedicated Health-Care Tax Credit Fund. This tradeoff will ameliorate, if not totally offset, the drain on business to support health care.

Eliminating business from the health-care equation is a major accomplishment. The justification for economic restrictions on health care arises from the perception that it consumes too great a percentage of the Gross National Product. This implies that medicine is economically inert. But this problem only exists because other business entities currently fund health care through their purchase of health insurance for their employees. In reality it is medicine's economic position as a cost center to business that creates the problem. A tax credit that permits the individual to purchase health-care insurance out of his own income eliminates this problem. He becomes the source of his own funds. Parenthetically, a tax credit also negates the economic conflicts of interest that develop when government attempts to manage health care. Competition for tax dollars now only begins after the required health-care tax credit is satisfied. Freed of its dependence upon both government and private business for funding, health care now stands, in its

own right, as a legitimate force in this country's economy. Now the percentage of Gross National Product attributed to health care is justified by virtue of its own productivity. Indeed its expansion will contribute to the real growth of the nation's economy rather than be a drag on profit. The extraordinary advances in medical science, which we all anticipate will occur in this coming century, are now achievable without concern for the welfare of the rest of the economy. Those gains will occur as a consequence of a competitive market price. The necessary constraints will evolve as a natural function of the laws of supply and demand.

At this point we need to examine the significant changes in the flow of dollars within the economy. The federal and state governments lose control over the first increment in tax revenue. The loss of this horizontal slice through their tax revenues is compensated, at least in part, by the disappearance of Medicaid from the budget. The government will also witness the gradual disappearance of their financial responsibility for Medicare as this program is phased out. Some programs currently covered by Medicaid or Medicare may need to be retained. These are largely ancillary programs that, in all probability, would still require tax dollar support. However, government will realize increased tax revenue as a consequence of the windfall profits reaped by private industry. Regardless of how business spends this money, government will benefit from the taxable profits generated by an increased economic productivity. This new revenue stream should replace any net loss in revenue created by the dedicated health-care tax. If the federal budget incurs a significant shortfall, the burden of all future income tax increases will impact most heavily upon the wealthy. In fact, because it comes off the bottom of everyone's income tax, this tax credit will act as a buffer to the lowest income groups against variations in the tax code. The principle that this first portion of taxed income be used in absolute priority for health care must not be violated.

Because it is a tax credit, changes in its value are readily apparent to the population at large. This leaves it subject to constant political pressure. There must be mechanisms in place to safeguard the adequacy of the funding. An annual cost of living increase should keep the credit abreast of current costs. But from time to time more substantial adjustments may be necessary. A periodic review every eight years, preferably during a presidential election, might provide such a forum. If this is to be a verifiable price, then its ultimate determination should be subject to public debate and the electoral process. This completes the circle. The price of health care becomes both a direct exchange between patient and provider and a measure of the nation's commitment to health care. It will be an open consensus between the government and its people.

A Dedicated Health-Care Income Tax Credit, available to everyone, achieves the major social goal of affordable universal health care. But this achievement extends well beyond this goal. In the process, the right to health care becomes the individual's right to sufficient personal income with which to purchase health-care insurance. With this purchase the individual gains access to a health-care program of his own choice. The right ends with that choice. Here the interface between patient and physician begins. If the individual is displeased with the manner in which his care is provided, he has the right and freedom to choose a different provider. By the same token, the physician is free to choose the manner in which he relates to health insurers. The ramifications of this freedom are the subjects of the next chapter. But in its essence, fiscal responsibility for health care is now modulated by the manner in which both patient and physician make their choices. It is worthwhile to emphasize the nature of this distinction. The purchase of health insurance does not convey the right, nor does the government have the right, to dictate the income of the providers, nor to control the purchase and distribution of medical equipment or skills. These activities properly belong to the owners of the health care being provided. All citizens, including physicians, have the right to freedom, equality and the pursuit of happiness. The dedicated health-care tax achieves both universal. health care and the right to health care without abridging anyone's rights. This is a unique achievement.

There is another benefit to this program. By virtue of the guaranteed access to funds to purchase health insurance, the government creates a true equality in health care for all citizens. It is an equality that is blind to all circumstances other than that person's need to purchase health care. It cannot be abridged. All citizens are now on an equal footing, regardless of their income, to purchase health care without fear of prejudice. Many of the health-care problems faced by this country today are solved by a dedicated health-care tax. However, it does not solve them all. We need to look at the other half of the problem.

Chapter 10: The No-Payor System

Creation of a Dedicated Health-Care Tax Credit would change everything. With it, a half-century of accepted business practice would become unhinged. The implementation of this credit would challenge the existing market definitions of supply and demand. Before these forces are resolved, a powerful stimulus for change will focus upon the medical marketplace. Let's try to anticipate how these forces might eventually result in the emergence of a logical price.

The critical change with this credit is the recognition of a new purchaser of health care. No longer is the marketplace driven by the needs of business. Now it is the patient whose needs must be met. They will search for sources of health care that support their needs. Good medical practice, not reduced business cost, will be the winner in this new paradigm. With this tax credit, the forces of economic demand will be placed solidly in the hands of the patient. How the economic forces of supply respond to this challenge will determine medicine's future in America: whether health care remains forever subservient to outside forces or is free to explore its full potential.

In the beginning, the marketplace will seem unchanged. Although freed from dependence upon an employer, the individual still must buy his health care from the same health insurance industry. But now the market is driven by a demand controlled by patients. Even people who never had reasonable access to health care now buy their own. Out of all the policies available, these individuals will choose the most advantageous to

themselves. This marketplace, driven by the needs of patients, will force health care to evolve new priorities.

Managed-care programs that restrict access to necessary diagnostic procedures, or physicians will lose favor in this marketplace. Those insurance policies that offer the best combination of comprehensive services will do well. As in the current marketplace, these companies may offer supplementary coverage to provide increased flexibility to the individual purchaser. It is therefore important that the Dedicated Health-Care Tax Credit be set high enough to discourage the evolution of a truly discriminatory two-tiered system. On the other hand, it is not worthwhile to attempt to legislate out of existence the ability of more affluent individuals to purchase additional benefits for themselves. Ultimately these added sources of income will help to sustain the growth of the total health-care system.

Up to this point, one essential element of the marketplace has not changed. Health insurance companies still organize the market. In order to deliver health care, each insurance company must establish a relationship with health-care providers. They may pay fee-for-service, capitation fees, or even employ physicians on salary. Whatever form it may take, under each of these arrangements, the medical provider has little control over the deployment of health-care resources. Health care continues to be governed by a piecemeal allocation of funds to the different sectors of the industry. Whether hospital, home care agency, rehabilitation institution, or physician, all are paid separately for their efforts. The central fiscal authority remains a business entity divorced from responsibility for the actual delivery of health care.

Furthermore, each insurance company has fiscal responsibilities over and above the delivery of health care. Their shareholders expect a profit. The necessity to provide a profit creates a business loyalty that supersedes the needs of patients. Any health insurance company must use a portion of its revenues to service its own business interests. The very nature of this arrangement creates a conflict of interest between the insurance managers and their patient subscribers. No matter how generous the initial Dedicated Health-Care Tax Credit may seem, advances in medical science and technology will inevitably strain this relationship. Despite all efforts to streamline their own management practices, the need to provide profit will inevitably lead to restrictions on the availability of health care. The same cycle will repeat itself. As outlined in the previous chapters, all methods of funding health care, which utilize third-party payers, including government, lead to this same outcome. When push comes to shove, the fiscally responsible entity will choose

a course of action—whether for profit or political gain— which is in its own best interest. This is the defining moment. Some strong new element must emerge in the marketplace to both neutralize this trend and provide a rational basis upon which to build a stable future. This is the quintessential challenge. Fail and we are destined to repeat past failures.

There is only one logical solution. Logic requires that both the profit and political motives of the business entity responsible for health care be dependent solely upon the quality of the health care it provides. Its income must bear a direct relationship to the entity's success in meeting the needs of patients. This, in its essence, is the business definition of a physician. The challenge is to harness that definition to an organiza tion of medical practice that will withstand the strains of such fiscal responsibility. Upon a successful response to this challenge hangs the quality of medicine that will be available to all future generations. It is a challenge that the medical profession can ill afford to ignore.

Ownership is the critical factor. The concept of ownership is a fundamental element in our economic system. It is the cornerstone upon which price is established. Without this element of ownership, goods would be sold on black markets run by thieves. To protect our system, owners have rights and responsibilities that form the bedrock upon which the stability of our society is built. These attributes of ownership apply equally to medicine as they do to commerce.

Traditionally, the basis for the physician's ownership in medicine is knowledge. Each doctor acquires his ownership through a lifelong program of study: beginning with his medical degree, augmented by post-graduate studies, and solidified by his experience and continued study throughout the years of his practice. The knowledge and experience of any one physician cannot be partitioned. It is a solitary pursuit. That each day's practice may critically affect another human being's life only serves to intensify his focus upon his craft. But within the broader context of society, the responsibilities of this ownership extend beyond this solitary quest. The practice of medicine is framed within a social compact that owes its origins to the Hippocratic Oath. The integrity of each physician's practice is defined by these expectations. The physician cannot exclude himself from these greater responsibilities. They are part and parcel of his profession. Each transaction between physician and patient reaffirms this commitment to society as a whole. But it is within the economics of this very transaction that the ownership of medicine is challenged.

To understand how this evolved, we must retrace our steps. Once the tangible medical benefits of the scientific method reached a critical level, the stage was set. Demand for access to these often lifesaving treatments both broadened the scope of medicine and increased its cost. In an open marketplace a creative response to this escalating cost was inevitable. Obviously the health insurance industry filled this void. But its introduction wedged a new claim into the ownership of medicine. By assuming responsibility for the monetary transaction between physician and patient, the health insurance industry became the arbiter of price. This is a very peculiar economic phenomenon. By delegating the responsibility for direct negotiation of price with his patient, the physician surrendered an essential attribute of the marketplace. Setting the price for one's services or product is a critical factor in ownership. It allows the owner to have control over his own economic success or failure. By initially acquiescing to any fee request, but then moving to directly control price, the health insurance industry ultimately assumed its defacto ownership. In an economic sense it can legitimately be claimed that the health insurance industry now controls, and therefore owns, medicine. It does so without the need to acquire the actual skills to practice medicine. The enormous power of the health insurance industry derives from this ownership of price. The ultimate proof of this ownership is illustrated by the actions taken by the managed-care industry. They have extended their rights of ownership to include the ability to budget for and ration the distribution of health care, to distribute patients to physicians, and to control the deployment of new technology. These prerogatives of medicine are subtly transferred into the hands of business owners who have no direct responsibility for patient care.

On the other hand there is nothing subtle about the ownership claimed by government. They justify their control under the banner of universal care and the right to health care. This is in effect a shift from their role as protectors of the social compact to a claim of its exclusive ownership. Using this justification they take control of virtually all aspects of medical care. They assume direct control over the distribution of new technologies and the replenishment of older assets. They dictate remuneration for services and make arbitrary decisions as to what services will actually be available. The outcome is the same. Their definition of ownership ultimately disenfranchises the rights of both patient and physician.

Today, the physician owns a hollow shell. He no longer has a meaningful economic relationship with his patient. He no longer controls the boundaries that define the attainable application of medical science. Indeed, he can no longer rely upon his own medical

wisdom as the foundation upon which to build his medical practice. Yet despite this, like Don Quixote, he flails his sword at windmills he cannot conquer.

What is the source of this weakness? Strangely enough it is the consequence of past strengths. Fee-for-service is the quintessential expression of the shared responsibility between physician and patient. Practiced for centuries, it encompassed the totality of the physician's responsibility to society. It is now an impractical relic of an obsolete economic system. Once the health insurance industry elected to average health-care costs over large populations, the concept of fee-for-service was no longer relevant. The physician's insistence upon individual payment for piecemeal work exposed the transaction to external manipulation. The current situation is its inevitable outcome. In fact, fee-for-service is the very element that continues to isolate physicians. Such a piecemeal system is a potent inhibitor of any concerted effort to regain control of the profession's destiny. To survive as a profession, the logical response to the pooling of financial resources by the health insurance industry is for physicians to pool theirs. It ultimately requires a new creative response.

To this day, physicians continue to practice in a hodgepodge of arrangements. Solo and small group practices are still commonplace. This persistence of the practice of medicine as a cottage industry seems incongruous in today's economy. Why has this happened? Despite his recognition of the growing complexity of both medicine and its fiscal ramifications, the physician still believes that his professional integrity is a sufficient contribution to fiscal responsibility. He fears and therefore resists change. He fails to recognize that by clinging to the false hope of his individual professional independence, he destroys his own freedom. Society has little use for a professional integrity that has lost all contact with real fiscal responsibility.

The medical profession must choose. The Dedicated Health-Care Tax Credit will lay the foundation for that choice. Once all citizens are guaranteed the ability to purchase healthcare insurance for themselves, physicians will face an economic dilemma. They may continue to sell their services through third-party payers. If this is the option they choose, then they will ultimately return to their current defenseless economic position. However, there is a better choice. They can take full fiscal responsibility for the delivery of health care. To accomplish this they must join together in large alliances, be it a large group practice or an Independent Practice Association (IPA), to gain the capability to provide for the total needs of their community. Then they must compete directly with health

insurance companies by taking the fiscal risk for the care given to these patients. Such a choice will usher in a new era in medicine.

In effect, these risk-taking physician groups become a fully integrated health-care system. Initially they will compete with existing insurance companies to sign up patients to their program. However, properly organized, these physician groups should have significant competitive advantages over traditional health insurance companies. The ownership of the corporation should be spread evenly among the physicians participating in the group. This frees them of the necessity to provide profit for shareholders while still allowing the corporation to create capital for reinvestment in their system. To sustain their competitive advantage it is essential that they plan for the refurbishment of obsolete equipment and the introduction of new techniques. Perhaps the most unique feature of this arrangement is the group's ability to abandon fee-for-service. Given this choice, competition for income among physicians becomes an internal matter based upon productivity, value to the system and other incentives tied to the success of the group as a whole. This decision eliminates the considerable cost of billing and collecting individual fees for services rendered. It also eliminates the temptation, or the appearance of a temptation, to provide excessive services in order to artificially augment one's income. The implicit conflict of interest associated with fee-for-service disappears. Physicians working within the group can apply their energies entirely to resolving patient problems. Their use of resources will depend entirely upon the nature of those problems. Since physicians are owners, they will recognize that their ability to compete in the marketplace ultimately depends upon the quality of the care they give. On the other hand it must be recognized that the incentives within the group must be strong enough to ensure that each physician willingly applies his full energies to the group's success. To achieve these very considerable financial objectives, each group will need to hire strong professional business leadership.

To maintain their credibility these groups must be held accountable for their decisions. The prudent group will establish a board of governors that includes an appropriate representation from their patient community. Such a board must have real responsibility to monitor the fiscal activity of the group. Among other things, the intent of this oversight is to ensure that the group sustains a high quality of business management. This may seem to be a cumbersome and meddlesome way to ensure the "honesty" of the physicians. In fact, it brings the system to a full circle. This negotiation between patient subscribers and their physician group restores the missing element to the physician-patient relationship. By reaching agreement over the fiscal policy of the group, this board of governors will in effect have negotiated a price for their health care. By participating in this

discussion the physicians will have reasserted ownership over both their expertise and medicine. There is a final gap that must be closed before this marketplace can establish a verifiable price. The price negotiated by the board of governors only deals with the allocation of existing revenue sources. This revenue is dependent upon the Dedicated Health-Care Tax Credit. Its value is controlled by government. The appropriate adjustment of this tax credit through a political process must be the final step in achieving a verifiable market price. Political pragmatism dictates that physicians secure a strong influence on this process.

Without appropriate allies, it is at this point that the physician becomes vulnerable to exploitation by the government. The usual argument used to impose control on increases in health-care cost is that they are excessive. Yet this claim is made in the absence of a demonstrable and justifiable standard. Arbitrary proclamations that health care consumes too large a percentage of the gross national product are totally divorced from any concept of value for dollars spent. All such arguments remain purely conjectural. But when the board of governors approves their health-care budget, the legitimacy of these expenses is established. Included in these negotiations should be an agreed-upon floor below which the allocation of income for physicians should not fall. Otherwise the government could refuse to change the tax credit, knowing that the physician's income is the most vulnerable item in health care and could be squeezed by their inaction. When physicians and their board of governors agree upon their definition of an adequate budget for their area, they will have reached a consensus on what they consider to be an acceptable standard of health care. When the tax credit no longer supports this definition, there will be a political coalition between the physicians and their patients that will demand a reasonable correction. This coalition achieves two goals. First, it reaffirms the full meaning of the physician-patient relationship. But it is also the final step in establishing a truly verifiable price for health care. Physicians and patients will stand together to demand that society set aside sufficient income to provide an acceptable standard of health care upon which all citizens can agree.

There remains one other characteristic of this arrangement that needs to be emphasized. Once physicians accept the principle of managing "risk" as part of their responsibility, the health-care system becomes a no-payor system. When the patient uses his Dedicated Health-Care Tax Credit to purchase health care from the physician group, no other monetary transaction need take place between them. There is no need for an intermediary. Insurance, in the business sense, disappears from the equation. In the process, the physi-

cian-patient relationship is reestablished, albeit on a higher plane of economic organization.

But we live in a real world. Is it reasonable to expect that physicians, who traditionally view themselves as independent thinkers, will willingly accept a cooperative approach in their daily practice? Fortunately, there are some precedents. Organizations such as the Fallon Clinic and Kaiser Permanente are examples of organizations that have complex relationships within the medical profession. These organizations all allow large groups of physicians to work together under legally acceptable structures and to accept varying degrees of financial risk in managing their patients' problems.

Large group and multi-specialty practices begin to address broader issues in the organization of medical practice, but their ability to contract is limited to determining fees for individual specialties. They remain subservient to external organizations that continue to control fiscal policy. These practices must attain more global integration of medical services before they are in a position to assume true fiscal responsibility. This threshold is crossed when the organization makes a commitment to develop a fully integrated health-care system, which includes hospitals, medical clinics and all ancillary services. In addition, to be financially successful, these maturing organizations must provide care over a wide geographic area. Unfortunately, the realities of the current marketplace require these fledgling health-care systems to contract directly with businesses. Consequently, they remain in direct competition with the insurance industry.

Physicians also organized HMOs. By becoming the insurer, the physician owners of the HMO eliminate the middleman and assume full fiscal responsibility. This ought to be an ideal business arrangement. But there are some basic weaknesses. As a health insurance company, physician-owned HMOs are in direct competition with other health insurers. To survive, they must respond to the same market forces. Under these circumstances, success depends upon tight control over physician spending. This brings them face to face with the critical issues. In a very real sense, they find themselves in competition with themselves. Unless the physicians participating in this organization accept that they have a personal fiscal responsibility to it, the project is doomed.

The last type of physicians-developed organization is the IPA. IPAs provide a legal structure that permits different physicians and medical groups to practice as a single bargaining entity. However, the fact that the individual practices continue to function independently weakens the structure. The fate of these various more complex integrated ar-

rangements for the delivery of health care is varied. Many failed: some because of incompetent fiscal management, and others as a result of internal strife. A common exit strategy for many of these complex organizations is to sell themselves back to the insurance industry. One cannot help but lament the waste of such successful organizational energy.

A number of well-organized, integrated health-care systems owned by health-care providers still continue to operate successfully. These survivors are more than capable, with very little change, of responding to the challenge of independent taxpayers buying their own health care.

However, if this transition occurred today, most physicians would be ill equipped to respond. To succeed, physicians must take a long-range view of their own future. Medicine continues to evolve into an ever more complex body of knowledge. The skills required to guide patients must inevitably exceed the wisdom of even the best practitioner. Cooperation and exchange of information is increasingly at a premium in day-to-day practice. Each physician can best protect his professional integrity by not isolating himself from his community and the realities of the world around him. The more seamless the relationships between physicians become, the more effective they will be in the practice of medicine. If he truly wishes to retain the respect of his community and to honor the integrity of his profession, then he must step forward, wholeheartedly, into this new age.

What are the tangible benefits of a system that gives physicians responsibility for a global budget? Physicians are in the best position to correctly gauge the likely success of each new scientific advance. They will recognize its intrinsic importance, and they can plan for its introduction. They can more easily discard obsolete equipment, techniques, or medical therapies. With sound business leadership they will set aside funds for investment in their own system. Given access to such investment capability, they will actively seek to integrate the electronic age into the practice of medicine. Computerized records accessible to all members of the group from their own offices will create a seamless sharing of patient information invaluable to their care. The sharing of radiological and pathological images within the group or across the nation raises to an infinite level the degree of expertise that can be brought to bear on any one patient's problem. Individual physicians will never be able to muster the economic resources to accomplish even these simple ends. Ownership of an integrated health-care system converts these possibilities into an everyday occurrence. Medicine's future seems boundless. Unless we find a rational means of funding health care, we run the risk of squandering this opportunity. The emer-

gence of a no-payor system will establish a viable economic framework upon which to support the future of medicine. It would seem strangely self-destructive not to make this choice.

Chapter 11: Medicine: Its Value

The essence of any price rests upon the perception of its value. The diamond, a useful but mundane tool in industry, becomes "priceless" when sold as a symbol of human love. The value of medicine is equally fungible. For medicine, the accepted definition of price in the marketplace determines how its value is perceived. Each such definition imposes its own bias upon the delicate balance between society's respect for human life and pecuniary self-interest.

It may help to understand the dynamics of this concept if we take a real example. This illustration will also demonstrate the impact of managed-care logic on day-to-day medicine.

Seriously ill patients often require the introduction of intravenous catheters that extend deep into the major veins above the heart. For many reasons, they subsequently become a risk for blood-borne infection. Whenever this occurs, patients require much longer periods of hospitalization and are at risk for major complications, if not death. Several years ago, a technological solution emerged. Scientific studies demonstrated that an intravenous catheter impregnated with a bactericidal substance greatly reduced the incidence of these infections. These bactericidal catheters were more than twice the price of the catheters then in use. The medical staff proposed that a local hospital switch immediately to the new catheter. But the hospital administration, under heavy budgetary pressure caused by managed care, could not justify such an increased cost for a single item. The physicians argued that the application of this new technology was essential, regardless of

cost. After months of negotiation, the hospital administration finally agreed that the catheters should be used for one year and their economic impact subsequently reviewed. After one year, the incidence of bloodstream infection had been cut in half. This equated to a saving in reduced hospital cost of over $300,000. This is more than fifteen times the increased cost to purchase the new catheters. Clearly, the new catheters were a success. Their use is now standard practice. But what is learned about the perception of value?

Because managed-care values controlled cost, the administration initially rejected the proposal because it would increase the cost of a single item in their line-by-line budget. The physicians, whose sense of value focused upon the health benefit to their patients, insisted upon the change. To the administration's credit, they eventually accepted the risk to their budget with the proviso that savings justify the cost at the end of the year. The outcome rewarded their decision. It should be noted that in their managed-care equation, both budget savings and human benefit are measured by the number of hospital days saved. In the administrator's managed-care world, the next innovation will meet the same cost-constraint orientation of the budget managers. Within the value system of managed care any new cost is a threat to the system. There is little incentive to consider costs that do not conform to their immediate needs. In a managed-care environment the analysis ends when the budget is safe. But is this the end?

Within the physician's value system, the impact of these catheters upon good medical care justifies the expense, even if their cost totaled $300,000. That the actual saving was fifteen times the cost is irrelevant. In caring for patients, savings have nothing to do with money. There would appear to be an irreconcilable dichotomy between these two points of view. Their reconciliation depends upon our finding some way to convert the physician's sense of value into an understandable economic context. How can this be done?

The answer begins to emerge from a broader consideration of the economic effects of medical care. In the managed-care model, health benefit is weighed against a single standard. Does it reduce the cost of health care to business? As a consequence we are a nation that values its industry over its own health. Medicine's value is expressed in terms of cost centers and medical loss ratios. Growth of business is given priority over growth in medicine. It is an insular point of view that measures health benefit against experienced cost. Human values must therefore be measured directly against their impact on the bottom line. Of necessity, these boil down to a series of short-term decisions that obviate consideration of their long-term impact. There is no incentive to consider health benefit that accrues to the future. This is the missing factor. Current views of medical economics

do not include consideration of the extension of life, or the reduction in morbidity and suffering. But these are the foundation of medicine. Physicians act to save and extend lives. The costs they create, the value of their actions, indeed, the practice of medicine, are based upon these outcomes. Physicians strive to reduce morbidity and mortality from pneumonia, cancer, cardiovascular disease, or, for that matter, any other disease known to man. The cost of treating each disease is incidental to this ultimate sense of value. Surely, any rational health-care system would seek to support such a value system. It is a matter of perspective. Current approaches to medical economics weigh the health benefit of individual events. But medicine's true benefit to society derives from the health benefit accumulated by the whole. It is the continuance of life that counts.

This dichotomy over the relevance of cost is the quintessential point. Cost in medicine is both economic and human. Moreover, it is driven by the human desire to live. Medical science is the embodiment of that spirit. Successful scientific endeavor will, by definition, seek to replace less effective modes of therapy or provide cures where none yet exist. These are the essential tools that lay the foundation for productivity in any industry: invest to improve methods of production or provide new products. To practice medicine each physician must invest his time and energy in both learning and deploying new approaches to medical treatment. Immersed in the knowledge gleaned from the most extraordinary century in the history of human science, the physician constantly witnesses the fruition of medicines human productivity. How can he question that the healthier, longer lives lived by his patients are anything other than productive? Certainly, it is the intuitive sense of every physician that this is so. Any valid discussion of medical economics must actively accommodate this aspect of its productivity.

Fortunately, some economists are beginning to quantify this ethereal relevance of medicine to our society. Among them, David Cutler5 refers to this intangible value as "health capital.6" They express, in mathematical terms, a basic reality: that medicine's value is measured in terms of events that did not happen; patients who did not die, who were not crippled, whose illnesses never occurred. These economists estimate that the total value of health improvement is about three times total Fortunately, some economists are beginning to quantify this ethereal relevance of medicine to our society. Among them, David Cutler5 refers to this intangible value as "health capital. 6 " They express, in mathematical terms, a basic reality: that medicine's value is measured in terms of events that did not happen; patients who did not die, who were not crippled, whose illnesses never occurred. These economists estimate that the total value of health improvement is about three times total spending on medical care.7 That is to say that the medical-industrial

complex was compensated by one-third of the value of its contribution to society. This encompasses an incredible period of expansion in medicine. The accumulated contribution, as each new specialty sent waves of highly trained physicians into practice, is the foundation upon which this health capital rests. With each wave came new hope, now realized, for the extension of human life. This is the economic benefit to the citizens of this country. But how do we recognize this unrealized gain? It appears in the increased health and vigor of our people. More people live to collect their Social Security. Yet under managed care, no matter what price business pays for its employees' health care, this price is regarded as a negative. But if we accept that medicine's value exists as "health capital," then its growth and expansion are justified by this ultimate outcome. How much stronger we would be if the cost of medical care became a free competitive factor in our own economy. If we shift the responsibility to purchase health care back to the patient, then business is free to fully realize its own productivity while medicine's positive value is reaffirmed.

Direct government financing of medicine does not suffice. By using tax dollars government is divorced from any direct economic link to productivity. Isolated from the real responsibility this entails it can only approximate market forces through legislation. The relevance of such legislation is easily lost in the political competition for tax dollars. Politicians will more easily claim credit for any increased "health capital" than provide adequate funding to facilitate its creation. It is clearly more productive if we facilitate the purchase of health care by the people who directly benefit. By shifting the cost of health care back into the hands of the patient, the burden, both on business and on tax revenues, is relieved. A Universal Health-Care Tax Credit places the responsibility for value in the health-care system where it belongs: directly in the hands of the physicians and their patients. The value realized by such a tax credit extends well beyond our current expectations. By establishing universal health care, a whole new segment of our society will gain direct access to the full benefits of modern medical science. This will lead to a further expansion of health capital through the improved health of the poor and uninsured. Our society will benefit as improved health begins to impact both prosperity and productivity.

The value of a society is determined not only by its industrial productivity but also by the quality of the lives lived by its people. People's lives are enriched by good health. Health care's productivity exists less in the sense of demonstrable goods and services than in its total benefit to society. It represents the ultimate accumulation of wealth: health capital realized through the constant evolution of the best in medicine. In the final analysis, to value health care is to value ourselves.

We need a method of funding health care that values the total contribution of medicine. It is society's perception of the medical marketplace that determines its value. The true benefits of health care exist in the sum of all the care that's given. We must allow those with direct responsibility for the delivery of health care to make the wisest choice.

We live in society not just to promote profit, but to enjoy our lives. Good health is the underpinning of that desire. It is a value onto itself and as such owes no debt to any productivity other than its own. Medicine supports our human needs and ought to be independent of all other concerns.

With this millennium, mankind crossed the Rubicon of his own destiny. Accumulated knowledge in virtually every field has reached a critical level of understanding. There can be no pretense of innocence. We cannot claim we did not know or understand. To survive, conflict must dissolve into common purpose. Man's future now depends as much upon his humanity as it once thrived upon his thirst for knowledge. His curiosity will inevitably continue to push the limits of his understanding. It is not the rate of accumulation of knowledge that will limit mankind, but rather his society's ability to accept the challenge of a shared world. Medicine is the quintessential common purpose. Our biology is indivisible. To create a universal care that honors individual responsibility and freedom in a society that facilitates the sharing of resources establishes a pattern of human behavior upon which to build such a future.

Endnotes

1. David M. Cutler and Mark McClellan, "Is Technological Change in Medicine Worth It?" Health Affairs 20 (2001) 11–29.

2. Medicare was introduced on July 30, 1965 as Title XVIII of the Social Security Act Amendments of 1965.

3. J.C.M. Brust, P.C.T. Dickinson, E.B. Healton, "Failure of CT Sharing in a Large Municipal Hospital." N Eng J Med 304 (1981) 1388–1393.

4. Medicaid was enacted into law on July 30, 1965 under Title XIX of the Social Security Act Amendements of 1965 (P.L.89-95) that also created Medicare.

5. David M. Cutler and Elizabeth Richardson, "Measuring the Health of the United States Population," Brookings Papers on Economic Activity, Microeconomics (1997) 217–272.

6. Michael Grossman, "On the Concept of Health Capital and the Demand for Health," Journal of Political Economy 80 (1972) 223-255.

7. David M. Cutler, Elizabeth Richardson, "Your Money and Your Life: The Value of Health and What Affects it," in Alan Garber, ed, Frontiers in Health Policy Research, MIT Press. Volume 2 (1999) 99-132.