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How We Got Here: a history of the American healthcare system with respect to organizational information flows

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Introduction

High costs, frustrations, and low service levels have characterized many people's experiences with the healthcare industry. When patients see their doctors, they hope to receive answers to their questions and a clear understanding of the options available to them. Instead, they are shuttled from waiting room to examination room and back to the reception desk with a feeling that they have been rushed through or that their questions have only been partially addressed. Much of the healthcare industry is bewildering and frustrating to patients. People are left asking, how did things get to this point and why is it costing so much? This paper attempts to answer that question by providing a historical perspective to the healthcare industry.

Over the past hundred years or so, the nature of the healthcare organization has changed from a peer-to-peer structure where doctors had a relatively intimate relationship with a small body of patients to a hierarchical structure where administrative organizations, such as hospitals and managed care groups, act as a filter between patients and doctors. One of the consequences of this shift in organizational structure has been a high degree of information asymmetry that has resulted in rising costs. Furthermore, the flow of information between doctors and patients has become highly distorted. This paper explains how these changes to the system occurred in terms of information flow and organizational responses to an evolving system.

History of the healthcare system in America

Healthcare in the 19th century

In the early 19th century the system of American healthcare had developed into a truly free market. Between the 1830s and 1850s, congress repealed most of the laws governing medical licensing which had been inherited from the British colonial government (Goodman & Musgrave, 1992). During this period of time there were no laws governing the education or licensing of physicians in the country. Theoretically, anyone could declare himself or herself to be a doctor and start treating patients regardless of their

background or education. As Goodman and Musgrave noted, "the exigencies of the market alone [determined] who would prove successful in the field and who would not"(1992).

One of the consequences of such a free market system was a large supply of physicians across the nation. Providing education to these doctors was a large number of medical schools. With barriers to entry being very low and medical education cheap and easy to come by, the number of doctors in the nation was quite large. In fact, the nation had more than 40,000 practicing physicians and population of fewer than 20 million. This amounted to about one doctor for every 500 citizens. Accordingly, competition was fierce and physicians were paid quite little. Even the most educated of doctors might not expect to receive more than the "merest pittance in the way of remuneration"(Goodman & Musgrave, 1992).

During this period of time, the structure of the nation's healthcare system was very simple. Doctors treated patients directly, and there were no intervening agents. Physicians did not belong to healthcare provider networks, and patients had no managed care plans. The relationship between patients and doctors was a personal one. Furthermore, the high ratio of physicians to patients meant that each doctor treated fewer patients. One can conclude from this that physicians would have had an intimate relationship with clients as they had few patients to treat and more time to devote any one patient.

Because there were fewer formal organizational barriers between doctors and patients, the nature of system as a whole would have been one of many disconnected peer-to-peer type networks centered on the physicians. There was no formal structure to link fellow physicians together except in hospitals, and even there the organizational ties were loose (Goodman & Musgrave, 1992). Such a loose organizational structure at the macro level may have encouraged and facilitated the free flow of information between patients and doctors as there were no organizational elements to act as information filters. However, the disconnected nature of the networks of physicians inhibited the flow of information from physician to physician.

Founding of the American Medical Association

In 1847 the American Medical Association (AMA) was founded by a group of physicians from the New York Medical Society and representatives from 28 other states.

The AMA was founded with the goals of scientific advancement, standards for medical education, launching a program of medical ethics, and improved public healthcare (American Medical Association). An unstated, but by no means secret, mission of the AMA was to enhance the financial wellbeing of its member physician and to protect them from the competitive pressures of new entrants into the medical market. At the very first meeting of the AMA, the body of delegates endorsed the Code of Medical Ethics:

> *Some general rules should be adopted by the faculty, in every town or district, relative to the pecuniary acknowledgments from their patients; and it should be deemed a point of honor to adhere to this rule with as much steadiness as varying circumstances will permit.*

Later this code would be expanded to govern over other activities such as: (1) “solicitation of patients, either directly or indirectly," (2) "competition and underbidding," (3) “compensation ... inadequate to secure good medical service," (4) “interference with reasonable competition in a community," and (5) “impairment of ‘free choice’ of physicians." According to Goodman and Musgrave, the AMA code of ethics was tantamount to endorsing a medical cartel and making participation by physicians an ethical obligation (1992). Such actions were the first inroads towards the creation of a regulated market for healthcare. In another example of AMA actions to create a healthcare market favorable to physicians, the Journal of the American Medical Association condemned the administration of free vaccinations as being, “inimic to the best [financial] welfare of young medical men” (Goodman & Musgrave, 1992).

The AMA pursued its goals by lobbying both federal and state governments to enact strict medical licensing laws designed to restrict the supply of new physicians entering the market for healthcare services. By 1901, all states and territories with the exceptions of Alaska and Oklahoma had medical examining boards. However, many of these regulatory bodies had divergent standards for the education of physicians. In 1906 the AMA Council on Medication conducted an inspection of the nation’s medical schools and found less than half of them to be acceptable. In 1910, in order to gain legitimacy for its findings, the AMA convinced the Carnegie Foundation for the Advancement of Teaching to conduct the same

study. This study, conducted by Abraham Flexner, came to be known as the Flexner Report.

As Reuben Kessel said, "If impact on public policy is the criterion of importance, the Flexner report must be regarded as one of the most important reports ever written" (Kessel, 1958). With the support of the Carnegie Foundation, the AMA had achieved their goals for regulation of medical education. In actions ostensibly designed to ensure the supply of qualified physicians, every state enacted legislation over the next few years to license only those physicians graduating from AMA approved medical schools. This is one of the largest impacts in the history of regulatory action in the United States. Kessel explains:

> *The delegation by the state legislature to the AMA of the power to regulate the medical industry in the public interest is on a par with giving the American Iron and Steel Institute the power to determine the output of steel. This delegation of power by the states to the AMA, which was actively sought and solicited, placed this organization in a position of having to serve two masters who in part have conflicting interests. On the one hand, the AMA was given the task of providing an adequate supply of properly qualified doctors. On the other, the decision with respect to what is adequate training and an adequate number of doctors affects the pocketbooks of those who do the regulating as well as their closest business and personal associates. It is this power that has been given to the AMA that is the cornerstone of the monopoly power that has been imputed by economists to organized medicine (Kessel, 1958).*

As a consequence of this legislation, many medical schools that did not pass the new standards for teaching would be shut down. This had the simultaneous effects of reducing the supply of physicians and increasing the overall quality of care provided by the average physician. As one scientist of the era remarked, "It was about the year 1910 or 1912 when it became possible to say of the US that a random patient with a random disease consulting a doctor chosen at random stood better than a 50-50 chance of benefiting from the encounter" (Cohn, 2007). Prior to this, the standard of care practiced by physicians was divergent and vulnerable to quackery, unsanitary techniques, and uneducated guesswork.

In effect, the AMA had achieved their goal of monopoly over medical education and greatly increased the quality of the nation's supply of physicians.

When examining the impact of the AMA on the healthcare system from an information flow standpoint, the AMA acted as a mass filter on the new information entering the system. Desouza and Hensgen define a filter as an agent or device that removes "unwanted noise from the signal of interest" (Desouza & Hensgen, 2005). The AMA's enforcement of standards on medical education and practice had the effect of reducing the volume of questionable practices and inconsistent treatment approaches from the field of public health. While the stated intent and purported purpose of these actions was in the interest of, "advancing the science of medicine, improving the standards for medical education and care, developing a program of medical ethics, and improving the health of the public"(American Medical Association), the intent of these actions have often been interpreted as self-serving and designed to elevate the status and professional rewards of physicians. As Desouza and Hensgen stated, "whether or not integrity is maintained in the signal belongs solely in the domain and responsibility of the system design and actually has little to do with the signal per se" (Desouza & Hensgen, 2005). While the message may have been intended solely to benefit the state of public healthcare, the system AMA had created was designed to enhance the prosperity of its members and this affected the ultimate outcome of the AMA's efforts.

As fewer and fewer medical schools were able to meet the AMA's criteria for licensure, they lost their accreditation and were closed. As a consequence, the capacity to train physicians was diminished. Graduations of physicians fell each of the subsequent 20 years. This had a disproportionate effect on minority physicians. African American physicians, once common, were generally not admitted to AMA licensed schools, and African American medical schools were systematically closed as they failed achieve AMA licensure (Goodman & Musgrave, 1992). One of the effects of fewer graduates and a tight supply of physicians was the development of a culture of insiders or a 'guild behavior' among physicians. Furthermore, the costs of medical care, particularly in hospitals began to rise as physician salaries and investments in hospital infrastructure increased. By the 1920s, the costs of treatment at a hospital had become quite expensive by the standards of many Americans (Cohn, 2007).

It is during this period of time, that the healthcare system as a whole began to develop its own organizational culture and structure. By gaining the sole regulatory ability to license the nation's medical schools and set the standard for practicing physicians, the AMA was beginning to impose a degree of order on a previously chaotic system. At this point, the nation's system of medical education had developed a hierarchy at the macro level were decisions came down from the AMA and impacted the medical schools and physicians under its authority.

This change to the supply of physicians meant that number of patients being treated by an individual physician would be greatly increased. This in turn, caused an increase in the complexity of the system. As Desouza and Hensgen noted, in order to deal with an increasingly complex flow of information, organizations have tended to respond by developing hierarchical systems to manage, filter, and distribute the flow of information throughout the organization (Desouza & Hensgen, 2005). The structural change imposed upon the macro system by the AMA would have a ripple effect over the next several decades leading to the development of ever more complex systems to cope with rising costs and increasing complexity in the flow of information throughout the nation's healthcare system as a whole.

Early models of insurance

The concept of financially insuring oneself against the possibility of future expenses is not a new one. Insurance has been around since the days of Babylonian traders who feared that their shipments across the desert might fall prey to bandits or other disasters (Cohn, 2007). In fact, Benjamin Franklin formed the Union Fire Insurance Company in Philadelphia in 1752 (Public Broadcasting System, 2002). However, health insurance did not develop in the United State until the early 20th century.

The development of health insurance in the late 1920s had it beginnings in, "isolated communities where employers provided insurance to their employees and thereby were able to attract physicians to take care of their workforce"(Richmond & Fein, 2005). Richmond and Fein described the beginnings of health insurance in the United States as follows.

"The growth of modern health insurance, however, began in 1929 when an able hospital administrator, Justin Ford Kimball, wanted to make certain that Baylor University Hospital would receive payment for services provided to hospitalized patients. He conceived of the idea of collecting 'insurance premiums' in advance and guaranteeing the hospital's services to members of groups, such as employee of a railroad company, subscribing to this arrangement"(Richmond & Fein, 2005).

The concept of offering 'hospital insurance' as an employment benefit soon began to take hold and employers and hospitals became the focal point of health services. Initially employers administered the plan, which had the effect of reducing overhead administrative costs, and physicians or hospitals were contracted to treat the plan members at a fixed rate. The result was a health insurance plan where the contracted physician or hospital would fix as many illnesses or injuries as necessary without charging extra fees. This was in effect, a prepaid healthcare plan. With the onset of the Great Depression in the 1930's the prepaid solution even became popular with physicians because it guaranteed them a salary at a time when few people had the financial resources to see a private physician whose services were generally more expensive (Richmond & Fein, 2005).

Eventually this system would evolve to encompass multiple hospitals. The arrangement changed from one where a group of subscribers contracted with a particular hospital to a system under which subscribers and contracted physicians could select any hospital that was a member of the plan. Physicians were contracted with either individually or as a group. Hospital association-sponsored not-for-profit-plans, such as the Blue Cross soon began to develop. The not-for-profit Blue Cross associations in different states accepted the responsibility of serving the entire community. These plans developed a community–rating system under which the one fee designed to reflect the average costs in the community was charged to all members of the plan. Such flat-fee programs made generally equal healthcare available to all those who could afford the premium regardless of the resources they consumed (Richmond & Fein, 2005).

At the same time that the non-profit plans were reaching maturity, for-profit healthcare plans were beginning to develop. These plans were primarily marketed to healthy individuals participating in Blue Cross-type plans who were attracted to the lower

premiums offered by the for-profit plan. Such plans offered lower premiums to low-risk individuals and excluded high-risk individuals. In this way they competed effectively with the Blue Cross's system that based it's premiums on average community risk. As low-risk individuals fled to less expensive plans, "The average risk for those remaining with the Blues increased and, as a consequence, so did their premium" (Richmond & Fein, 2005).

The introduction of employers and insurance companies to the system added a new layer of complexity to the system. Furthermore, access to healthcare was expanding, which also contributed to increased size and complexity. Before these developments, a consumer's interactions with the system were mostly limited to physicians and hospitals, the providers of healthcare. With the introduction of insurance companies and employer-sponsored health plans, the number of entities a patient was required to interact with doubled. While this marked a distinct change in the system from a patient's point of view, the initial homogeneous nature of the plans acted to minimize the complexity being added to the system. A consequence of this new model was that it encouraged indifference in patients towards information related to the costs of healthcare(Gordon, 2005, p. 360). For the most part, patients did not need to understand the inner-workings of the healthcare plan as they simply paid their fees and received unlimited services. This model would ultimately prove to be financially infeasible as the demand for services and associated costs began to escalate.

Explorations in national healthcare

By 1933, the nation as a whole was beginning to seriously explore the idea of a national healthcare plan. The Committee on the Costs of Medical Care had conducted an extensive census of national healthcare and determined that the majority of expenses were concentrated in a small high-risk percentage of the population. However, since all citizens run the risk of experiencing a medical crisis, the committee decided to recommend that all Americans, "…assume some form of collective responsibility for medical costs"(Cohn, 2007). This concept was not unprecedented. By this time, other nations had already begun to distribute the financial burden of healthcare across all citizens and provide universal medical insurance to their citizens. Cohn argues that, "…in these countries healthcare was on it's way to becoming a right" (Cohn, 2007), rather than an article of trade.

However, universal health care had many opponents. Morris Fishbein, editor of the Journal of American Medical Association (JAMA) and a prodigious writer, was a vocal opponent of national health insurance. Fishbein was an advocate of the sanctity of the patient-physician relationship and believed that a national healthcare plan would violate the intimacy of that bond. Fishbein also opposed corporate medicine, prepaid hospital insurance, and even fee-for-service health insurance. To him all of these threatened to interject a third party organization between the doctor and the patient (Lundberg, 2001).

Fishbein's concerns were well founded. As previously mentioned, third party organizations such as employer-sponsored insurance and prepaid hospital insurance plans had already interjected another entity into information flow between doctors and patients. At this point in time, those entities were causing minimal disruption to the information being passed between doctors and patients. Perhaps prophetically, Fishbein had predicted that these entities would become major sources of distortion in the communication channel.

Further government actions in healthcare

Throughout the 1940s and especially during World War II, the number of insured Americans rose dramatically. This is in large part due to the National Labor Relations Board's 1948 ruling that health benefits were subject to collective bargaining. By 1950 about 54.5 million Americans, roughly one third of the population, had health insurance (Gordon, 2005, p. 360). Throughout this period of time and into the 1950s the healthcare system grew steadily while health care costs continued to increase in the background. By the late 1950s the postwar economic expansion had slumped, people lost their jobs, and suddenly the predominantly employer-paid health insurance system left many previously insured people uninsured. The growing population of retirees was also largely without insurance(Lundberg, 2001, p. 31). Although this was not an unprecedented condition, public expectations concerning access to healthcare had changed. In response to the growing demand for health insurance, the federal government created the Medicare program in 1965 to provide health insurance to the elderly and the Medicaid program to provide healthcare services to the indigent. Whatever services the government did not cover could be obtained through supplementary Medigap providers who offered 'first

dollar', or fee-for-service, coverage. Therefore Medicare beneficiaries who purchased the supplemental insurance would have the same comprehensive benefits available to those with employer-paid or prepaid insurance (Lundberg, 2001, p. 87).

During this same time period the demand for trained physicians was beginning to eclipse the available supply. President Johnson's administration proposed to address this by doubling the enrollment at medical schools through a series of generously funded federal programs designed to encourage the development of new medical schools and expand the enrollment of existing schools. The plan also proposed to address the shortage of physicians in rural areas through economic incentives and to lower physicians' fees by increasing supply relative to demand (Lundberg, 2001, p. 32).

During this period of history the regulatory actions by the government induced more change in the system than at any time since the Flexner report. Government action had helped cause the rapid rise in the number of insured Americans and the related expansion of the healthcare system as a whole. Furthermore, the creation of the Medicare and Medicaid programs introduced the government as an agent directly involved in the interaction between patients and healthcare providers. With the addition of Medigap and other supplemental insurance providers, patients were now faced with two intermediary agents in their interaction with physicians. By this point, the structure of the healthcare system had become quite complex and the chances for distortion in the information flow between patients and physicians had been dramatically increased by the new developments in health insurance and government intervention.

Rising costs and the specialization of physicians

Contrary to its intent of producing more general practitioners and lowering costs, the actions of the Johnson administration dramatically increased the number of specialist physicians and consequently the associated costs. Due to the outflow of government spending in the Medicare program, physicians specializing in eldercare became one of the fastest growing segments of the healthcare industry. Rather than see a family doctor, more and more elderly patients began consulting with geriatric specialists. These physicians offered complex and often expensive therapies with the promise of prolonged life (Lundberg, 2001, p. 87). Due to the rise of supplemental insurance programs these

patients paid little for their increased consumption of medical services and were largely unconscious of the rising costs. This phenomenon was not restricted to eldercare and repeated itself over-and-over across a variety of medical fields. Historian David Johnson observed that, "When you double the surgeons in an area, you double the number of surgeries, but you do not increase the overall health care" (Johnson, 2009). Johnson's observation illustrates that the effect of increasing the number and diversity of specialists was to increase the demand for their services.

The demand for health coverage from employers also increased. According to Lundberg, to stay competitive employers were forced to provide healthcare plans offering immunizations, prenatal care, periodic checkups, and preventative screenings. There was no opposition to this from physicians or the AMA. Hospital based doctors began to increase their fees on a regular basis and met little resistance as most patients' insurance plans did not require the payment of any out of pocket fees (Lundberg, 2001, p. 88). Additionally, a new trend began to develop among specialists. When some practitioners set their fees as high as they possibly could, that became the base fee under the 'customary and reasonable' method for setting fees used by the Blue Shield and other insurance providers. These practices quickly lead to the rapid inflation of fees for specialist physicians. Conversely, general practitioners met real resistance to ramped fee increases and were forced to keep fees lower to remain competitive. This reinforced the inclination of many new physicians to specialize rather than enter general practice.

Soon the same obscuration of costs affecting doctor's fees began to affect the coverage of prescription drugs. Lundberg explains, "Once payments were made by 3rd party payers, resistance to price increases diminished" (Lundberg, 2001, p. 88). Again, supplemental insurance programs were obscuring the price increases from the consumer and pharmaceutical companies began to steadily increase prices for drugs.

In addition to the obscuration of fees, the payment model for physicians had nearly universally changed from a salary based model to a fee-for-service model. Doctors were now paid for the individual services they provided. This meant that the more patients a doctor treated the more doctor would be paid, and the more expensive the treatment the more the doctor would be paid. Lundberg offers the following explanation.

> *"The incentives created difficult ethical dilemmas. Here's one obvious example. A surgeon covered by fee-for-service insurance is confronted with a patient in the middle of the night who has abdominal pain. After an examination, the question for the surgeon is whether to operate. Somewhere in the back of the surgeons' mind is the understanding that if he does operate he will be paid, and if he does not operate he will not be paid. Either consciously or subconsciously, there was always a bias to intervene in fee-for service medicine. The same surgeon in a traditional prepaid plan knows that no matter what he does, his income is not involved. He is paid in the same fashion come what may, so he might decide to wait until morning to consult with other physicians about the patient's condition or he might decide that an immediate operation is necessary. Either way his income is not affected." (Lundberg, 2001)*

It is at this stage in the evolution of the system that information asymmetry becomes a real problem. Information asymmetry is a situation where one party, the agent, conducts work for the other party, the principal, yet for some reason, usually self interest, does not fully disclose all relevant information. In the resulting situation, the principal has less information pertaining to the topic at hand than the agent (Desouza & Hensgen, 2005). In this case, the insurance companies, whether intentionally or not, have obscured the information pertaining to the costs of medical services from the consumers. The resulting situation is that consumers fail to resist cost increases for medical services. Healthcare service providers were quick to exploit the lack of resistance and rapidly raised their fees. Goodman and Musgrave noted that in 1991 alone physician fees increased by 9.3 percent – 50 percent more than in any previous year(Goodman & Musgrave, 1992).

Development of the current insurance provider model

With coverage rates and costs increasing, insurance providers both private and government based began to enact measures to control raising costs of comprehensive care. At some point in the 1970s, insurance providers began a trend of reducing coverage and limiting benefits in an effort to curb their raising expenses. Also concerned with continuously escalating costs of comprehensive care, the federal government enacted a series of laws designed to contained costs. The Employee Retirement Income Security Act (ERISA), enacted in 1974, included provisions to oversee health benefit plans and freed

most employers from state regulations regarding coverage standards. Lundberg explains that, "Employers offering coverage through self-insurance often used insurance carriers to administer their plans, using restrictive networks and methods to constrain coverage" (Lundberg, 2001, p. 94). The ERISA laws protected these decisions to restrict coverage and gave employers the leeway to choose less expensive health plans. The eventual result of these trends was the stabilization of insurance prices at the cost of reduced benefits from comprehensive coverage plans.

This trend towards a reduction of benefits continued to gain momentum into the 1990s. Journalist and economist Robert Kuttner claimed that throughout the 1990s, "The most prominent feature of American health insurance coverage is its slow erosion" (Kuttner, 1999). Premium costs for health insurance both to individuals and employers began to rise again. Furthermore, businesses began to prefer hiring temporary or part-time workers to whom they did not provide health benefits. Maximum coverage levels began to decline. Additionally, employer-paid insurance program began a shift away from traditional Health Maintenance Organizations (HMOs) towards Preferred-Provider Organizations (PPOs). While these plans offered patients greater choice, they required higher out of pocket expenses (Kuttner, 1999).

Overall, the trend throughout this period has been to place more of the financial burden for healthcare on the consumer. Additionally, the number of underinsured has been on rise also. The underinsured represent the portion of the population with some health benefits, but who must forgo treatment because their healthcare plans will not cover medically necessary treatments (Kuttner, 1999). These individuals must either pay out-of-pocket for their healthcare or forgo treatment. Another disturbing trend is the increasing population of uninsured. Beginning in the early 1990s, the percentage of the population without insurance began to climb moving from less than 15 percent in 1990 to a high of 16.1 percent in 1997. The rate dropped in the early 2000s, but rose again to 15.3 percent in 2007 (DeNavas-Walt, Proctor, & Smith, 2008).

The previously described trends can be explained as a reaction of the system to the changes in its previous state. The reduction in benefits coverage is an organizational response to the rapidly increasing costs and information asymmetry of the previous decades. Employers and insurance companies acted in their own best interests to reduce

expenses without dramatically reducing the size of the insured population. The asymmetry of information in relationship between physicians, insurance providers, and their patients also increased. Under the direction of HMOs, some physicians would decline to inform patients of possible treatments not covered by their health plans. In effect, insurance providers and healthcare providers filtered and restricted the flow of available information to patients. With their access to information regarding the choices and consequences of their medical treatment, patients now more than ever before are disconnected from the physicians responsible for their treatment.

Conclusions

The American healthcare system is a very complex organization with many stakeholders ranging from patients and doctors to employers and insurance providers. But in coming to understand the history of the system, it has been possible to examine how changes to the organizational elements of the system and how their interactions have ultimately resulted in the frustrations that patients experience today. While the revolution in medical science and the development of complex insurance systems over the past century has dramatically increased the quality and accessibility of healthcare in United States, the results have proven to be expensive as well.

In the early days of the American healthcare system, the free market nature of the system kept organizational complexity fairly low. Doctors and patients enjoyed a less restricted relationship, and there were no other entities to distort the flow of information between the two. The founding of the AMA and the granting of monopoly power over medical education to the AMA marks the beginnings of a pattern of ever increasing complexity and expense in the system. Furthermore, the AMA's monopoly over medical education both increased the quality of medical service in the nation and initiated a shift from a free market system to a closed market.

The development of early models of health insurance further increased the organizational complexity of the system. Furthermore, this marked the first time that a third party was interjected into the flow of information between doctors and patients. This marked the beginning of a pattern of information asymmetry that would lead to escalating

costs and rising demand. Increasing government intervention in the system further added to the levels of complexity and caused a dramatic increase in both costs and insurance coverage that would further exacerbate the asymmetry in information between doctors, insurers, and patients. This chain reaction of organizational changes and distortion of information has ultimately shaped the healthcare system into what it is today.

Part of the problem in this system is that Americans pretend to embrace a free market system in healthcare, but their actions have created a closed market that encourages the obfuscation of costs. An essential component of a free market system is consumer access to information regarding the costs of services. However, the system of healthcare this nation has been designed to specifically hide the costs of services from consumers and works to short-circuits competition in the market. The nation should embrace one clear direction for the healthcare market. Whether that is a free market system, a heavily regulated market, or a nationalized system, the future of the nation's healthcare system would benefit from a clear vision.

Future decision makers in the healthcare system would be well advised to consider the implications of their actions on the organizational dynamics and information flows of the healthcare system. All actions taken on specific parts of the system will inevitably have consequences beyond the designer's intentions. Future actions taken on the healthcare system must take into account the effects they will have on the information flow between physicians and their patients.

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