
D Deregulation and Regulatory Backlash in Health Care

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The traditional health care system, organized as a professional guild and financed by indemnity insurance, has been irrevocably changed. Once-complacent taxpayers and formerly paternalistic employers have fought back against inflating costs and escalating premiums, choking back the once massive flow of subsidies for inefficient physician practices, fragmented delivery systems, and cost-unconscious consumer demand. Community-rated insurance pools have fractured as self-interested and often self-insured purchasers pursue better value for their health care dollar. Consumers are increasingly assertive as to their preferences and willingness to pay for particular health benefits and medical interventions.

Three powerful and conflicting forces dominate the trajectory of the health care system. The first and most fundamental is the continuing pressure to adopt new technologies while moderating the economic burden on taxpayers, employers, and consumers. New technologies derive from a broader accumulation of scientific and engineering knowledge, from advances in physics, pharmacology, and pathology that highlight opportunities for intervention in the mechanisms of disease, trauma, recovery, and repair. These advances do not remain under the exclusive purview of scientific or political elites but are communicated widely to the citizenry, generating strong demands for their immediate diffusion. However, this enthusiastic embrace of new clinical interventions is not accompanied by a commensurate commitment on the part of the public to pay for them. The increasing wealth of society permits ever-growing investments in health care and it is to be assumed that expenditures will pace the overall

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growth in the economy. However, even the wealthiest of nations cannot continue on a trajectory that would devote 15, then 20, and then 25% of total resources to health care. The limits on social willingness to pay manifest themselves in the taxpayer revolt, in labor market tradeoffs between wages and fringe benefits, and in the tens of millions of citizens who lack even the most basic of insurance coverage.

The second feature of the emerging health care system, which derives from the first, is continued innovation in forms of organization, ownership, contract, finance, and governance. Given the pressure to restrain inflation, large rewards will accrue to those who pioneer cost-decreasing products and processes. Outpatient surgery, home health care, sub-acute facilities, nurse practitioners, inpatient hospitalist teams, practice profiling, drug formularies, case managers for patients with chronic illness, and internet-enabled applications of every description represent clinical innovations that attenuate rather than accentuate the cost of health care (compared to what the traditional hospital-centered, specialty-dominated, and indemnity-financed system would have generated). Each product and process faces continued pressure towards evolution or extinction, but each exemplifies the process of organizational experimentation that has been unleashed by the transition to unmanaged competition in health care.

The emerging *corporate system of health care* is better able to moderate cost inflation than the traditional system of professional dominance and the only partially implemented systems of utility regulation and managed competition. The corporate health care system has adopted forms of organization, ownership, and contracting from the most dynamic sectors of the larger economy and applied them to the technology, culture, and institutions of medicine. Its foundations lie in the multi-specialty medical groups and health insurance plans that redesign economic incentives and clinical practice at the grassroots level. Medical groups, IPAs, and physician-hospital organizations offer a balance of competition and cooperation that accommodates the social needs for efficiency, adaptation, and innovation. Health plans have adjusted to the heterogeneity of consumer demand by marketing multiple networks, methods of managing utilization, and benefit packages priced with multiple premiums, deductibles, and coinsurance provisions. Product diversification is accompanied by geographic expansion, as plans and providers reduce their dependence on any one region and leverage skills gained in one local market into competitive advantages in others. These multi-state, multi-product firms are consolidating through mergers and acquisitions, leaving most metropolitan markets dominated by a small number of large organizations. Vertical disintegration also is the norm, permitting health plans, medical groups and hospital systems to focus on those services they perform best while coordinating with other services through contractual relationships. Innovation in organizational structures is accompanied by innovation in contractual structures, as plans and providers experiment with new methods of payment, medical management, and quality measurement.

However, the long-term viability of an organizational system depends not merely on its economic prowess, but on its compatibility with the social culture and political institutions. In overturning so many traditional practices and expectations in such a short period, corporate health care has brought down upon itself the wrath of the American populist heritage that distrusts big business almost as much as it dislikes big government. The third fundamental feature of the emerging system, therefore, is continued social discontent and political backlash. Legislatures, courts, attorneys general, and administrative agencies have issued a flood of hostile legislation, litigation, and regulation. Some of these impose beneficial supports for the corporate system, mandating grievance and review, financial solvency, and quality monitoring mechanisms that enhance accountability and legitimacy. Others, however, target the very engine of innovation, impeding or prohibiting new methods of payment, utilization management, benefit design, network contracting, capital financing, and organizational affiliation.

Lessons of Utility Regulation and Deregulation

No nation has ever unleashed the forces of market competition and corporate organization on its health care system. Insights are available from the experiences of the transportation, communication, energy, and banking industries. For decades, these industries have been opened to competition and its consequences. Despite differences in physical technology, geographic concentration, and consumer demand, the experiences of the utility industries under partial and total deregulation have been broadly similar. There is now a substantial body of research from the airlines, trucking, railroad, banking, and natural gas industries (as well as from telecommunications, electric power, and cable television). While the experiences from these sectors do not precisely replicate that of health care, they can provide useful guideposts and standards of comparison. Indeed, the utility industries are potentially more relevant to the emerging health care system than the oft-cited experiences of health care in other nations, which evolved in different cultural contexts and under different political institutions.

The deregulation of the utility industries has been remarkable for the breadth of the industries affected and the depth of the changes effected, but also because it was so unanticipated. Scholars and industry observers have diverged widely in their assessment of the economic desirability of regulation but converged in their assessment of its political durability. Liberals often interpreted regulation as an efficiency-enhancing response to market failure and as an equity-enhancing means of subsidizing the poor. Conservatives often denounced utility commissions as captured by the regulated industries, and hence as conducive to inefficiency and inequity, but by this very token despaired of mobilizing a political constituency for change, since the beneficiaries of regulation are concentrated and committed while the losers are dispersed and apathetic.

However, over the course of the 1960s and 1970s, during the era of its apparent invincibility, utility regulation was subjected to a sustained critique from both the left and the right that created an intellectual quasi-consensus and prepared the way for sweeping change in the following decades.

The new consensus, shared in diverse ways by consumer activists and Nobel laureates, by Democrats and Republicans, is that utility regulation exacerbates rather than attenuates economic inefficiencies and social inequities. The inefficiencies stem from incentive distortions induced by particular rules and from the general climate of a protected, non-competitive industry. Regulatory pathologies were identified in the airline industry, where price floors stimulated cost-increasing competition through amenities and flight frequency;¹ in the electric power industry, where rate-of-return limits induced a substitution of capital for labor and the construction of overly large generating facilities;² in the railroad industry, where restrictions on track abandonment led to excess capacity, under-maintenance, and demands for public subsidy;³ in the banking industry, where constraints on product and market diversification limited the number and type of financial instruments and protected inefficient and poorly managed firms;⁴ and in the natural gas industry, where uniform rates prevented conservation-enhancing seasonal and time-of-day pricing.⁵ Barriers to market entry, product diversification, and corporate mergers protected incumbent firms against the rigors of competition, fostered managerial slack, financed above-market wages, and discouraged innovation in methods of production, supply, and marketing. The distributional impact of regulation derives from its attentiveness to mobilized political constituencies and its insulation from the larger but less vocal majority. Simplistic theories of agency capture by regulated industries failed to acknowledge the full complexity of regulatory politics, in which consumer groups, legislators, and litigators all play important roles, but did succeed in dispelling even more simplistic interpretations of regulation as a means to tax the rich and help the poor.⁶ The greatest defenders of continued regulation often have been not the disenfranchised but the regulated firms themselves, backed by their investors, bankers, labor unions, executives, and employees.

Deregulation is not a one-time event but a process that unfolds in different ways across industries and geographic markets. It generates instability and stress, and it is threatened continually by political reaction and re-regulation. Based on the industry experiences and research evidence to date, four basic impacts can be identified.⁷ First, deregulation in the utility industries has stimulated productivity and performance, with significant reductions in cost and improvements in service. Second, it has led to differentiation among product features and prices depending on the purchaser, the geographic market, the season, and other characteristics of supply and demand. Third, the relaxation of restrictions on new entry has led to dramatic changes in market structures, organizational forms, distribution networks, and methods of purchasing. Finally, deregulation has engendered countervailing pressures to slow the pace and reverse the direction of change, to dampen the instability and impede the innovation, to

cushion the blow to previously favored constituencies, and in some cases to re-regulate in whole or in part the behavior of the industry.

Utility Deregulation: Cost and Quality

The most visible impact of deregulation has been to lower prices and improve service to consumers.⁸ After adjusting for economy-wide inflation, deregulation has reduced fares per mile traveled by 33% for airlines, 35% for less-than-truckload freight, 75% for full-truckload shipping, and 50% for railroads. Natural gas prices have fallen 30% for both residential and industrial users. Service frequency has increased substantially in air transportation, due to lower fares and higher demand; service times have declined substantially for less-than-truckload and full-truckload shipping; both the mean and standard deviation of railroad transit times have fallen by approximately 20%; banking is more convenient due to longer hours, automatic tellers, no restrictions on branching; and natural gas service is more reliable as shortages have been eliminated.

Higher value to the consumer has derived from improved industry productivity, capacity utilization, and network configurations and from a virtuous cycle of lower costs, lower prices, increased demand, and further reductions in costs. The hub-and-spoke route configuration developed by the deregulated airline industry has raised rates of seat occupancy from 52% to 62% and thereby lowered costs per mile flown by 25%. Price wars have driven down air fares, dramatically increased business and leisure air travel, and permitted ever more frequent flights.⁹ The trucking industry has increased the percentage of full truckloads and reduced the number of empty return miles, thereby permitting price reductions that have attracted additional business from non-trucking firms that previously shipped on their own vehicles to avoid the costs of trucking regulation. Railroads have abandoned approximately one-third of their trackage, reduced operating costs, improved profitability, and thereby escaped from the regulation-induced death spiral of mandated excess capacity, high operating costs, high prices, declining demand, and need for ever-greater subsidy. Banks have lowered their operating costs through extended electronic and branch banking, raised interest rates above regulatory ceilings, and developed new financial products that better balance risk and return. Natural gas firms have restructured their transmission and distribution networks and improved pipeline capacity utilization, reducing overall operating and maintenance expenses by 35%.

Utility Deregulation: Price and Product Differentiation

A common characteristic of utility regulation was uniformity in products and prices in the face of great variability in consumer preferences and the actual costs of providing service. This one-size-fits-all approach led to services that were of excessive cost for some consumers and insufficient quality for others, impeded the use of price flexibility to enhance capacity utilization, and

juxtaposed overcapacity and low load factors in some industries with undercapacity and shortages elsewhere. It generated cross-subsidies from consumers for whom the cost of service was low to consumers for whom the cost of service was high. Shippers on heavily traveled routes subsidized shippers on remote routes and long distance telephone users subsidized local callers.

Deregulation has spurred an outpouring of new services that incur different costs and impose different prices, permitting a better match between supply and demand. Air travelers can obtain substantial discounts if they purchase tickets in advance and stay for the weekend, but must pay the full cost of standby capacity if they want to delay their decisions to the last minute. Shippers can obtain low rates if they allow their freight to be combined with others' and be routed over less direct but more heavily traveled corridors, or they can choose to pay the full cost of less-than-truckload delivery. The increased variability in price and service results in part from the deregulation of contracting between buyers and sellers. Rail and road regulation, for example, often prohibited shippers from negotiating with transporters for volume discounts, flexibility factors, multi-market or multiyear agreements, or other variations from uniform price and service standards. Now half of rail freight moves at specially contracted rates, allowing better track utilization for the railroads and better coordination of production, inventory, and distribution for the shippers. Deregulation permits the contractual flexibility that allows buyers and sellers to explore potential gains from new electronic and Internet technologies, thereby accelerating the adoption and diffusion of innovation.

Utility Deregulation: Market and Organizational Structures

Deregulation stimulates competitive entry into previously protected industries and local markets. Startups challenged the most prominent firms in airlines, trucking, electric power, and telecommunications and even have appeared in specialized niches of the railroad industry. After an initial turbulent phase, however, deregulated industries undergo a process of concentration through merger, acquisition, market exit, and bankruptcy. Airlines, railroad, and banking firms are almost all larger now than prior to deregulation, and there has been a similar wave of consolidation in the electric power and telecommunications sectors. Deregulation has spurred exit from particular product and geographic markets as firms have pulled out, sold out, or gone under in the face of new entry. Much of this was overdue, since regulation protected incumbents from more efficient and innovative outsiders. Large scale is not incompatible with the most intense competition, as much growth has occurred through product and market diversification.

Some firms have grown by developing broader networks that better fit the needs and preferences of customers. Airlines have thickened their regional nets by servicing more communities around their hubs and have developed joint venture and contractual arrangements to service global demand. Railroads have merged end-to-end to more efficiently link ports to mines to manufacturing

centers, and have purchased or contracted with maritime shipping firms and trucking companies to offer intermodal transport services. Many mergers and acquisitions are designed to penetrate new geographic markets, as in branch banking and local service telecommunications, or to penetrate new product markets, as in linkages between commercial banks and investment banks. Substitution stimulates rivalry for traditional services and their producers. Mutual funds, corporate lenders, life insurers, and other financial intermediaries now compete with savings and loan institutions for deposits. Of course some consolidation is designed to reduce rather than increase competition. While end-to-end mergers increase rivalry in the railroad industry, parallel mergers decrease it. Airlines dominant at particular hubs can exploit the shortage in airport capacity to exclude rivals and raise rates. All in all, however, the utility industries have become increasingly competitive as the deregulatory process has unfolded, even in what were formerly considered natural monopolies such as electric power and telecommunications. The strategy of full service diversification—driven by the heterogeneity of preferences, technology, and geography—leads to the creation of large firms competing fiercely across many products and many markets.

Utility Deregulation: Political Backlash

Deregulation has exerted a major impact on the political climate of the utility industries, in some cases stimulating a backlash that finds sympathetic ears in legislatures and the courts. Formerly subsidized consumers deplore market-level price and quality. Airline pilots, unionized teamsters, stock brokers charging fixed commissions, employees of power companies with cost-plus rate structures, and domestic crews on American flagships all have experienced the reduction in industry costs as a reduction in personal incomes. Consumers as a whole are winners, with more choices, better service, and lower prices, but significant subgroups find themselves to be losers. Everyone appreciates price decreases and quality increases in services where regulation offered neither subsidy nor shelter. They lament, however, similar effects in industries where they were protected and pampered.

The consumer and producer backlash against utility deregulation has found sympathetic ears in Congress, state legislatures, and executive agencies due to the structure of political incentives and institutions. Legislators look not to the aggregate social impacts of deregulation but to the costs and benefits accruing to their local constituents. They seek to slow, stop, and reverse adverse impacts, such as the abandonment of little-used railroad trackage, competitive threats to hometown truckers, and the transfer of jobs to distant communities. Elected politicians and appointed administrators are concerned with short-run rather than long-run effects and are uncomfortable with the instability created as deregulation opens long-protected industries to entry and innovation. All three branches of government are under continual pressure to do no direct harm, to minimize adverse impacts on the visible and vocal at the expense of

the invisible and inarticulate, thereby upholding perceived standards of due process while rewarding politically powerful interests.

The process of deregulation has generated considerable friction, but almost without exception it has not been reversed. Indeed, the deregulatory process has spread to previously untouched industries and previously unconvinced nations, as local phone service sees the first glimmerings of competition, global maritime and airline regulations are loosened, and European nations re-examine their telecommunications and transportation policies. Over time, moreover, deregulation creates a constituency in its own support, as producers, consumers, and communities advantaged by the changes mobilize against re-regulatory initiatives. Nevertheless, the process is fragile and always endangered. Utility deregulation depends on the political as well as the economic marketplace, on the temporal and geographic incidence of costs and benefits, on the comparative salience of winners and losers, and on the likelihood that political entrepreneurs will find in the turbulence of change the opportunity to pursue other agendas.

Comparing Health Care to the Utility Industries

No exact analogies can be drawn between the changes sweeping through health care and the revolutionary transformations spurred by deregulation in the transportation, communication, energy, and finance industries. Health care was never subjected in such an explicit and comprehensive fashion to the dictates of a utility commission. However, the performance of the traditional health care system so closely resembled a regulated utility, and health care competition has affected performance in ways so similar to utility deregulation, that significant commonalities must be acknowledged and important lessons can be learned. Many states experimented with price controls covering a subset of insurers, and all imposed certificate-of-need entry barriers for at least some services and facilities and a few states imposed rate regulations affecting all hospital patients. The Medicare program imposed a uniform administered pricing system for its patients on the nation's hospitals, and many states imposed Medicaid payment rates that were based on budgetary politics rather than an analysis of the cost of care.

Economic theory looks to market failure and income redistribution to explain the pattern of regulation and deregulation across industries. The most commonly cited market failures include natural monopoly (which can lead to excess profits and distortion of resource allocation) and imperfect information (which can expose consumers to exploitation by better-informed producers). Distributional motives include the efforts by producer or consumer groups to convince legislators and regulators to impose taxes, rules, or other mechanisms that generate special benefits for special interests. Health care includes rural communities too small to support more than one hospital or a few physicians, but the mainstream of the system is structurally so competitive and has so

many providers that it is implausible that public policy can be an efficiency-enhancing response to natural monopoly. Imperfect information is a more important feature of health care and one to which has been attributed most of the system's unusual organizational and normative characteristics.¹⁰ It is difficult to believe, however, that the asymmetry of health care information between consumers and producers has changed in an exogenous fashion over the past three decades and thereby spurred the tumultuous changes in ownership, finance, and payment mechanisms. The amount of health care information possessed by consumers is likely to be the result rather than the cause of changes in the economic and political environment. It therefore is most enlightening to examine distributional motives, cross-subsidies, and the creation of rents as the underlying source of similarity between the processes of regulation and deregulation in health care and the utility industries.¹¹

Many of the traditional institutional and normative features of health care served to restrict entry, comparison-shopping, price competition, and other features of a deregulated industry.¹² Professional licensure, judicial acquiescence in physician boycotts of prepaid group practice, and exemption from antitrust statutes created economic rents for physicians that could be spent providing charity care for the indigent or by enjoying a more generous personal lifestyle. State "corporate practice of medicine" statutes outlawed the creation of vertically integrated delivery systems that would employ physicians to provide services on a salaried basis. "Any willing provider" statutes prevented insurance companies from negotiating volume discounts with subsets of physicians, pharmacies, or other provider entities. Community-rating regulations limited the ability of insurers to offer low premiums to healthy subscribers, thereby increasing revenues potentially available for subsidizing premiums for unhealthy subscribers. Hospital rate regulation programs directly imitated utility commission pricing policies, imposing price floors as well as ceilings to generate the operating surpluses necessary to subsidize charity patients. Certificate of need regulations limited entry and dampened the non-price competition that would dissipate operating surpluses. A particularly important feature of the health care industry, less prevalent in the utility sector, is the moral hazard generated by widespread insurance. Indemnity and Blue Cross insurance buffered consumers from the cost consequences of the physicians' decisions and thereby fueled an open-ended demand for quality-improving and service-enhancing new technologies and process of care. Certificate of need and rate regulation in the hospital industry was consciously designed to moderate the inflationary aspects of this "medical arms race," in a manner analogous to that of the Civil Aeronautics Board in its campaign against amenity competition and low load factors in the airlines industry. Some of the competition-limiting features of the health care system were designed in part to effect the spreading of insurance risk and subsidy of the ill through indirect means, as an alternative to creation of a national health insurance system analogous to those in European nations. Here again the health care system bears comparison to the utility and transportation industries, which

were put under regulatory tutelage during the New Deal era in part to forestall demands for nationalization on the then-prevalent European model.

Most economic discussions of the politics of deregulation focus on the tendency for the cross-subsidies underlying utility regulation to grow over time and to become ever more complex and unpredictable in incidence. These changes gradually undermine the political support for the regulation, creating new coalitions that eventually accumulate sufficient power to partially or completely remove the regulatory edifice.¹³ The accelerating medical care inflation of the 1970s and 1980s spurred the principal purchasers of health care, including private employers, state Medicaid agencies, and the federal Medicare program, to attack the institutional barriers to competition in health care. The removal of the antitrust exemption, abandonment of most Certificate of Need and hospital rate-setting programs, and removal of limits on price-based negotiations between insurers and providers embody experiments in moving the health care system towards a more competitive market. The phenomenon known as managed care—comprising various combinations of volume purchasing (“selective contracting”), prepayment (“capitation”), monitoring and oversight (“utilization management”), creation of preferred provider panels, and other mechanisms—attempts to limit moral hazard and stimulate cost-conscious decision making.

Health Care: Cost and Quality

Market competition and corporate organization have demonstrated a remarkable ability to moderate the inflationary trajectory.¹⁴ The development of medical groups, health care systems, multi-product insurers, capitation contracting, and utilization management during the 1990s held the growth in health care costs to the lowest levels in 50 years, confounding the skeptics and contributing to the strong economic performance of the decade. It is difficult to ascertain the influence of corporate organization on health care quality, due to the inherent difficulties in measuring outcomes and to the lack of pre-existing baselines for comparison. The overall quality of care is improving, but this is due primarily to longer trends in laboratory research, physician training, and technology diffusion than to recent changes in markets and organization. The record on customer service is decidedly mixed. Cost pressures have led to a shortening of physician visits and oversight of utilization patterns that patients resent, while the new emphasis on satisfaction surveys and enhancement has induced providers to offer longer office hours, 24-hour telephone advice, and other consumer conveniences.

The short-term success against health care cost inflation does not imply that the long-term battle for stable expenditures has been won. On the contrary, America is poised to enjoy the clinical benefits but rues the budgetary implications of an outpouring of new drugs, devices, tests, and treatments that prevent infection, dispel uncertainty, enhance functional ability, and generally contribute to a healthier and more long-lived citizenry. This technological dynamic opens

diagnostic and therapeutic opportunities that are hard to ignore, but it is less important perhaps than the revolution of rising expectations. It is clear that as the population gets healthier, it demands more—not less—from its medical care system. We embrace treatments for old ailments that once were merely suffered, from childhood viruses and rashes through migraine headaches and springtime allergies to the impotence and arthritis of our golden years. We open our hearts and our wallets to medical breakthroughs that benefit victims of the great scourges of our time, from childhood cancer through AIDS to Alzheimer's. We take gains in longevity for granted, expect that full physical, social, and intellectual functioning will continue to the now more distant end, and insist that these advances are for all to share.

The corporate system of health care does not seek to stop the development of quality-increasing technology or to quell the revolution of consumer expectations, both of which inevitably accompany the growing wealth of society. It does, however, create significant changes in economic incentives and organizational structures that will temper the rate of inflation and enhance the overall value of health care services in a manner analogous to the gains in efficiency and quality in the deregulated utility industries. Four dimensions are particularly worthy of note.

The shift from the professional guild to integrated organization, from indemnity insurance to managed care, and from non-price rivalry to price competition creates strong economic rewards for the diffusion of cost-decreasing clinical innovations. The medical arms race rewarded the development of technologies that raised quality—real or perceived—but not ones that reduced costs. Now firms and individuals at every point along the health care value chain—from bench scientists to clinical researchers, pharmaceutical manufacturers, hospital managers, multi-specialty medical groups, single-specialty networks, and primary care physicians—can increase their status and income if they discover, develop, or adopt interventions that reduce the overall expense of care.

The corporate system is rapidly restoring the normal economic relationship between supply and demand, between market disequilibrium and price changes in health care. The United States has inherited an excess supply of acute care hospitals and physician specialists, analogous to the excess capacity generated by entry and exit regulation in many utility industries. In the now-passing system of guild organization and indemnity insurance, excess capacity stimulated cost-increasing non-price competition analogous to that experienced by the rate-regulated airline industry. Health services researchers delighted in discovering ever-new economic pathologies, from Roemer's Law that a built bed is a filled bed, to the medical arms race of duplicative clinical technology, to supplier-induced demand in response to physician fee reductions. Henceforth, facilities and services that are in excess supply will receive lower, rather than higher, prices than otherwise comparable facilities and services that enjoy excess demand. The painful recalibration of relative incomes within the profession

and across the industry will continue, redirecting investments and career choices towards areas of need rather than areas of excess.

The original demand placed on the corporate system by public and private purchasers was to reduce the cost of care, not to improve quality and service, and the system responded accordingly. The greatest emphasis in the early years has been on methods of payment, network contracting, utilization management, benefit design, and organizational structure that promise to restrain the inflationary spiral. Considerable success has been achieved in this endeavor. However, the distinctly American question remains: What have you done for me lately? Patients are worried lest the emphasis on cost control reduce the quality of the care they receive. Consumers are annoyed with every obstacle to obtaining what they want when they want it. The corporate system is shifting its emphasis to developing methods for measuring and improving service, in a manner analogous to the process pursued in the utility industries after deregulation. For the first time, the health care industry is being subjected to systematic monitoring of quality and service levels, with the intent of promoting clinical comparisons and quality-conscious consumer choice. The road to be traveled is a difficult one, since almost all the monitoring tools need to be invented. A salient feature of the professional guild was reliance on unmonitored trust and opposition to quantitative, validated measures of performance. Purchasers, plans, and provider organizations now experiment with satisfaction surveys, indicators of preventive services utilization, tracers for appropriate clinical processes, and risk-adjusted measures of patient outcomes. The new monitoring mechanisms hold great potential to enhance as well as simply measure the quality of care, since statistical and epidemiological methods always outperform bad-apple approaches to quality improvement.

Deregulation has not universally improved quality and service in the utility industries. We all bemoan the paucity of empty seats on the airlines or the ubiquity of small fees for banking services that once were offered free. Some forms of regulation imposed a uniformly high-cost, high-quality style of service by forbidding firms from developing economy options. Without the ability to attract customers through lower prices, airlines added flights that they knew would be half-empty and financial institutions offered white-glove service to those customers who could come in during bankers' hours. Deregulation in these contexts led initially to a reduction in service as a byproduct of an even greater reduction in price. However, the value offered to the customer, defined as including both service and price, increased. Most of us are willing to put up with strangers in adjacent seats in order to obtain economy fares and, for those who are not, the airlines offer business class service. Similarly, the corporate system of health care will experiment with different combinations of price and service to find the mix that offers best value in the mind of the consumer. There are tradeoffs to be made between broad and narrow provider networks, stringent and loose utilization management, thick and thin benefit coverage, high deductible and first dollar cost sharing, and, of course, between connoisseur

class and economy prices. The tradeoffs are more controversial in health care than in the utility industries since the benefits of gold card service accrue to the patient while the benefits of low cost often accrue to the employer or taxpayer.

Health Care: Price and Product Differentiation

Generations of reformers have sought to overcome the variability in health care demand and supply through uniform benefits, premiums, and prices that do not vary according to incomes, preferences, health, location, employment, or other characteristics of consumers and producers. In the absence of strong governmental controls, however, the heterogeneity among consumers (in what they are willing to buy) and among providers (in what they are willing to sell) is driving price and product differentiation in health care. Benefit coverage and network design, premiums and prices, and method of marketing and distribution now are highly variegated and promise to become ever more so.

The defeat of President Clinton's Health Security Act spelled the demise of the uniform benefit package as the foundation of health care policy in the United States. Simply put, those who currently enjoy rich benefits and low premiums—due to good subsidies, good health, or good luck—are unwilling to sacrifice so that the less endowed, less healthy, or less fortunate can come up to their level. A uniform benefit package sufficiently rich to be politically acceptable to the quality-conscious voter would be economically unacceptable to the cost-conscious taxpayer. The unstandardized marketplace is responding to the diversity in incomes and preferences though a wide variety of benefit packages, cost-sharing provisions, network configurations, and methods of utilization management. Self-employed individuals and small firms now can shop from a menu of options—with inclusion, exclusion, or partial coverage for prescription drugs, mental health services, rehabilitation therapy, and complementary medicine; with different levels of cost sharing; and with combinations of deductibles and co-payments for particular services. Large public and private purchasers demand idiosyncratic benefit configurations, reminding the health plans and providers that he who pays the piper calls the tune. Network designs are proliferating at an equally astonishing rate, mixing and matching PPO and HMO components, gatekeepers and self-referral, prior authorization and retrospective profiling, out-of-network wraparounds and out-of-area expansions. The three-letter acronyms that once anchored our understanding of health insurance alternatives are rapidly becoming untethered as the industry crafts hybrid strains in a dizzying display of product-engineering.

Premiums and prices have lost whatever uniformity they once possessed, with community-rating and standard methods of capitation and fee-for-service being swept aside by the market imperative to vary prices according to underlying variations in costs. Consumers choosing rich benefit packages, loose network designs, and patrician physician practices find themselves paying substantially more than those content with thinner benefits, more tightly managed access, and community-based practitioners. Public and private sponsors are continuing

their slow and painful transition from defined benefits to defined contributions, paying a fixed dollar amount rather than encouraging costly choices through higher subsidies. In a competitive market each product must be priced to be self-supporting, since cross-subsidies invite new entry that appeals to the over-charged customers. The diverse options in benefit and network design are reflected in actuarially sound, and hence diverse, price levels. Insurance premiums and provider payments will increasingly reflect the health status and cost of care required by the individual enrollee and patient. Risk-adjusted prices are desirable since they remove incentives to cherry-pick the healthy and avoid the ill. They are essential for the continued economic viability of safety-net providers who attract the sickest patients due to their geographic location or open-door policy. In the absence of risk-adjusted subsidies, market competition will shift the economic burden of illness onto the ill while allowing the healthy to pay for only their modest medical needs. The United States currently maintains a tattered fabric of risk-adjusted subsidies, with employer-paid benefits, government entitlement programs, and the health insurance tax deduction allocating greater sums for sick than for healthy citizens. However, the system has many loopholes and exceptions. Competitive markets and corporate organizations in health care would benefit from a well-designed and well-financed system of risk subsidies, since this would eliminate the pressure to deny coverage and would convert charity cases into paying customers. However, steps in this direction are difficult since they would violate the ban on new taxes, which is one manifestation of the "do no direct harm" principle in contemporary politics.

The marketing of health care is increasingly differentiated and methods of branding, distributing, and selling are becoming key competitive skills for health plans and provider organizations. It is increasingly hard to imagine that all Americans one day will pick up their health insurance at the local Social Security office or be channeled through a uniform open enrollment process. Consumers obtain their information and options through insurance brokers and websites, private and public employers, state insurance pools and Medicaid agencies, federal Medicare and military programs, and myriad other options. The industry is pioneering ever-new ways of connecting buyers and sellers, including print and electronic media, direct mail and the Internet, community organizations and consumer cooperatives. Through it all, the American consumer reigns sovereign over a complete menu of choices, chaos of opportunities, and cacophony of salesmen promising a product as unique as the individual and as affordable as the alternative.

Health Care: Market and Organizational Structures

We are witnessing massive changes in the structure of health care markets and organizations. Many of today's most prominent organizational forms, such as Independent Practice Associations and physician-hospital organizations, were difficult to find 20 years ago.¹⁵ Multi-specialty medical groups have a long and illustrious history in some communities but have been thoroughly

transformed by the marketplace shift towards managed care. Preferred provider insurance has displaced indemnity and the network HMOs have displaced their staff model progenitors only in the recent decade. Forms of contracting are in a state of ferment, with payment methods that borrow from both capitation and fee-for-service and methods of utilization management that compromise between arm's-length review and full delegation. Organizations are becoming larger and more complex through merger, acquisition, and product diversification. However, increased scale is stimulating competition rather than cartels, as local barriers fail to impede entry by multi-product, multi-market firms.

The most visible feature of the corporate system of health care is ceaseless acquisition and divestiture, integration and outsourcing, and combination and recombination. Medical groups, hospital systems, and health plans are coming together and then coming apart, substituting contract for joint ownership, creating diversified conglomerates and refocused facilities, and experimenting with ever new structures of ownership, finance, governance, and management. After decades in which medicine was frozen into a cottage industry of solo physician practices, freestanding community hospitals, and single-state Blue Cross insurers, incumbents and upstarts are pushing boundaries in ways once not merely infeasible but unthinkable. They are exploring potential economies of scale, the advantages offered by large size in insurance risk bearing, administrative efficiencies, and vendor contracting as well as the diseconomies that accompany the attenuation of individual incentives and accentuation of influence politics. Firms are exploring the economies and diseconomies of scope, the tradeoffs between conglomerate versus staff-and-line organization, broad-spectrum versus niche positioning, transfer versus market pricing, diversification versus product focus, coordination versus clinical specialization. They seek some middle ground between the extremes of vertical integration and spot contracting, some balance of coordinated and autonomous adaptation in the face of ever-new challenges.

This process of trial and error is generating a diversity rather than uniformity of organizations and contracts. The heterogeneity of regional providers and purchasers, technologies and transactions, economics and demographics, popular cultures and political institutions supports an enduring variety in the health care marketplace. There are striking cross-market and within-market differences in methods of payment, medical management, data reporting, and quality accountability. Some physician communities are characterized by multi-specialty medical groups, others by more loosely structured IPAs, and others by a continuing Diaspora of unaffiliated practices. For-profit hospital chains hold a strong position in some communities, while others are dominated by large nonprofit systems and the remainder cling to hometown facilities. Different regions favor different mixes of HMO, PPO, and hybrid insurance products. This heterogeneity stems both from enduring regional characteristics and from transient differences in each community's place on the health care learning curve, as experiments that succeed in one locality are copied in others.

Medical groups, hospital systems, and health plans want to avoid the rigors of competition by acquiring or merging with their rivals, seeking oligopoly and ultimately monopoly power to dictate prices and protect profits. However, accomplishment seems ever to lag behind aspiration, as purchasers, suppliers, substitute services, and entrepreneurial outsiders compete for their share of those potential monopoly profits. The organizational diversification of health plans and providers has created a ravenous crowd of well-financed and battle-hardened competitors able to jump into new products and new markets when revenue opportunities arise. Entry barriers are lower, not higher, than in the bygone era when the professional guild boycotted group practices, fixed prices, restricted advertising, enforced any-willing-provider laws, and banned the corporate practice of medicine. The cottage industry structure of yesteryear lent itself well to the most thoroughgoing anti-competitive practices, while the large corporate organizations, consolidated industry structures, and complex contractual relationships of today lend themselves to the most vigorous competition ever observed in health care.

Health Care: Political Backlash

The political backlash against competitive markets and corporate organization in health care has far exceeded the reaction against deregulation in the utility industries. The success against cost inflation has produced large savings for employers and governmental programs but little visible benefit to individual employees and taxpayers. Had the rate of inflation that prevailed in the five years prior to the defeat the President Clinton's Health Security Act continued for the five years following that landmark event, health care costs and premiums at the end of the decade would have been twice their actual levels, creating dire personal hardships, acrimonious tax politics, and contentious labor relations. However, the transition to a market-driven health care system coincided with an acceleration of trends away from paternalistic employment policies and welfare state politics. Many employees experienced the decline in overall premiums as an increase in their paycheck deductions and compared unfavorably the network restrictions and utilization oversight of managed care with the halcyon days of first dollar indemnity insurance.

Consumer concerns have been accompanied and encouraged by a producer backlash against the changing market and organizational structures in health care. Hospital employees and their labor unions are dismayed to note the shift in jobs from unionized inpatient settings to often nonunion ambulatory, sub-acute, and home health settings. Medical specialists resent the tilt in status and income towards primary care. Physician earnings have continued to rise, but at a slower pace and in a much more uneven pattern than in the era of cost-unconscious consumer demand. Medical groups and hospital systems impose a degree of administrative oversight, peer review, and public accountability that feels foreign and uncomfortable to clinical miracle-workers. Caregivers resent the budgetary constraints necessary for financial solvency as unwarranted

incursions on their clinical autonomy. Specialty societies, labor unions, device manufacturers, and all the other constituents of the medical-industrial complex have mobilized in defense of their economic self-interest, naturally explaining their behavior as a defense of patient rights and the quality of care.

The number and variety of new laws and regulations concerning the corporate health care system is remarkable. While debate over the federal legislation (including imposition of liability on insurance plans and exemption of physicians from antitrust law) has gained the greatest attention, most of the activity has been at the state level. In the 1999-2000 legislative session, over 10,000 pieces of health care legislation were introduced at the state level.¹⁶ For example, 38 states imposed timelines on claims payment, 31 mandatory disclosure of pharmacy formularies, 27 banned various payment incentives for physicians, 21 required insurers to include "any willing provider" in their contractual networks, 19 mandated "point of service" options on HMO products, 7 imposed new tort liability on insurers, and one exempted physicians from state antitrust statutes. The numbers rise rapidly when bills are counted that did not reach the governor's desk, including 21 state bills to exempt physicians from antitrust law and 32 state bills to increase insurer tort liability. Needless to say, measures of regulatory backlash that include regulations in addition to new statutes would be substantially larger.

Social Benefits of Partial Re-Regulation

Market economies need well-conceived and well-implemented political institutions just as much as democratic polities need vibrant economic markets. Utility commissions and statutory compulsions were not replaced by *laissez faire* in the transportation, communications, and finance industries but by a mix of disclosure mandates, safety standards, financial reserve requirements, and other safeguards that protect the public interest with a hand somewhat less visible than before. By analogy, some mechanism of oversight and accountability are beneficial and indeed essential for the corporate system of health care.

A salient characteristic of medicine is the clinical uncertainty of each individual's diagnosis and appropriate treatment. It is essential that administratively efficient and socially acceptable mechanisms be developed for reviewing, adjudicating, and appealing differences concerning benefit coverage, experimental treatment, and medical necessity. These mechanisms must be not only sufficiently close to the clinical interface to produce informed and timely outcomes, but sufficiently independent to claim a broader legitimacy. The system will need to grope to some workable mix of mediation, arbitration, and litigation to resolve differences in what is an inherently stressful and complex decision-making arena.

Health insurance involves the collecting of premiums and subsequent paying of claims in a manner that invariably raises the possibility of over-extension and insolvency. State insurance departments traditionally regulated

indemnity, Blue Cross, and HMO carriers but have been outstripped by the geographic expansion, product diversification, and capitation contracting of the industry. The locus of administrative control and the incidence of risk is no longer clear in health plans that operate in multiple states, offer multiple network designs, and sell every form of insurance, partial insurance, and reinsurance. Private employers and public agencies with self-insured fringe benefits programs escape state regulatory oversight altogether. Medical groups, practice management firms, and physician-hospital systems cover capitated populations larger than the enrollments in some insurance companies yet are often exempt from formal insurance regulation. The emerging system needs to revisit the nuts and bolts of tangible net equity, liquidity ratios, and other means for ensuring that the money paid at the beginning of the year is still available to cover the stream of claims that trickle in at the end.

The emerging health care system has pioneered new methods for the collection, dissemination, and comparison of data on customer service and clinical quality. The progress to date has been frustratingly slow but has laid the foundation for more specific, severity-adjusted, and outcomes-oriented measures in the future. This is an arena with important roles for public agencies that can mandate participation, for nonprofit organizations that can develop the instruments, and for health plans and providers who can cooperate on data collection and compete on quality results. The proliferation of print, television, and internet avenues for the dissemination of quality and service data repeats the experience of the deregulated utility industries, where the rise of choice and competition created a new demand and thereby spurred a new supply of information to consumers.

The Corporate Practice of Medicine

The corporate system of health care has produced ever-larger organizations and ever more intense performance competition among them. However, its sustainability has not thereby been assured. The very dynamism of the corporate system disrupts established social norms and disadvantages powerful political constituencies. American health care will never go back to professional dominance, which lost its political power as well as its organizational basis in the transition to managed care. It will not proceed to the complete consolidation, the full vertical and horizontal integration embodied in the principles of managed competition. However, corporate health care is threatened by a new form of regulation. This will not be the entry barriers and rate setting of the utility commission, but will come through myriad small rules, requirements, and judicial precedents designed to protect the purportedly helpless consumer against the hazards of choice and competition. Individually, each new regulation will limit only modestly the discretion of health care purchasers and providers. Cumulatively, however, they could strap down the corporate Gulliver through

a thousand small impediments on innovation, taxes on efficiency, and litigious disputes over clinical uncertainties.

Despite the serious challenges facing the emerging health care system, it is possible to conclude on a cautiously optimistic note.¹⁷ Political backlash followed the growth of large diversified firms in the American economy but did not reverse its course, due to the remarkable gains in efficiency and quality generated by market competition and corporate organization. Capacity investment, market entry, product price, and service specifications have been opened to competition in the transportation, communication, energy, and finance industries after decades of utility regulation. The competitive corporate system has been sustained because it proposes not incremental improvements in cost or quality for the pre-existing set of goods and services but, rather, revolutionary changes in the basic organizational and market structures of the economy. Similarly, the corporate system does not offer incremental reforms to the framework of professional dominance in medicine but has swept it away completely, along with fragmented physician practice, arm's-length indemnity insurance, and cost-unconscious consumer demand. In the final analysis, it is not incremental improvement in price and quality that counts, but rather the radical competition from the entirely new product and service, the new technology, the new source of supply, and the new type of organization—competition that strikes not at the margins of the profits and the outputs of the existing organizations but at their foundations and their very lives. This is the corporate practice of medicine.

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