

# Excess Capacity: Markets, Regulation, and Values

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**Objective.** To examine the conceptual bases for the conflicting views of excess capacity in healthcare markets and their application in the context of today's turbulent environment.

**Study Setting.** The policy and research literature of the past three decades.

**Study Design.** The theoretical perspectives of alternative economic schools of thought are used to support different policy positions with regard to excess capacity. Changes in these policy positions over time are linked to changes in the economic and political environment of the period. The social values implied by this history are articulated.

**Data Collection.** Standard library search procedures are used to identify relevant literature.

**Principal Findings.** Alternative policy views of excess capacity in healthcare markets rely on differing theoretical foundations. Changes in the context in which policy decisions are made over time affect the dominant theoretical framework and, therefore, the dominant policy view of excess capacity.

**Conclusions.** In the 1990s, multiple perspectives of optimal capacity still exist. However, our evolving history suggests a set of persistent values that should guide future policy in this area.

**Key Words.** Excess capacity, policy context, competition

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Excess capacity is a term that evokes strong feelings among healthcare professionals. For some it conjures up images of inefficiency begging for government solution. For others, it is evidence of a market in transition: a trigger only for misguided government action.

Each side can assemble facts. The "excess capacity as inefficiency" side reports that there were 450,000 excess beds in the U.S. healthcare system in 1993, adding \$25 billion to the nation's healthcare bill (Cerme and Montague 1994; Keeler and Ying 1996). On the other hand, the "excess capacity as market transition" side cites evidence that in the early 1990s, it was the existence of excess provider capacity that enabled the shifting of power from providers to purchasers. This power shift triggered heated price

competition in all sectors, reducing capacity and decelerating expenditure growth (Morrisey 1995; Miller 1996; Levit, Lazenby, and Sivarajan 1996).

An assessment of these arguments depends critically on what we mean by excess capacity. But by its very nature the term is value laden. Its definition, therefore, must be relative: we have excess hospital beds or specialty physicians *relative to* some standard or preconceived notion of the correct number. Without a clear statement of this standard, we cannot determine what constitutes "too many."

The research literature provides no clear statement. Authors on both sides argue positions in which standards are implied. This article examines the conceptual basis of these implicit definitions and their application in a search for a strategy to determine and achieve optimal capacity in the context of today's turbulent environment. Although the focus of the discussion, following the focus of the research literature, is on hospitals, the conceptual arguments are easily extended to most healthcare markets.<sup>1</sup>

## IMPLICIT DEFINITIONS AND COMPETING CONCEPTUAL FRAMEWORKS

### *The Neoclassical Economic Approach*

The "excess capacity as market transition" banner is carried largely by traditional economists. They argue that the forces of supply and demand, if left unfettered, will dictate market solutions that by definition are optimal: suppliers will supply only what demanders demand. The term "excess capacity" has little place in such an analysis, except to acknowledge that there might be transition periods where changing conditions have caused one side of the market to alter its desired terms of trade but the other side has not yet had sufficient time to respond. These periods are temporary and self-correcting. Government action is not only unnecessary, it can be harmful. Optimal capacity to a traditional economist is the capacity required to accommodate market demand at prevailing prices.

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Prepared with the support of the Industry Advisory Board, Center for Health Management Research, Seattle, Washington.

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### *The Market Imperfections Economic Approach*

Most economists will agree that the foregoing analysis requires that certain market conditions be met. Among these conditions are that participants on both sides of the market be reasonably well informed, markets be reasonably competitive, and no significant “externalities” exist—an economist’s term for spillover effects of market decisions on entities not party to those decisions. Economists disagree, however, about the extent to which these conditions hold in healthcare markets. Proponents of the “excess capacity as inefficiency” argument use the failure of these conditions to exist to justify government intervention.

*Imperfect Information.* The lack of a well-informed consumer population is among the reasons listed in support of government actions to limit capacity. Certificate of need, introduced in the mid-1960s as the first and most explicit public attempt to restrict inpatient bed capacity, was originally supported by proponents of the “Roemer Effect”: the proposition that a built bed is a filled bed. Roemer and Shain (1959) argued that built beds get filled because providers can induce ill-informed patients to be hospitalized whenever it suits them. Given the seemingly unrestricted pay-per-service nature of providers’ environments and the generous supply of physicians in the Roemer era, it suited them to fill a bed whenever there was a bed available (Havighurst 1973). The financial situation facing consumers at the time also played a role. Even well-informed patients had no reason to refuse procedures that offered even a small benefit, because the costs of these services were typically borne by a third-party insurance company or public program.

*Competition.* Lack of competition mutes producers’ incentives to be cost-conscious. A second argument for capacity restrictions was that most health insurance policies were purchased by employers who were relatively unconcerned with the cost of those policies. Because insurance benefits were only one component of an overall compensation package offered to employees, increased costs of health insurance could be offset (over some range) by decreases in other pieces of the package. Without cost pressure from purchasers, insurance companies put no cost pressure on providers, and facilities were allowed to overbuild (Kaplan 1991). Competition among hospitals actually encouraged overbuilding because the competition was quality- and technology-based rather than cost- or price-based. Hospitals needed to have the full range of available equipment and facilities in order to attract and retain a medical staff, and the largely unrestricted cost-reimbursement policies of payers provided easy financing for these capital purchases (McGinley 1995; Keeler and Ying 1996).

*Externalities.* Externalities exist whenever a market decision significantly affects an entity not party to the decision. A common form of externality is the public good. Public goods are commodities and services whose benefits are available to everyone once they are purchased by one person. Because no one has the incentive to pay for what is available free, governments frequently use their coercive powers of taxation and/or regulation to force all who benefit from public goods to share in their financing. In healthcare, community benefits (charity care, teaching and research, and emergency capacity) are important public goods. A third argument for the entry restrictions imposed by certificate of need was that the surpluses (profits) of providers needed to be protected from elimination by competitors to continue the "quasi-public" funding of these community benefits (Posner 1971). The latter argument was used to justify limiting the entry of new facilities while approving the plans of existing facilities to expand.

A final economic argument given for capacity regulation is that market imperfections have been created by other government policies. If these policies cannot be eliminated, further government action is needed to create a "second-best" capacity outcome. An example of such an imperfection is that employees do not pay personal income tax on health benefits purchased by their employers. For an employee in a 25 percent income tax bracket, this means that \$100 of earning power translates into \$100 of health insurance, but only \$75 of income. The tax treatment of health benefits, in combination with other public subsidies of medical education, research, and facility construction, create artificially low prices for health insurance and healthcare services. Artificially low prices result in an artificially high demand for services and, therefore, in artificially high levels of capacity. Capacity restrictions are needed to counteract the impact of these subsidies.<sup>2</sup>

The market imperfections approach provides an explicit (if not uniformly accepted) rationale for government intervention. Unlike the pure neoclassical approach, however, it does not offer a clear path to empirically defining and achieving optimal capacity.

### *The "New Age" Economic Approach*

A few new voices are beginning to rise above the debates over the existence and magnitude of neoclassical market imperfections. These voices are questioning the fundamental tenet at the heart of all economic analysis: that individual consumer preferences provide the appropriate measure of value to guide an economy's resource allocation decisions (Rice 1996; Daly and Townsend 1993). Standard economic theory takes as given the preferences

that consumers reveal through their market choices. Rice (1996) argues, however, that these “revealed preferences” may be too greatly influenced by a society’s income and wealth distribution and the prevailing marketing practices of producers to be “true” measures of value.

Markets take their signals from consumers who purchase goods and services. Consumers with more income make more purchases. Thus, markets are most heavily influenced by this group’s preferences about which goods and services to produce, and with what characteristics. By contrast, the values and preferences of those who do not have the resources to make purchases are not registered and therefore do not count.

While economists generally take consumer preferences as fixed, the large marketing budgets of most companies indicate that others view them as susceptible to suggestion. Rice argues that as marketing activity spreads in healthcare markets, what consumers reveal in their purchasing decisions has more to do with the latest advertising campaign than with a set of self-determined preferences. He concludes that market outcomes, including capacity decisions based on these flawed measures of society’s values, will be inappropriate.

Other voices caution that we have made resource allocation decisions within the context of specific, but not general, scarcity. That is, we have allowed ourselves to consider tradeoffs between more physicians and fewer beds, and even occasionally between more healthcare and fewer roads, but we have never considered the possibility that there may be physical capacity constraints on the entire economy. Herbert Daly is among a growing number of economists who argue that scale considerations (*how much* we produce) are as important as considerations of resource allocation (*what* we produce and *with which* resources) and distribution (*who gets how much* of what is produced) (Daly and Townsend 1993). A paradigm that ignores scale issues leads to measures of economic success and therefore to public policies that encourage perpetual growth, a concept that Daly and his colleagues believe is unsustainable in the long run. The fee-for-service and cost-based reimbursement payment systems that dominated healthcare markets until recently reinforced the growth-as-success mentality. The Daly approach would regard with suspicion the capacity decisions made in such an environment.

Both Rice and Daly reject the notion that competitive market choices yield the most socially desirable results. Rice’s revealed preference argument implies that consumer demand reflects too much consumption of some healthcare services and too little of others. “Too much” and “too little” have value

contexts, however, and Rice offers no clear empirical standard by which they can be measured.

By contrast, Daly's scale approach is grounded in biological evidence regarding the overall carrying capacity of the ecological system within which our economic system exists. According to Daly, optimal social decisions about consumption and capacity should be determined by levels that current science believes to be physically sustainable in the long term. Unless consumers understand this science and incorporate its implications into their purchasing decisions, government action is required to integrate the scientific realities with consumers' values.

## FROM PUBLIC TO PRIVATE AND BACK AGAIN: THE CHANGING CONTEXT OF CAPACITY CONTROL

When subjected to careful analysis, the conceptual differences among the various perspectives are modest. Much of the real discord about excess capacity relates less to theory and more to interpretations of empirical realities: neoclassical economists acknowledge theoretically the existence of market imperfections, the influence of income distribution on market demand, and the consequences of general as well as specific scarcity; they simply do not see these possibilities as empirically important. To the proponents of the other perspectives, these possibilities are not just important, they are central.

The context in which the various perspectives are grounded must be examined if we are to understand how such diverse views of healthcare markets have developed. As the context has changed over time, the dominant perspective has also changed.

### *An Era of Largesse*

The Roemer effect and the regulatory response it engendered grew out of an era of seemingly limitless resources. Culminating in the passage of Medicare and Medicaid in the mid-1960s, the period following World War II was one of broad-based growth in the healthcare industry. The federal government created and expanded direct subsidies for the education of medical professionals and for research and facility construction, as it financed the provision of medical services.<sup>3</sup> State governments also contributed to medical education, public health programs, and direct services.

“Voluntary” hospitals and other nonprofit entities received public support from the availability of tax-exempt bond financing and from the granting of nonprofit status. The former reduced the price of borrowing capital by allowing investors to receive nontaxable interest payments. The latter reduced operating expenses by exempting certain nonprofit entities from paying income taxes at all levels of government, and from paying most state and local property taxes and other taxes that varied by jurisdiction. It also encouraged charitable donations to nonprofits by exempting these donations from donors’ income tax liability. The tax code was also used just after World War II to create a massive health insurance subsidy by exempting employer-purchased health benefits from personal income taxes paid by employees. Reinhardt (1993) estimates that this subsidy amounted to \$75 billion in 1993.

The postwar period was one of expansion in the private sector as well. Fueled by rising incomes and robust consumer spending, businesses expanded the depth and breadth of the health insurance benefits offered to employees, dependents, and retirees to attract an adequate workforce. An important feature of much of the private insurance of the early 1960s was that physicians were paid for insured services on a usual and customary fee-for-service basis, and hospitals were paid retrospectively on the basis of incurred costs of treatment. When Medicare and Medicaid were passed, the political compromise with recalcitrant providers was to codify these payment practices for the public programs as well.<sup>4</sup>

### *Rising Demand, Regulated Supply*

By 1970, the collective impact of several decades of growth was obvious. National expenditures on healthcare, which had been 5.1 percent of gross domestic product (GDP) in 1960, were 7.1 percent by 1970 (Levit, Lazenby, and Sivarajan 1996). The cost of hospital care, which accounted for nearly 40 percent of total expenditures, was increasing by well over 10 percent annually. Budget-constrained states were finding that their financial partnership with the federal government for the Medicaid program made for an increasingly heavy burden. In response, the states adopted a regulatory approach to counteract the demand-increasing policies of the 1950s and 1960s. The federal government followed.<sup>5</sup>

The regulations were aimed mainly at hospitals, as the largest and most visible target. Professional Standards Review Organizations were created to monitor the hospital admission and length of stay decisions of physicians; hospital rate-setting bodies reviewed and approved hospital budgets and

rates in nine states; and certificate-of-need (CON) programs were established to constrain the capital expenditures of hospitals and nursing homes (Brown 1983).

The first CON law was passed in New York in 1964. The public interest argument for CON was based on the market imperfections economic approach: where both producers and consumers are insulated from the financial consequences of their decisions, unregulated markets will not yield socially desirable results. In this environment of excess, it was left to government to provide the restraint that market forces would not. The states, and later the federal government, saw CON as a way to limit their Medicaid expenditure obligations by limiting the availability of beds in which beneficiaries could seek services.

The idea caught on. By 1974, a year in which there were an estimated 20,000 excess beds in the nation, 26 states had passed some form of CON regulation (McGinley 1995; Simpson 1985). The federal government joined forces with the states in 1972, creating the "Section 1122" program. This program offered states federal funds to review and approve the capital expenditure projects of hospitals. Hospitals whose capital projects failed the review had the capital expenses portion of their Medicare and Medicaid reimbursement withheld. By 1975, 46 states and the District of Columbia were operating CON programs, 1122 programs, or both.

In 1974, with healthcare expenditure growth continuing to outpace growth in other sectors of the economy, the federal government got tougher. The National Health Planning and Resources Development Act of 1974 (NHPDA) provided more funds for health planning and for CON programs that met federal standards.<sup>6</sup> States that did not pass acceptable CON laws suffered severe financial penalties through the withholding of federal funds for a variety of health programs. By the end of 1982, every state but Louisiana had passed a CON statute in the federal mold (Simpson 1985).

Despite its widespread application, the CON strategy failed (Ashby 1984; Salkever and Bice 1976; Joskow 1980; Misek and Reynolds 1982). McGinley (1995) writes, "In searching the scholarly journals, one cannot find a single article that asserts that CON laws succeed in lowering health care costs." Brown (1983) agrees. CON "has elicited a remarkable evaluative consensus—that it does not work."

### *A Shifting Tide: Prospective Payment*

By 1980, the disenchantment with CON had spread to healthcare regulation more generally. Faced with continued double-digit expenditure increases,



the Reagan administration turned for relief to the government's power as a purchaser. In 1983, Medicare changed its payment strategy from retrospective cost reimbursement to fixed prospective payments for a newly defined unit of output called the diagnosis-related group (DRG). DRG-based payment was adopted quickly in various forms by private payers, Medicaid, and state governments.

Prospective payment of hospitals dramatically changed the face of inpatient activity. The average length of a hospital stay fell from 7.6 days in 1980 to 7.1 days in 1986. In the same period, the number of inpatient admissions in short-term general hospitals declined from just over 36 million per year to just under 32 million (Clay 1989). Further, prospective payment was able to do almost overnight what CON had been unable to do in more than a decade: the number of hospital beds began to decline in 1983 after having increased every year after 1962 (Clay 1989). The decline was modest, however, and was accompanied by even larger declines in hospital utilization. Occupancy rates fell. By 1986, hospital occupancy rates had fallen from 75 percent in 1980 to 65 percent: nearly one-third of all staffed hospital beds stood empty (Clay 1989).

But even as evidence of continued excess capacity grew, the commitment to the purchaser (as opposed to regulator) strategy held. When Pete Stark, Chairman of the House Ways and Means Committee, proposed that states with low occupancy rates be forced to review hospital capital expenditures or risk losing Medicare funds, his proposal was rejected (Tokarski 1989). Further, in 1986, Congress repealed the 1974 NHPRD Act. Twelve states dropped CON; a number of others narrowed its application (Burda 1991).

### *The Power of Competition*

The 1990s brought more change to healthcare markets. Seriously price-conscious purchasers using the tools of prospective payment and managed care began to bear down on the overbedded, overstaffed provider community (Miller 1996). Pressure from purchasers induced competition among insurance companies, and this in turn spurred competition among hospitals, physicians, and the myriad organizational entities they were forming to cope with the new rules of play.<sup>7</sup>

Unlike the genteel quality and technology competition of the 1960s and 1970s, the competition of the 1990s was brutal and based on price. The work of Robinson and Luft (1985) highlights the effect of this shift in the focus of competition. These authors found that in 1982, hospitals in competitive California communities had higher costs per admission. Hospitals

with 11 or more competitors had 26 percent higher costs than those with no competitors, given the same hospital characteristics, case mix, population characteristics, and local wage rates. But by the mid-1980s, after the State of California allowed insurers to selectively contract with hospitals, non-price competition began to give way to price competition. Zwanziger, Melnick, and Bamezai (1993) report that by 1988, hospital costs per admission were equal between communities with competitive hospital markets and those with less-competitive hospital markets; in 1990, hospitals in more-competitive markets had average costs below those of less-competitive markets. The number of hospital beds in highly competitive markets also fell relative to population. The number of beds per thousand in Minnesota, for example, was 5.77 in 1971, well above the national average of 4.19 in that year (American Hospital Association 1972). By 1995, after two decades of increasing competition, that figure had fallen to 3.76 (American Hospital Association 1997). Competitive markets that began the period with less capacity relative to the national average also saw decreases. The number of beds per thousand population in Washington state fell from 3.32 in 1971 to 1.99 in 1995 (American Hospital Association 1972, 1997).

The national impact of price-based competition is demonstrated by healthcare expenditure patterns. After five years of double-digit and near-double-digit growth in aggregate healthcare spending, the growth rate slowed to 7 percent in 1993, and to 6.4 percent in 1994, the slowest rate in more than 30 years (Levit, Lazenby, and Sivarajan 1996). After adjusting for increases due to general inflation and population growth, hospital expenditures actually fell by 0.2 percent.<sup>8</sup>

Vertical and horizontal integration and consolidation at least accompanied, if it did not precipitate these expenditure changes. In 1984, the year subsequent to the implementation of Medicare prospective payment, 17 hospital mergers were reported in the United States (Burke 1990). In the first quarter of 1996, 223 such transactions (including consolidations as well as mergers) were reported, up 35 percent from the previous quarter (Lutz 1996).

But although the organizational face of the healthcare industry has unquestionably changed, the changes have not always meant bed or facility closures. Capacity concerns remain. Even where the number of beds has fallen relative to the population, these decreases have not kept pace with reductions in utilization. The California statewide average beds per thousand population fell from 3.73 in 1971 to 2.37 in 1995, but occupancy rates also fell (from 70 percent to 60 percent) in the same period (American Hospital Association 1972, 1997). In the 15 markets studied in the Robert Wood Johnson Foundation Community Snapshots Project, few hospitals closed

in recent years. In Orange County, California, researchers found hospitals still operating with occupancy rates of only 20 percent (Duke 1996). The average occupancy rate for all hospitals in the community has fallen below 70 percent in 11 of the 15 sites, and below 60 percent in eight sites.

## HISTORY, REVEALED VALUES, AND OPTIMAL CAPACITY

The history of the last five decades in the healthcare industry illuminates the changing context within which the debate on excess capacity has been waged. The “excess capacity as inefficiency” argument flourished in an era when evidence of market imperfections (largely of our own creation) was abundant. To many, public regulation as a substitute for private self-regulation seemed to be a reasonable, if ultimately ineffective, strategy to control capacity. In recent years, the “excess capacity as market transition” approach has gained favor as some markets have responded to the hurricane force of price-based competition. But while we now have 50 years of evidence on the forces that affect capacity, we still have not collectively decided on a level of capacity that is the best for all concerned. Unfortunately, this decision is as difficult to make as it is critical, as evidenced by the conflicts that are emerging in today’s competitive markets.

Proponents of “excess capacity as market transition” proponents cheer the successes of aggressive purchasers and the price-based competition they have created. Some authors are concerned, however, that providers will be successful in protecting old ways of doing business by undermining new market pressures. As evidence, these authors note that even as utilization and expenditures have declined, hospital capacity has been slow to respond (Keeler and Ying 1996). Some observers blame institutional inertia for the reluctance to close underutilized facilities. Others note that hospitals serve multiple purposes in their communities, as a major employer, community presence, and source of prestige. Thus, the closure of a hospital means fewer jobs and the loss of a source of pride and prestige for the community. In smaller communities, it may also mean the loss of medical professionals who are dependent on inpatient capability for their own livelihood.

Local hospitals also often have ties with community business and political leaders who provide insulation from market forces. A 1994 study in St. Louis revealed that representatives from 59 of the largest local companies were directors on the boards of at least one health insurer or hospital (Duke 1996). Much of the fear of entry by the national proprietary companies relates

to the expectation that the local “rules of the game” with regard to hospital downsizing, closure, and the provision of community benefits will not be respected by outsiders who come into the community to make a profit.

Morrisey (1995) argues that providers will use their substantial influence over public policy to seek statutory protection from competition and competitive pressures to eliminate excess capacity. As evidence, he notes that certificate-of-need laws are resurfacing. Since 1990, 16 states have reinstated or expanded their CON laws. According to Morrisey, there is at least anecdotal support for the notion that these newly revitalized CON programs are being used to protect existing hospitals from competition, thus decreasing the pressure for these facilities to reduce capacity and potentially increasing overall healthcare expenditures.

To the proponents of “excess capacity as inefficiency,” the rise in public scrutiny and the resurgence of regulation of the aggressive competition of the 1990s relate not to providers’ desires for protection, but rather to legitimate public concerns about the effects of unbridled competition in a vital services industry. They argue that increased price competition among healthcare providers not only does not make up for the existence of other market imperfections, it exacerbates their consequences.

While information on prices may be available more easily in competitive markets, the discrepancies between what consumers and providers know about quality can be the source of legitimate public fear and inappropriate decision making. Our technology for disseminating and assimilating private information can be improved, but in a heavily price-competitive market incentives for mischief will continue to exist. Given the nature of the healthcare product, bad decisions made as a result of inadequate or misleading information can have serious outcomes.

Price competition has implications for the production of public goods in healthcare markets. In markets relatively unburdened by notions of scarcity, the resources to support charity care, medical education and research, and option capacity were readily available from the surpluses of private transactions.<sup>9</sup> Direct public financing of these public goods could thus be supplemented without time-consuming and contentious public debate: decisions regarding who gets how much charity from which facility, for example, could be settled by the pricing and service decisions of individual institutions. When price competition eliminates provider surpluses, the full burden of public goods decision making and financing falls to government. Proponents of “excess capacity as inefficiency” advocate regulating competition to address these issues of quality and access, and are willing to tolerate the capacity protected

from elimination by this regulation as a reasonable tradeoff in achieving their nonfinancial objectives.

Aggressive competition also heightens the concerns of the “new age economics” perspective that markets responding to biased demand signals will yield inappropriate decisions on capacity. Rice (1995) argues that codifying the supremacy of consumers’ revealed preferences rewards marketing based on perception rather than substance and ignores the allocation consequences of maldistributed wealth and income. Capitation, the competitive market’s favored pricing mechanism, eliminates the immediate “do more” imperative of fee-for-service and cost reimbursement. But price competition is ultimately relative—plans need only to keep prices lower than their competitors’ prices. If consumer-dominated markets demand ever higher levels of technology and service, price competition can promise only the most efficient path to higher expenditures. The issues of sustainable scale raised by Daly and Townsend are left unattended in such a scenario, and industry capacity is too great.

There is at least conceptual agreement across all perspectives on one issue: the negative consequences of too much concentration of economic power. For the “excess capacity as market transition” side, too much economic power concentrated in a single entity creates monopolistic behavior that results in higher prices and reduced innovation. On the side of “excess capacity as inefficiency,” economic concentration means fewer consumer choices and lower quality.<sup>10</sup> The Rice and Daly/Townsend perspectives remind us that in an industry with such a large public presence, the decades-old concerns of John Kenneth Galbraith also must apply (Galbraith 1979). In a representative democracy, economic concentration results in political concentration with broad implications for who is served by public decisions.<sup>11</sup> Again, however, although there is agreement about the conceptual need to worry about the concentration of economic power, there is disagreement about how much is too much. In the opinion of some researchers, the Federal Trade Commission and Justice Department scrutiny of organizational changes in healthcare markets has an unwarranted, chilling effect on mergers, closures, and other efficient capacity-reducing strategies (Burke 1990; Keeler and Ying 1996).

## LESSONS FROM THE PAST, STRATEGIES FOR THE FUTURE

The definition of excess capacity is necessarily relative. We can only judge whether or not we have too many hospital beds if we have in mind an

appropriate standard. But there is no objective way to determine such a standard: it is a reflection of our collective values. If five decades of history give us no definition of optimal capacity, it at least provides some indication of the values that our standard must reflect. The most important lesson from the last 50 years is that we have multiple objectives:

- We value increased technology and high-quality care, but not at any price.
- We value efficiency, but we also care about fairness.
- We value choice, so long as it includes the freedom to choose the familiar.
- We value our healthcare facilities for more than the healthcare services they provide.
- We value community benefits, even if we are not sure how we want to finance them.
- We value accountability; where we invest public funds, we expect them to be spent wisely.
- We value trust: in the 1950s and 1960s, we trusted physicians; in the 1970s, we trusted government; in the 1980s, we trusted plans; in the 1990s, we are not sure who to trust.

Our history suggests that neither the regulatory strategies of the 1970s nor the unregulated competitive strategies of the 1990s brings us close enough to a capacity standard that reflects these values.

Regulation failed to give us a standard consistent with our values because we used a piecemeal regulatory strategy that was both ineffective and contradictory. One agency regulated hospital rates in a vacuum. Another agency reviewed the capital expenditure proposals of certain types of facilities, with only negative authority and with no formal connection to reimbursement. There were technical problems. Review criteria were vague or nonexistent. Enforcement powers were weak. And probably most important, because the pieces of the strategy were superimposed on a broader set of demand-enhancing policies, the funding and political will to support expenditure-decreasing regulations varied widely across communities and over time.

Competition failed to give us an adequate standard because of the inherent characteristics of markets. Markets are good at handling single objectives: to provide a particular product at the lowest price. Markets can even handle multiple objectives so long as they are measurable and are represented in the purchasing decisions of consumers: provide a particular product at the lowest price, subject to the condition that all parts are made in

the United States. Markets alone, however, cannot handle multiple objectives requiring information that consumers do not reliably possess, that require balancing the desires of one consumer against those of another, or that have consequences for individuals not in the market.

For 50 years, U.S. healthcare policy has been driven by an implicit standard of capacity that has changed as the market context has changed. The debate over excess capacity in healthcare markets will not be resolved, nor will an explicit standard of capacity be found, until the various perspectives in the debate are reconciled. We must find a strategy that combines the strengths of markets with the balance of collective decision making. We must create a forum for reaching consensus about society's competing values and interests. Our decisions must reflect our *revealed values* as well as our *revealed preferences*, and we must integrate good science with them both.

## ACKNOWLEDGMENTS

The author wishes to acknowledge the helpful comments and support of Howard Zuckerman, Patricia Lichiello, Aaron Katz, and Austin Ross.

## NOTES

1. Clearly the specific capacity issues in other markets may be different (rural markets may experience "shortages" at the same time urban markets have "too many" providers of various kinds). However, these differences reflect differences in the *applications* of the theory that relate to context rather than the *applicability* of the theory itself.
2. Some would argue that if the subsidies reflect the collective will of the population, then the capacity generated by subsidized markets is optimal. Others argue that the subsidies were passed and are maintained to benefit a narrow subset of the population: providers (Morrisey 1995).
3. McGinley (1995) reports that 87 percent of the funds used for voluntary hospital construction between 1946 and 1967 were made available by the federal government through the Hill-Burton program.
4. Hospitals actually got cost plus 2 percent for growth and development at the outset. The 2 percent was fairly quickly removed.
5. It should be noted that regulations did not replace the demand-increasing policies; they were merely added to them.
6. To be eligible for federal funds, state CON programs needed to cover hospitals, skilled and intermediate care facilities, kidney dialysis centers, ambulatory surgery centers, general capital expenditures over \$600,000, new services with

- operating expenses over \$250,000 annually, and acquisitions of medical equipment for inpatient use over \$400,000 (Simpson 1985).
7. The results of the Robert Wood Johnson Foundation Community Snapshots Project reported in Miller (1996) and Lichiello and Madden (1996) suggest that the threat of national reform also provided an important source of pressure for expenditure control and system integration in many communities.
  8. Some observers believe that this downward trend is temporary and that expenditures will rise now that the immediate threat of national reform has passed. Economists are more likely to view the sustainability of the trend as dependent on the continued price vigilance of purchasers.
  9. Option capacity is that which is desired by currently healthy individuals to assure that facilities will be available if and when they are needed. The existence of 24-hour emergency service is an example of option capacity.
  10. The concentration of power in nonprofit hospitals in the 1970s did not seem to elicit the same concern, perhaps because it was created and sustained by the quasi-public decisions of CON agencies.
  11. In Denver, where recent hospital purchases gave Columbia/HCA 34 percent of the Denver market, that national company became the third-largest private employer in Colorado (Conklin 1996). Some local observers are concerned about the potential political clout such a position gives to a single (particularly out-of-state) entity.

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