Could U.S. Hospitals Go The Way Of U.S. Airlines?

Hospital market changes such as price transparency and specialization could have severe negative consequences.

by Stuart H. Altman, David Shactman, and Efrat Eilat

ABSTRACT: The market for hospital services, like global markets in general, is becoming more competitive. Increased price transparency and focused competition can squeeze out inefficiencies, restraining prices and making some consumers better off. But competition can have a dark side. U.S. hospitals can treat Medicare and Medicaid patients at less than cost, care for the uninsured, and provide other money-losing services because they can cross-subsidize. By 2025 the need for general hospitals to cross-subsidize will greatly increase, but their ability to do so will be diminished. U.S. hospitals could begin to resemble U.S. airlines: severely cutting costs, eliminating services, and suffering financial instability. [*Health Affairs* 25, no. 1 (2006): 11–21]

UNIQUE AMONG U.S. INSTITUTIONS, general hospitals provide their services to anyone who walks through their doors.[1] Unlike enterprises that provide other necessities such as food and housing, these hospitals render their services regardless of patients' ability to pay. They treat Medicaid and Medicare patients for less than cost; provide trauma units and AIDS clinics that consistently lose money; and provide medical care to the uninsured, often for free.

Several factors have emerged that could erode hospitals' continued ability to provide these services. The market for hospital services is becoming increasingly competitive and price-sensitive, more closely resembling trends in global markets. In such markets, any nonessential cost or service is often squeezed out in the quest for price-competitiveness. In the past, hospitals could build the cost of free care and other money-losing services into their prices, because pricing was not transparent and insured consumers were not price-sensitive. In essence, hospitals were able to cross-subsidize—to charge higher prices to some (mostly private) patients to make up for losses from treating others. In this paper we show that hospitals' historical ability to do this could change. Increases in patients' responsibility for payment, price transparency, and competition from specialty providers threaten

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hospitals' ability to provide these money-losing services.

What might the hospital world look like if the need for cross-subsidies continues, but the ability to cross-subsidize is largely reduced or even eliminated? The market for hospital services could become more efficient. Consumers would be better informed about price and value: Inefficient and nonessential services would be eliminated; price competition would increase; and the prices for hospital services would be lower. In this market, some consumers would be better off.

But there is a dark side to price transparency and competition. In a world of true price competition, a hospital that provides free care and underreimbursed services cannot compete with a hospital that does not. As a consequence, if current trends continue, general community hospitals' financial stability could be threatened. In fact, a world in which U.S. hospitals are required everywhere to treat everyone bears many similarities to the U.S. airline industry of the past, which was built to fly anywhere to everywhere. Could our most storied medical institutions face the same fate as our once proud, now defunct airlines?

Airlines And Hospitals: Price Transparency And Specialized Competition

It was almost inconceivable, just a few years ago, that many of the largest U.S. airline companies would file for bankruptcy or simply cease to exist. But the advent of price transparency and the growth of specialty airlines or low-cost carriers have changed the nature of the airline industry and threatened the financial demise of the traditional or "legacy" U.S. airlines. The U.S. Government Accountability Office (GAO) summarized the challenges facing the legacy airlines as follows:

> Foremost among these challenges is addressing the declining yields brought about by price transparency and competition. ...The price transparency the Internet provides has empowered consumers searching for the lowest fares and depressed fare levels. The emergence of well-capitalized low-cost airlines has also been a significant challenge.[2]

■ **Similarities between the two industries.** There are numerous similarities between the airline and hospital industries. Both comprise companies that built a complex infrastructure and provided cross-subsidized services. Both were protected by a lack of price transparency and limited competition. In the recently deregulated airline industry, price competition and specialized airlines have emerged that do not have to serve all cities and can focus on the most profitable routes. They need not charge higher prices for these routes to make up for losses incurred elsewhere. Similarly, in the hospital industry, specialty hospitals have emerged that can focus on the most profitable patients and do not have to treat the uninsured or provide money-losing services. The new specialty hospitals, like the new low-cost carriers, are not saddled with fixed costs from old plant and equipment and do not have to contend with excess capacity that resulted from historical changes in demand. Both use their inherent cost advantages to compete for more price-sensitive consumers.[3] Legacy airlines cannot raise fares to cover costs because price-sensitive cus-

tomers can now obtain transparent price information on the Internet and shop for the lowest fares. California is now requiring, and many advocacy organizations are encouraging, hospitals to post their prices on the Internet. Hospital patients, facing increased copayments, deductibles, and other out-of-pocket costs, could begin to behave more like airline passengers.

■ **What has happened in the airline industry.** Because of increased price transparency and specialized competition, legacy airlines could not raise prices sufficiently to cover their costs. Between 1 October 2001 and 31 December 2003, they cut costs by $12.1 billion. They stopped serving some locales and reduced seat capacity. They cut labor costs, services, and amenities. Nevertheless, from 2001 through 2003, the legacy airlines lost $24.3 billion, while the low-cost carriers reported profits of $1.3 billion.[4]

■ **What could happen in the hospital industry.** If the hospital industry is placed in a similar position, it might be forced into many of the same remedies. It could be forced to reduce capacity and close hospitals, particularly in high-cost communities that serve the poor and underserved. It might have to reduce service and amenities, much like the airlines have reduced food, travel agent commissions, and other services. Nurse-staffing ratios could be decreased, and facilities might not be updated. General hospitals could also be forced to reduce services that lose money. Just as airlines have abandoned unprofitable routes, hospitals could abandon unprofitable patients. Burn and trauma units, neonatal intensive care units, and AIDS clinics could become scarce among hospitals that are struggling to survive. Struggling hospitals also could reduce quality, which could adversely affect patient safety. The *Washington Post* reported in June 2004 that "the Federal Aviation Administration is failing to effectively oversee new safety risks posed by sharp cost-cutting in the airline industry and rapid growth of budget carriers."[5] Another similarity could be in wage and benefit reductions, mainly for managerial and technical personnel, but possibly for nurses and hospital-employed physicians. Of the $12.1 billion in airline cost savings, 43 percent came from labor reductions.[6] Some senior pilots still earn up to $250,000, but as they retire, the new wage scale for pilots now tops out at about $100,000.

Downsizing, service reduction, and salary cuts are not the only eventualities that could occur. It is also likely that the hospital industry could become tiered—one system with modern up-to-date facilities, some focused and specialized, that serve the privately insured, and one poorer, underfunded, and possibly publicly supported system that serves everyone else (Medicare and Medicaid patients, the poor, the uninsured, and many of the chronically ill); one system that dominates suburban areas with high income, high employment, and extensive insurance coverage, and one that serves the inner city, poor rural areas, and retirement communities. Consider this "concluding observation" from the GAO report on airlines:

> The airline industry is being transformed into two industries, profitable, low-cost point-to-point airlines that continue to grow and extend their reach into ever more markets and the major network legacy airlines

> that account for the vast majority of the industry's losses. ...Until these airlines are able to bring their unit costs closer to those of low-cost airlines and align their services with fares that passengers are willing to pay for "anywhere-to-everywhere" networks, they are unlikely to improve their competitive position.[7]

Analogies can be pushed too far, and one can certainly find numerous dissimilarities between airlines and hospitals. Even within the hospital industry, numerous differences result in some hospitals' being much more vulnerable to these pressures than others. Nevertheless, the emergence of similar market forces such as price transparency, specialty competition, and consumer price-sensitivity could presage similar consequences. If the need for hospitals to cross-subsidize continues and their ability to do so is reduced or eliminated, market forces could precipitate a financial crisis.

Estimating Hospitals' Future Need To Cross-Subsidize

One of the major reasons hospitals need to cross-subsidize is that nearly 60 percent of their revenues come from public payers, which reimburse them less than their costs of providing services. For example, in 2003 Medicaid reimbursed hospitals at 92 percent of costs, and Medicare, at 95 percent.[8] Because of the aging of the U.S. population, more Americans will be in public programs as they make the transition from private insurance to Medicare. In addition, a continued decline in employer-sponsored insurance will increase both Medicaid enrollment and the number of uninsured people.

■ **Outlook for the federal budget.** It seems highly unlikely that public reimbursement levels will increase commensurate with expected increases in cost. The Congressional Budget Office (CBO) projects that the cumulative federal deficit for 2006–2010 will be $1.6 trillion.[9] President George Bush has set a goal of reducing the deficit by half in five years.[10] To do so, he will have to make reductions in the budget, and two of the most obvious targets are Medicare and Medicaid.

Exacerbating the federal budget outlook is the looming insolvency of the Medicare Part A Trust Fund. To extend its solvency beyond 2020, Congress will have to increase taxes, cut benefits, or both. Because tax increases seem politically unlikely, we estimated how much spending (benefits and payments to providers) would have to be reduced to extend the life of the Trust Fund until 2025. Based on projections from the Medicare trustees, we found that projected Medicare spending will have to be reduced by 10 percent.[11] In comparison, the Balanced Budget Act (BBA) of 1997 reduced Medicare Hospital Insurance payments by 7 percent and wreaked havoc on hospital profitability.[12] The combined impact of potential cuts in Medicare and Medicaid would put much pressure on hospitals to make up for these reductions in revenue by attempting to raise prices to private payers.

■ **Impact on uncompensated care.** In addition to the above, general hospitals provide a sizable amount of uncompensated care—an average of 5.5 percent of total general hospital costs, or about $25 billion, in 2003.[13] All else being equal, uncompensated care can be expected to rise as the costs of health care and insurance pre-

miums rise faster than personal income and the number of uninsured increases. Todd Gilmer and Richard Kronick project that between 2002 and 2013, per capita health spending per insured adult will rise 7.4 percent per year, while personal income will grow only 4.6 percent per year.[14] As a result, they predict, the number of uninsured Americans will reach fifty-six million by 2013. Consequently, hospitals are likely to experience increases in both free care and bad debt. Furthermore, many hospitals have recently reduced prices charged to the uninsured, a relatively small but additional loss of patient revenue.

■ **How much will hospitals have to charge private payers?** Given the likelihood of these losses, we address the following question: For hypothetical losses from Medicare, Medicaid, and uncompensated care, how much would hospitals have to charge private payers (relative to cost) to maintain their 2003 operating margin of 3.3 percent?[15] To answer this question, we made the following assumptions: (1) The proportion of hospital expenditures on Medicare enrollees (as a percentage of total hospital expenditures) will increase by 17.2 percent between 2003 and 2025 as a result of changes in the U.S. age distribution. (2) The proportion of uninsured in the nonelderly population will continue to increase along the 1987–2003 trend line, and uncompensated care will vary directly with the increase in the uninsured. (3) After the changes in Medicare spending and uncompensated care are controlled for, the distribution of hospital expenses among the rest of the payers will be similar to that in 2003. (4) Hospitals' operating profit margin will remain at 3.3 percent.[16]

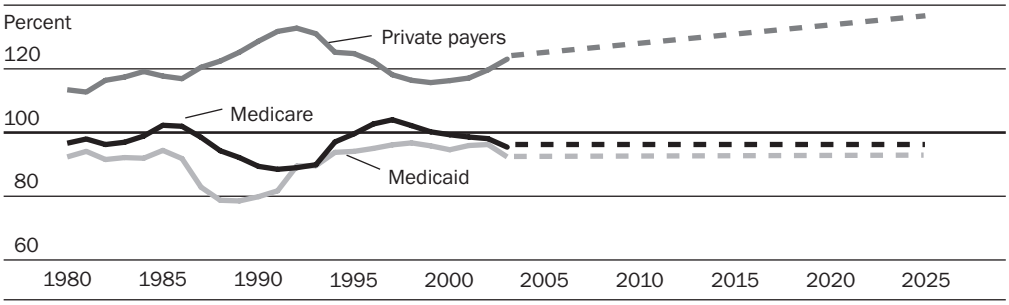
Based on the above assumptions, we calculated two different scenarios. In scenario 1 (Exhibit 1), we assume that in 2025 the payment-to-cost ratio for Medicare and Medicaid will remain at 2003 levels (95.3 and 92.3 percent, respectively). In scenario 2 (Exhibit 2), we assume that the payment-to-cost ratio for Medicare and Medicaid will be reduced to the same levels that existed in 1991 (88.5 percent and 81.9 percent, respectively). The 1991 ratios were (collectively) the lowest thus far recorded. Under scenario 1, at current payment-to-cost levels for Medicare and Medicaid, hospitals in 2025 would have to charge private payers 138.0 percent of cost to maintain the current operating margin of 3.3 percent. In comparison, the private payment-to-cost ratio is now 122.0 percent, and the largest thus far documented was 131.8 percent in 1992. Under scenario 2, if payment-to-cost ratios returned to their 1991 levels, hospitals would have to charge private payers 157.4 percent of cost to maintain the current margin.

What is clear from both scenarios is that for the average hospital margin to be maintained at its current rate, the private hospital payment-to-cost ratio will have to grow to unprecedented levels. Given these findings, we next examine the likelihood that hospitals can actually obtain price increases of this magnitude.

Market Trends And Hospitals' Ability To Cross-Subsidize

■ **Trends in the nongroup market.** The most important change now occurring in health insurance coverage is the growth of individual (nongroup) high-deductible

EXHIBIT 1
Scenario 1: Medicare Hospital Payment-To-Cost Ratio, By Type Of Payer, 1980–2025

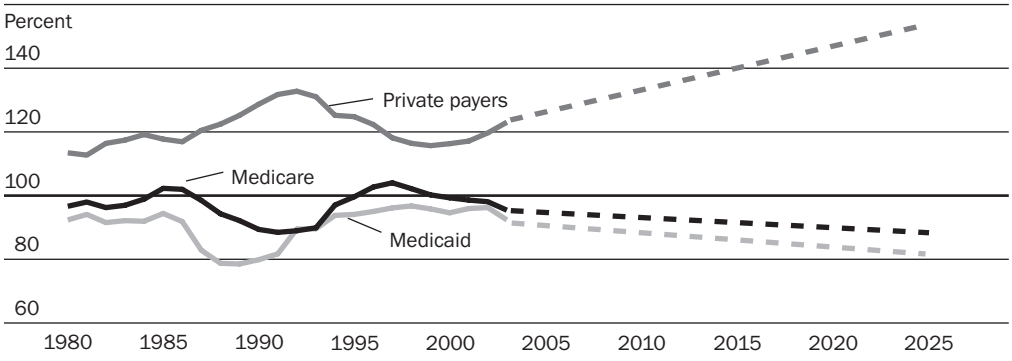


SOURCES: Authors' calculations based on Lewin Group, *Trendwatch Chartbook 2005: Trends Affecting Hospitals and Health Systems* (Washington: American Hospital Association, May 2005); U.S. Bureau of the Census, *Statistical Abstract of the United States, 2005* (Washington: U.S. Government Printing Office, 2005), Tables 11 and 12; Kenneth E. Thorpe's analysis of data from the Medical Expenditure Panel Survey (unpublished); Employee Benefit Research Institute, *Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2004 Current Population Survey,* EBRI Issue Brief no. 276 (Washington: EBRI, December 2004); and EBRI, *Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2003 Current Population Survey,* EBRI Issue Brief no. 264 (Washington: EBRI, December 2003).
NOTE: For explanation of scenario, see text.

insurance policies coupled with health savings accounts (HSAs). These are commonly called "account-based consumer-directed health plans." Although many health plans are just beginning to market these, the initial market response indicates a potential for major growth. As of 1 March 2005 more than one million Americans were enrolled in account-based plans.[17] Forrester Research projects that by 2008, 12 percent of all health insurance enrollments will be in consumer-directed plans.[18]

President Bush's 2005 budget contained specific proposals that provide tax advantages to nongroup and account-based plans. These proposals are intended to make health insurance more accessible and affordable, but they will also encourage growth of individual (nongroup) insurance. According to projections by Jonathan Gruber for the Henry J. Kaiser Family Foundation, the combined impact of the president's proposals would reduce the number of uninsured people by 1.3

EXHIBIT 2
Scenario 2: Medicare Hospital Payment-To-Cost Ratio, By Type Of Payer, 1980–2025



SOURCES: See Exhibit 1.
NOTE: For explanation of scenario, see text.

million.[19] In so doing, however, Gruber contends that the proposals will increase the attractiveness of nongroup relative to employer-sponsored (group) insurance. On the positive side, some people who were previously uninsured will enroll in nongroup coverage. However, some employers will terminate or reduce coverage, and some workers will switch to nongroup coverage or become uninsured. Gruber projects that when these proposals are fully implemented, eight million people will move into individual, nongroup coverage (of whom six million will be moving out of employer-based coverage).

This movement toward individual insurance could affect hospitals in several ways. The first is added pressure on hospitals to increase price transparency. People who have to pay for medical expenses from their own accounts will demand more information on the price and will be more apt to compare prices at competing institutions. Second, people will become more price-sensitive. Having to pay more of their hospital bills from their own accounts, they will more likely shop for lower hospital prices. Third, with increased out-of-pocket payments for deductibles and copayments, hospitals will incur more bad debt and collection expenses. All three of these factors will reduce general hospitals' ability to remain competitive and still obtain the price levels needed to cover costs.

■ **Trends in the group insurance market.** In an effort to limit increases in the cost of their health benefits, employers have shifted more premium cost to employees and attempted to reduce utilization by adopting plans that make employees responsible for a greater share of their medical costs. Between 2000 and 2004, insurance premiums for family coverage rose 59 percent—more than five times the rate of inflation (9.7 percent) and nearly five times the rate of wage growth (12.3 percent).[20] Hay Consultants estimates that the cost of employer premiums will rise 10 percent in 2005, the sixth consecutive year of double-digit rate increases.[21]

Between 2002 and 2005 (estimated), a survey of "human resource and benefit leaders" found that the average employee share of health premiums rose from 18 percent to 22 percent for single coverage and from 23 percent to 26 percent for family coverage.[22] And far fewer employers are paying 100 percent of their employee's premiums. In just five years, from 1999 to 2004, the percentage of employers footing the entire premium bill fell from 33 percent to 17 percent for single coverage and from 12 percent to 6 percent for family coverage.[23] The average family policy now costs roughly $10,000 per year.[24]

Another major cost control strategy has been to increase employees' cost sharing. Fifty-one percent of covered employees pay a deductible before most benefits are covered, and more than half pay separate cost sharing (deductibles, copayments, coinsurance, or per diem charges) for hospital care. Between 1988 and 2004, deductibles rose 130 percent for conventional family coverage and 215 percent for preferred provider organizations (PPOs) with nonpreferred providers.[25]

The results are predictable. Fewer employers will be able to afford to offer, and fewer employees will be able to afford to take up, employment-sponsored health

benefits. A decline in this type of insurance will increase the number of uninsured people as well as the number enrolled in individual high-deductible plans. The result will be an increase in hospital uncompensated care. Furthermore, as patients become responsible for greater proportions of their medical bills, more will seek out the lowest-cost providers. For covered employees who have hospital coinsurance, the average coinsurance amount is 16 percent—enough for some to avoid treatment in high-cost medical centers.[26]

An early example of this is the development of tiered provider networks, which give insured people a financial incentive to choose less costly hospitals. Generally, enrollees pay a smaller premium and agree to a limited network of hospitals and other providers. The prevalence of these arrangements is small but growing. In 2004, 10 percent of health maintenance organizations (HMOs), 6 percent of PPOs, and 16 percent of point-of-service (POS) plans offered tiered networks.[27] But tiered payments have become the norm in steering consumers' demand for prescription drugs and could become more prevalent in the case of hospitals.

■ **Medical tourism.** How far will consumers go to reduce their medical costs? A stark illustration of the potential of patients to migrate to the lowest-cost providers is the emergence of "medical tourism." Both India and Thailand have been at the heart of what is now a worldwide, multibillion-dollar industry in which patients travel to other countries for medical services.

The primary reason that Americans travel for medical services is price. Cardiac surgeries in India cost less than one-fifth of what they would in the United States, orthopedics about one-fourth as much, and cataracts about one-tenth (Exhibit 3). Curtis Schroeder, the American chief executive officer (CEO) of the Bumrungrad Hospital in Thailand, predicts that someday U.S. insurance companies will offer a two-tier plan in which the premiums would be lower for certain procedures performed outside the United States. It is now mostly uninsured Americans or those seeking uncovered services such as cosmetic surgery who leave the United States

EXHIBIT 3
Medical Tourism: Cost Comparisons Between Hospital Services, United States And India

	U.S. ($)	India ($)	Price ratio, U.S. to India (%)
Partial hip replacement	18,000	4,500	400
Full hip replacement	39,000	3,000	1,300
Orthopedic surgery	18,000	4,500	400
Cardiac surgery	30,000–50,000	4,000–9,000	560–750
Gall bladder surgery	60,000	7,500	800

SOURCE: CBC News, "Medical Tourism: Need Surgery, Will Travel," 18 June 2004, http://www.cbc.ca/news/background/healthcare/medicaltourism.html (15 April 2005).

NOTES: Figures are estimation and are in U.S. dollars. Ranges indicate that different prices were charged by different medical centers and for different patient profiles. Figures do not include travel and accommodation costs.

for less expensive destinations. Some might consider Schroeder's prediction an unlikely scenario, but several years ago it seemed unlikely that Americans' x-rays would be read by radiologists in Bangalore or that blood and tissue samples from Great Britain would be analyzed in New Delhi. However, regardless of the future threat from medical tourism, tiered providers are already a reality. They reduce hospitals' ability to increase prices or shift costs and thereby are one more element that threatens the financial stability of general community hospitals.

Specialty Hospitals And Ambulatory Surgery Centers

The growth of specialty hospitals and ambulatory surgery centers (ASCs) also threatens general hospitals' future ability to cross-subsidize. Specialty facilities can focus their expertise and organize their operating procedures around specific medical conditions. Their advocates claim that specialization will enable them to operate more efficiently, similar to "focused factories" in other industries. But ample evidence now exists that specialty facilities are able to "cherry pick" the most profitable patients and do not provide the same level of uncompensated care and other money-losing services. Mark Miller, executive director of the Medicare Payment Advisory Commission (MedPAC), reported the following findings:

> Physician-owned specialty hospitals concentrate on specific diagnostic groups, some of which are more profitable than average, and particularly on surgical procedures, which are relatively more profitable than medical procedures; within those procedures, they concentrate on less severe cases which are also expected to be more profitable; they treat a lower proportion of Medicaid patients than general hospitals; and many specialty hospitals do not have emergency rooms or, if they do, they are not fully staffed or included in regular ambulance routings.[28]

Hence, even if their operating costs for specific medical procedures are comparable to those of general hospitals, their profits will be higher because they do not incur other free and underreimbursed costs.

The number of specialty hospitals grew rapidly in the 1990s, and general hospitals were alarmed about the negative consequences of this type of competition. Congress enacted a moratorium on payment to new specialty hospitals in December 2003. In June 2005 Congress permitted the moratorium to expire, although the Centers for Medicare and Medicaid Services (CMS) instituted what is, in essence, a six-month administrative extension. Following the extension, it is possible that new specialty hospitals will be permitted. If so, it is likely that Medicare reimbursement levels will be revised to reduce the relative profitability of some services, particularly those that have been the core products of specialty hospitals. However, even if payment disparities are reduced or eliminated, general hospitals will remain at a competitive disadvantage. If they have to compete with specialty providers on price, they will not be able to cross-subsidize losses from public payers, the uninsured, and other money-losing services.

Concluding Remarks

The issues we have discussed in this paper can be seen as part of a larger context. As our current world economy moves toward global free trade, we see both the benefits and detriments of price competition. In its starkest form, pure price competition maximizes economic efficiency. It produces the most possible goods for a given amount of resources at the lowest possible prices for consumers. But it also squeezes out any nonessential services and amenities. It seeks the lowest global wages and applies pressure to reduce culturally popular perquisites such as generous vacation time and comprehensive health benefits. In commodity markets, the relative balance between benefits and detriments is different than it is with U.S. health care. We might not like the pay and benefit package Wal-Mart provides to its employees, but many are content to shop there and pay lower prices.

There is a dark side to market competition in health care that raises more extensive social and ethical questions. If every American had access to affordable health care, and if hospitals were adequately paid for providing mandated and other necessary services, the potential detriments of free price competition would be greatly diminished, if not eliminated. But instead of providing universal health care and sufficient payments for public patients and a variety of necessary services, the current system forces hospitals to cross-subsidize by charging higher prices to the privately insured. This partially regulated system has been able to sustain itself in a partially competitive market over a number of decades, largely because of an absence of price competition. But unlike predictions of financial ruin that have often been heard from hospital advocates in the past, a confluence of emerging forces might this time render the system unsustainable.

This is not to argue that the current system is optimal or deserves to be maintained. Many believe that there are substantial waste and ineffectual restraints on hospital spending. We would all prefer an efficient health care system that would be accessible to everyone. But how we get there and whom we choose to protect are vitally important. Some might argue that the market should be reformed first and that the benefits of competition will follow, lowering prices and making health services more affordable. But we believe that this is the wrong way around. It puts at risk those people who are most vulnerable and those institutions that have traditionally imparted important services to their communities.

Until the political system is willing to level the playing field by explicitly paying for under- and unfunded services, market changes such as price transparency and specialization, although beneficial in their own right, could have severe negative consequences. U.S hospitals could begin to look like the legacy U.S. airlines. And although we might feel only passing regret for the bankruptcy of an airline company, the health of our major medical institutions is of far greater concern.

NOTES

1. We use the term *general* or *community hospitals* to refer to full-service, acute care hospitals, including not-for-

profit, for-profit, and public hospitals.

2. U.S. Government Accountability Office, *Commercial Aviation: Despite Industry Turmoil, Low-Cost Airlines Are Growing and Profitable*, Pub. no. GAO-04-837T (Washington: GAO, 3 June 2004).
3. We use *cost* here as total cost, including the cost of providing free and underreimbursed services.
4. GAO, *Commercial Aviation.*
5. S.K. Goo, "Airline Inspections Called Inadequate," *Washington Post*, 9 June 2005.
6. GAO, *Commercial Aviation.*
7. Ibid.
8. Lewin Group, *Trendwatch Chartbook 2005: Trends Affecting Hospitals and Health Systems* (Washington: American Hospital Association, May 2005), Table 4.4.
9. Congressional Budget Office, *CBO's Current Budget Projections*, 15 August 2005, http://www.cbo.gov/showdoc.cfm?index=1944&sequence=0 (accessed 20 September 2005).
10. "President Bush's FY 2005 Budget," 2 February 2004, http://www.whitehouse.gov/news/releases/2004/02/20040202-1.html (accessed 10 November 2005).
11. An online appendix containing the authors' methodology and calculations is available at http://content.healthaffairs.org/cgi/content/full/25/1/11/DC1. Questions should be sent to efrat@brandeis.edu.
12. Authors' calculations based on S. Guterman, *Putting Medicare in Context: How Does the Balanced Budget Act Affect Hospitals?* July 2000, http://www.urban.org/UploadedPDF/medicare-context.pdf (accessed 6 October 2005); and Boards of Trustees, *2005 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund*, March 2005, http://www.cms.hhs.gov/publications/trusteesreport/tr2005.pdf (accessed 5 May 2005), Table III.B4.
13. Lewin Group, *Trendwatch Chartbook 2005*, 41.
14. T. Gilmer and R. Kronick, "It's the Premiums, Stupid: Projections of the Uninsured through 2013," *Health Affairs* 24 (2005): w143–w151 (published online 5 April 2005; 10.1377/hlthaff.w4.143).
15. Lewin Group, *Trendwatch Chartbook 2005*, Table 4.1.
16. See the online supplemental appendix (Note 11).
17. America's Health Insurance Plans, "Number of HSA Plans Exceeded One Million in March 2005," 5 April 2005, http://www.ahip.org/content/fileviewer.aspx?docid=9771&linkid=83197 (accessed 6 October 2005).
18. B. Holmes, "Consumer-Directed Health Plan Leaders Poised for Growth," Business View Brief (Cambridge, Mass.: Forrester Research, 22 July 2003).
19. Henry J. Kaiser Family Foundation, "Coverage and Cost Impacts of the President's Health Insurance Tax Credit and Tax Deduction Proposals," March 2004, http://www.kff.org/insurance/7049.cfm (accessed 31 October 2005).
20. Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2004 Annual Survey—Chart Book*, May 2005, http://www.hospitalconnect.com/hret/publications/content/chart.pdf (accessed 15 May 2005).
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22. Hewitt Associates, "Employer Health Care Expectations: Future Strategy and Direction—2005" (slide presentation), November 2004, http://was4.hewitt.com/hewitt/resource/spkrsconf/subspkrsconf/teleconferences/tapes/11-17-04_slides.pdf (accessed 5 May 2005).
23. Hay Group, "2004 Hay Benefits Report."
24. Kaiser/HRET, *Employer Health Benefits: 2004 Annual Survey*, September 2005, http://www.kff.org/insurance/7148 (accessed 6 October 2005).
25. Ibid.
26. Ibid.
27. Ibid.
28. Mark E. Miller, executive director, Medicare Payment Advisory Commission, "Physician-Owned Specialty Hospitals," testimony before the Subcommittee on Federal Financial Management, Government Information, and International Security, Senate Committee on Homeland Security and Governmental Affairs, 24 May 2005, http://hsgac.senate.gov/_files/MedpacTestimony_Miller_SenGovtReform52405_.pdf (accessed 20 September 2005).