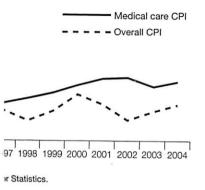
Redefining Health Care

Creating Value-Based Competition on Results

Michael E. Porter Elizabeth Olmsted Teisberg

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red new incentives to compete on ncouraged redundant facilities.³⁷ neral Hospital and Brigham and came part of the Partners Health-1d its obstetrics services rather than which had a nationally renowned 0 patients a year. Provider consolvice lines but can lead to more

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lated provider groups—that they dical condition level—was compart of one provider group, it is se served by another group, no matter what medical condition arises or whether the group is truly excellent at addressing it. While provider groups sound like the perfect opportunity for well-coordinated care over the care cycle, most groups have maintained the same old structure of care around discrete intervention and traditional specialties rather than medically integrated practice units.

Consolidation and cross ownership can also inhibit innovation—the only real solution to controlling health care costs in light of demographic trends. While the previous structure—with its many independent providers and cost-plus reimbursement—had its own flaws, there was usually at least one provider in each region in a disease or treatment area willing to experiment with new ideas or treatments. This plurality has been a unique American strength. Consolidation into a few large provider groups, however, has created stronger administrative control that can slow down the adoption of new drugs and devices, at least until patient demand becomes overwhelming. Given the need for reimbursement approvals and lacking rewards for better quality, provider groups have had little incentive to innovate, especially when a new approach raised costs in the short run.³⁸

Another consequence of the zero-sum competition on discounting and the shift in industry structure has been the emergence of powerful national buying groups for hospital supplies. Two private buying groups, Novation and Premier, now act as middlemen for about half of U.S. nonprofit hospitals. In a cost-sensitive system, the idea was that buying groups could source the best products at the lowest prices by aggregating the purchasing power of many hospitals. But not surprisingly, the buying groups have become yet another form of gatekeeper that is more likely to slow down innovation than speed it up. Also, buying groups create incentives for hospitals to increase their purchases of given items to obtain better prices. Hospitals find themselves with a limited choice of products and costly excess inventory, rather than purchases tailored to their specific needs. Patient value suffers. Buying groups are discussed further in chapters 7 and 8.

Finally, the shift in health plan and provider strategies, combined with industry consolidation, has led to another counterintuitive result: greater advertising and other marketing by drug companies directly to patients. In the current system, advertising is one of the few ways that drug companies can inform patients about new drugs and overcome resistance in the system to their adoption. Because health plans care about patient satisfaction, they have been more prone to reimburse pharmaceutical treatments demanded by patients. Advertisements, though, should *not* be the patient's sole or primary information source about drugs. It would be far better to disseminate objective data on results and balanced studies of alternative treatments than to target patients with marketing campaigns. While critics point to the cost of advertising as a failure of the current system, limiting

reimbursement toward value-based competition in all the ways they can influence.

Rewarding Provider Excellence. First and foremost, health plans need to reward provider excellence. Some health plans are taking steps in this direction through pay-for-performance programs, as we have discussed in previous chapters. Harvard Pilgrim's pay-for-performance contract with Partners HealthCare System in 2001, for example, was the first cooperative performance incentive contract between a plan and a large delivery system in the United States. Harvard Pilgrim has expanded its pay-for-performance system substantially, and publicly recognizes outstanding providers in its Honor Roll.

BCBS of Massachusetts has established quality-related pricing models for primary care physicians, specialty group practices, and hospitals. Available results measures are still rudimentary, however, so that BCBS and similar initiatives base their bonuses primarily on process measures. For primary care physicians, BCBS uses improvement in the National Committee for Quality Improvement's HEDIS³⁷ measures, such as mammography rates and diabetes treatment protocols.³⁸ In addition, there are rewards for prescribing generic versions of antibiotics and using a medical decision support tool (of their own choosing, not a particular tool specified by BCBS). All of these are process measures. BCBS's ultimate goal is to base rewards on publicly reported outcome measures.

For hospitals, BCBS bases bonuses on mutually established performance improvement goals that are specific to each hospital, rather than utilizing the same goals for all providers. In the chosen areas of improvement, broad outcome measures developed by the Agency for Healthcare Research and Quality (AHRQ) are utilized, such as infection rates and acute myocardial infarction rates after surgery. Hospitals that exceed their specific improvement goals can receive a 2 percent increase in reimbursement, which can involve millions of dollars for a medium-sized hospital. Again, the longer-term goal is to base rewards on outcomes rather than processes.

From Processes to Results. As we have discussed, current pay-for-performance approaches, with their emphasis on process compliance, are only a start. Pay for performance does not actually reward excellence. While the BCBS of Massachusetts program rewards areas of improvement, for example, it is less likely to set an improvement goal in an area where the provider is already very good. The incentive to develop true excellence would be far stronger if BCBS went a step further and created a reward for hospitals that further distinguish their best services.

Ultimately, providers should be encouraged not just to improve clearly substandard processes but to achieve clearly superior results. From a value perspective, results are best measured and rewarded at the level of medical conditions, not overall outcomes such as mortality or generic complications. Pay-for-performance bonuses should be specific to medical conditions, not across the board. Rewards for improvement need to be the same for all providers. Health plans should encourage providers to strengthen the areas in which they are already very good.

The process focus of current pay-for-performance initiatives reflects a desire to promote safety. However, if safety *results* are measured, such as numbers of patients with postsurgical infections or ventilator-associated pneumonia, the attention to safe *practices* will markedly increase. Health plans do not have to be in the business of monitoring everything a hospital does, but should ensure that physicians and patients are appropriately focused on results.

Competition for Patients. While bonuses to reward excellence are beneficial, perhaps the most powerful reward for excellence and value is more patients. Providers that are excellent and efficient will earn higher margins, even at the same prices as other providers. It is the margin (revenue net of costs), not the price, that really matters for providers. Increasing a provider's volume of patients in a medical condition should drive major improvements in value and margins, as we have discussed (see figure 5-2).

Health plans should resist the temptation to try to level the playing field by seeking to raise all providers to an acceptable level. Instead, the best providers in a medical condition should be rewarded with patients. Leveling the playing field works against the powerful role of volume and expertise in driving value, as we have discussed. Also, the motivation of weaker providers to win back lost patients by improving results will be far stronger than incremental pay-for-performance incentives.

Gain Sharing. Reimbursement structures must evolve to reward providers for value-enhancing improvements that reduce the need for services. Today, health plans penalize them. Since current payments are tied to providing services, and the price for a given service reflects its complexity, moving to a less invasive treatment or minimizing the need for admissions or office visits can reduce revenue faster than cost, as we described in chapter 4. In its contracts with commercial health plans, for example, Intermountain Healthcare discovered that its care improvements for community-acquired pneumonia reduced its costs by 12.5 percent, but that revenues fell by 17 percent. Intermountain is beginning to point out these anomalies and define models to share savings.³⁹ One

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model, for example, might be one in which a health plan guaranteed equal provider margins for the care cycle for innovative new care delivery methods, together with a formula to share net savings. Ideally, health plans would also reward process innovations with more patients.

Another way to encourage value improvements is to allow providers to capture gains of efficiency improvements by leaving prices stable for periods of time (while measuring outcomes). Providers will be motivated to improve efficiency (without sacrificing measured quality) because they will retain the benefits of efficiency improvements during that time.

Value-Based Pricing. In true value-based competition, prices should be based on health value rather than effort, the complexity of the service, or overall cost. In value-based pricing, for example, diagnosis would be recognized, measured, and rewarded as a discrete service. The price would reflect the overall efficiency and effectiveness of the diagnosis, and the fact that an accurate diagnosis can have a huge influence on subsequent costs and results.

One of the greatest flaws in the current pricing system is that consultation is undervalued relative to performing procedures. Value-based pricing would change this. Consultation-based services that have a clear health impact, and that reduce the need for expensive treatments, should be rewarded with attractive reimbursements. This will also help avoid the bias toward treatment.

An encouraging example of value-based thinking is the move to reward doctor-patient communication via telephone or e-mail. Such consultation has typically not been reimbursed at all. A bias is created for office visits or for not addressing issues early, which drives up costs. Some health plans are beginning to pay for doctor-patient communication by e-mail, including Blue Cross and Blue Shield plans in California, New York, Florida, Massachusetts, New Hampshire, Colorado, and Tennessee, as well as Anthem Blue Cross (now owned by Wellpoint), CIGNA, Harvard Pilgrim, and Kaiser Permanente. The physician is typically reimbursed \$24 to \$30, and patients typically make copayments of \$5 to \$10 to discourage unnecessary communication. Medicare has also been conducting experiments with online patient-physician communication, and House legislation has been proposed to let 'Medicare make "bonus payments" to physicians for e-mail consultations. These moves are a step forward in recognizing the importance of consultation, but they create yet another example of extremely fragmented payment. More comprehensive pricing models for services such as preventive care and disease management will be needed.

Value-based pricing models will also be necessary for risk assessment, prevention, and disease management services. Prices should reflect the value delivered in terms of patient health outcomes and cost savings. The onus should be on providers to demonstrate value, which will improve the availability of outcome information and comprehensive cost data. In each of these service areas, the best providers should also be rewarded with patients.

Ideally, providers would some day set their own prices based on value. rather than be presented with the amount of reimbursement. Different providers may well seek different prices depending on the cases they address and the results they deliver. As we mentioned earlier, however, providers with better results will often be more efficient and thus will earn higher margins even while charging the same price as rivals. The principles of value-based competition make it clear that the most powerful reward of all is patients. If health plans encourage and support competition to attract patients based on results in addressing medical conditions. this will not only enable excellent providers to improve value further (through the virtuous circle) but will also drive substandard providers to either improve or lose business.

Move to Single Bills for Episodes and Cycles of Care, and Single Prices. Aligning reimbursement and patient value will ultimately require that the current model of separate reimbursement for each doctor, hospital, charge, and service be replaced with a system involving single prices for service bundles, episodes of care, and ultimately full care cycles. The current system introduces unnecessary transactions and complexity that have no health benefit for patients. The current system also obscures value. The most important reasons for single, unified prices are to make prices transparent and to match price with value.

Value and cost can only be measured over episodes of care and complete care cycles, as we have discussed in earlier chapters. It is the results of all the interventions taken together that matter, not individual services. Only by adding up all the costs can the true cost be measured, including the cost of follow-up care, repeat treatments, and the cost of addressing any errors and complications. Moving to a single price for the entire care cycle will encourage appropriate care delivery structures and appropriate trade-offs among types of treatment (such as pharmaceutical treatment versus surgery; newer, less invasive surgeries versus older methods; more preparation versus treatment; and greater attention to follow-up care).

Moving to single prices will also be a huge step in making it possible for prices to be transparent. Without a single bundled price, transparency of the many prices for discrete services is much less useful to patients, health plans, and other system participants. It is the total charges that we should care about, not the prices of hundreds of line items. Billing and the explanation of benefits are hugely simplified with a single-price method.

o play roles abdicated by health lanage and coordinate their own o matter how informed and value be unable to meaningfully affect available and providers have to . In this chapter we describe the lue-based system, and the expecind providers.

the system, including their own rchasers of independent health rer-provided health plans in the ig employers even more latitude ninistered. Employers can exert ly through collaborative efforts can influence the way employees. We discuss here why employive value improvement in the inforce the shift to value-based

Suppliers

, and services play vital roles in ovation in health care practice. uated and reinforced zero-sum value to health care delivery

petition in a number of ways. ers and price pressures, suppliproduct lines to enhance their roducing competing entries in re similar to competitor product benefit. The focus seems to sell, and gaining more negotis, and customers, rather than iticals, for example, "me-too" are common. Such products at significantly lower prices.

However, in practice this has not usually been the case. Even if me-too drugs are introduced at lower prices, incumbents have rarely responded by bringing their prices down. After a respectable introductory period, me-too producers are prone to raise their price to approximate that of the incumbent.² This practice increases supplier margins but means that competing products yield little patient value.

Second, supplier sales and marketing efforts often seem more focused on volume than on patient value. Suppliers of drugs, devices, supplies, and equipment seek preferred positions on formularies or approved lists through discounts, rebates, and volume incentives. They make payments to buying groups to secure placements, behaving as if their products were interchangeable commodities instead of justifying their value to defined groups of patients. Suppliers are drawn into competing by offering incentives for physicians to use their products, rather than by demonstrating superior results or offering meaningfully lower prices. For example, suppliers have sometimes entered into questionable consulting agreements with doctors to secure product usage.

In sales, many suppliers have pursued the reach and frequency model. In this model, large sales forces are deployed to call on as many physicians as possible, and to see those physicians as often as possible. The idea is to engender maximum awareness and physician loyalty to secure the maximum usage of a drug, device, or test. Suppliers have sought to expand usage to as many patients as possible rather than focusing on reaching those patients for whom their products offer the best value. This has contributed to the unfortunate situation in which many therapies produce disappointing results for too many patients. In cancer care, for example, drugs such as Erbitux, Herceptin, Tarceva, and Iressa are each effective in only about 10 percent of patients. Thus, a succession of drugs is often tried, which boosts overall supplier revenue; however, repeated failures mean that treatment cost is wasted and patients are exposed to side effects. Value is dramatically eroded.

In pharmaceuticals, some companies open themselves to criticism and controversy through implicit support of off-label usage for patients who get only marginal benefit. Similarly, equipment suppliers encourage providers to match each other's investments in expensive technology, even when there is low utilization. These approaches raise revenues for suppliers, but erode patient value in the system.

The same mind-set afflicts supplier advertising. Suppliers invest in costly direct-to-consumer mass advertising campaigns to raise many patients' expectations, rather than competing through more targeted communication of meaningful outcome and price information to those patients who will benefit the most from their products.



Imperatives for policy makers: Improving the structure of health care delivery

Enable universal results information

- · Establish a process for defining outcome measures
- · Enact mandatory results reporting
- · Establish information collection and dissemination infrastructure

Improve pricing practices

- · Establish episode and care-cycle pricing
- · Set limits on price discrimination

Open up competition at the right level

- · Reduce artificial barriers to practice area integration
- · Require a value justification for captive referrals or treatment involving an economic interest
- · Eliminate artificial restrictions to new entry
- Institute results-based license renewal
- · Strictly enforce antitrust policies
- · Curtail anticompetitive buying-group practices
- · Eliminate barriers to competition across geography

Establish standards and rules that enable information technology and information sharing

- · Develop standards for interoperability of hardware and software
- · Develop standards for medical data
- Enhance identification and security procedures
- · Provide incentives for adoption of information technology

Reform the malpractice system

Redesign Medicare policies and practices

- · Make Medicare a health plan, not a payer or a regulator
- · Modify counterproductive pricing practices
- · Improve Medicare pay for performance
- · Lead the move to bundled pricing models
- · Require results-based referrals
- · Allow providers to set prices

Align Medicaid with Medicare

Invest in medical and clinical research

Government also has key roles in opening up competition, improving pricing practices, encouraging the penetration of information technology, improving the structure of publicly managed health plans (especially Medicare and Medicaid), and continuing to support medical research, with a greater emphasis on research in the area of clinical outcomes.

Innovation in the structure and organization of health care delivery is badly needed, and new models should be encouraged. Both new and incumbent providers, however, should have to compete on results.

Another common restriction on new competition is Certificates of Need (CONs). In some states, CONs are required for new facilities or large capital investments. Instead, the system should move to Certificates of Good Results. Ironically, CON regulation is sometimes supported by advocates of outcome data collection, because the threat of withholding approval ensures compliance with outcome data reporting. However, this is yet another example of using complex regulation to address a problem that would be better addressed directly. Data reporting should be mandatory, rather than using flawed CON rules as a lever to make data reporting appear voluntary.

Institute Results-Based License Renewal. Renewals of provider and individual physician licenses to practice should be based on patient results. Renewal should require objective evidence of results that meet or exceed national benchmarks at the medical condition level.⁵⁴ As value-based competition spreads, substandard providers will either improve or go out of business naturally. In the interim, license renewal based on the best available results measures can raise the bar.

Strictly Enforce Antitrust Policies. Over the past fifteen years, provider groups that shield substandard individual provider entities from competition have been deemed acceptable. However, the consolidation of providers into a few large groups runs the risk of thwarting competition in a region with little or no health value benefit. As we discussed in chapter 2, studies of hospital consolidation show that higher concentration often is associated with price increases for both not-for-profit and forprofit hospitals. Studies also document the absence of efficiency gains from acquisitions, because actual operations are not combined.⁵⁵

Antitrust policy has a crucial role in the health care system that has not been widely recognized. Antitrust authorities must scrutinize the behavior of all system participants to ensure that no provider, hospital group, health plan, or integrated system can concentrate excessively, unfairly dominate, or unfairly compete in an important market. Given extraordinary cost increases, the need to do so is as great or greater than elsewhere in the economy.

While health care has not been a primary focus of antitrust attention in the past, the Federal Trade Commission (FTC) and Antitrust Division of the Department of Justice (DOJ) issued a welcome report on the role of antitrust enforcement in the sector. ⁵⁶ Between 1994 and 2004, the FTC and DOJ challenged seven hospital mergers and lost each case. The

counts, perhaps not appreciating the consequences of a lack of effective competition in the health care sector, disagreed with the federal agencies on market definition, prospects for new entry, and the magnitude of possible efficiency gains, among other things. New guidelines or new legislation may well be necessary to clarify the tests for effective competition in the sector and set new standards for courts to apply.

Instead of a move to more vigilance on health care competition, there is a steady stream of proposals from health care experts and system participants to eliminate or relax competition. These steps are usually justified through hoped-for efficiencies from avoiding duplication and encouraging collaboration. Such flawed arguments are typical in other industries seeking to avoid competition. At best, these proposals are naïve. There is no evidence that such efficiencies of consolidation or collusion will be achieved—in truth, the evidence shows the opposite. Consolidation leads in practice to higher prices.

The only way to lower cost and increase value in health care is to insist that providers compete on results. Competition will define the best configuration of the system for patient value. Competition is the only way to eliminate uneconomic duplication of investment and excess capacity, as we discussed in chapter 4.

Curtail Anticompetitive Buying-Group Practices. Group purchasing organizations (GPOs) aggregate hospital purchases of supplies and medical devices in order to bargain down prices. GPOs are the subject of heated and ongoing debate about whether they improve efficiency or are anticompetitive. On one hand, most hospitals choose to utilize at least one and often two GPOs for purchases, which provides evidence of some benefit. Yet there are serious concerns that some GPO practices erode value and slow the rate of innovation. Hospitals, for example, explain that GPOs achieve volume discount targets by overbuying inventory that hospitals must then hold and manage. Inventory carrying costs can be hidden because separate hospital departments are often involved in procurement and care delivery. Also, hospitals that buy a product that is not on the GPO's list not only lose the discount but must also repay savings from previous purchases of the GPO-approved item.⁵⁷ This creates a strong bias toward the products the GPO has selected, which may have been determined more by the discount offered by the supplier than by the health care value of the product. In addition, critics of GPOs allege anticompetitive practices such as tying, bundling, and exclusive dealing, all of which would work against value-based competition. 58

Most troubling is that some GPOs are funded by suppliers rather than solely by hospitals. The fees that suppliers pay, which would normally be

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pliers that provide their funding, not providers, thereby undermining considered illegal kickbacks, are allowed by the 1986 amendment to the Social Security Act. 59 Thus, buying groups may serve the interests of the supvalue-based competition.⁶⁰ While the extent of this bias is contested, the potential for conflict of interest is indisputable.

To enable value-based competition, every buying-group practice should be ing groups to accept financing or any payments from suppliers: if a buying consistent with open and fair competition. There is no valid reason for buygroup adds value, the customers (hospitals) should voluntarily pay for it. Eliminate Barriers to Competition Across Geography. A variety of regulations and practices artificially limit competition in health care across such impediments to provider or health plan competition need to be states and geographic regions. We discuss just a few examples here, but all eliminated.

skilled personnel would encourage integrated care delivery systems across Establish Reciprocity in State-Level Licensing. Reciprocity across states in the licensing of physicians, provider organizations, and other geography, including the use of telemedicine. Licensing of providers from other states that meet reasonable standards in terms of training, experience, and results should be automatic. Otherwise, licensing becomes a barrier to competition that can only reduce health care value. Eventually, state-level licensing should be de facto eliminated in favor of national licensing, which could be administered by states. Modify Tax Treatment of Medical Travel. Currently, IRS rules for the deductibility of medically related travel hamper value-based competition. The rules allow 14 cents per mile for travel and \$50 per day for room and board. These amounts are unreasonably low and deter competition among providers across geography. A better policy would be to harmonize the rules with the reimbursement rules for business travel.61

Information Technology and Information Sharing Establish Standards and Rules That Enable

ter coordinated care, more integration across providers, improved results Information technology (IT) promises to enable major value improvements in health care delivery, as we have discussed in earlier chapters. Substantial benefits are possible through improved medical records, betmeasurement, and better patient information, among other things. b of the private sector, but govern-Deploying IT in health care is +1

ment has important roles to play in enabling the sharing of medical information and speeding IT adoption. Develop Standards for Interoperability of Hardware and Software. Standards need to be developed that ensure interoperability of IT software and hardware. Today, providers and other system participants operate a myriad of legacy systems, many of them built around particular applications such as scheduling or financial management. Vendors often support their own proprietary systems, especially in the area of software.

tion systems within and across health care organizations need to be able to talk to each other. Interface standards are essential, which all vendors In order to reap the full benefits for patient value, however, informaproviding systems for medical applications should be required to meet. A federal commission on systemic interoperability was established by Congress in 2003 to advance these aims. The commission's report, released in 2005, contains a set of useful recommendations. Implementing these recommendations after vetting takes on high importance.

Develop Standards for Medical Data. Standards for medical data are necessary so that records from different providers, health plans, and other parties can be exchanged, compared, and aggregated. Any type of information that appears in a medical record must be specified using a standard that is recognizable and compatible with the way other parties record the same type of data. This means that standard or compatible disease categories, diagnosis codes, pathology results, definitions, and so on must be utilized. Such standards for medical data are important not only for patient care, but also to allow the efficient compiling of results and process information.

Enhance Identification and Security Procedures. Rules and regulations are necessary to protect the security and privacy of medical information while allowing its efficient exchange. Rules are needed to make electronic signatures legal and verifiable. This would enable electronic prescribing, among other applications. Patients also need a unique identifying number to allow the reliable matching of records and individuals. Finally, procedures are necessary for requesting and releasing medical records that are verified and that protect privacy while ensuring timely access. HIPAA reguforward, however, this model is far from ideal. We believe that records lations already give patients the right to obtain their own medical records, which previously belonged to providers and health plans. While a step must eventually become the property of individuals, not just providers, in order to allow a practical and efficient medical records system. Verifiable research, and the Agency for Healthcare Research and Quality (AHRQ) is responsible for health services research.

- 29. AHRQ's stated goals are to work with both the public and private sectors to identify the most effective ways to organize, manage, finance, and deliver high-quality care, reduce medical errors, and improve patient safety. AHRQ has a very small budget relative to the National Institutes of Health (NIH), which is responsible for biomedical research. This reflects the general lack of understanding that still persists about the crucial role of results information in enabling competition and improving value in health care delivery (see the discussion in chapter 4). NIH spending will have a much higher return when health care competition shifts to value-based competition on results.
- 30. These reports include facility characteristics, utilization data, and costs (both in total and for Medicare patients). Data is reported by DRG and by provider. MS publishes these cost reports, which can be purchased for about \$100.
- 31. President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry (1998).
- 32. "Steps should be taken to ensure that comparative information on health care quality is valid, reliable, comprehensible, and widely available in the public domain" (President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry, 1998).
- 33. Even if such data is made public in a difficult-to-interpret form, information companies and health plans will benefit from it and create more accessible forms of the information.
 - 34. Knaus (2002).
 - 35. American Academy of Family Physicians (2005a).
 - 36. Caplan et al. (1990).
 - 37. Hallinan (2005).
 - 38. Pierce (1995).
- 39. We are grateful to Dr. Robert H. Bode at New England Baptist Hospital for bringing this example to our attention.
- 40. See chapter 4 for a discussion of the studies on experience, learning, and results.
- 41. Clear measures will help consumers distinguish between highly experienced practitioners who are set in their ways and those who have learned and improved based on experience.
- 42. In chapters 2 and 6 we discuss the use of complex, opaque billing as a means of cost shifting among hospitals, health plans, and patients.
- 43. Counter to past practices of requiring the low-income uninsured to pay the full list prices, the Minnesota attorney general has reached an agreement with Minnesota hospitals giving price breaks (below list) to people with incomes below \$125,000 at about half of the state's hospitals (Office of Minnesota Attorney General, 2005).
- 44. Hospitals, which are not in the business of bill collection, complied by turning over unpaid accounts to collection agencies, which collected aggressively. For a discussion of hospital billing practices for uninsured or low-income patients and their relation to Department of Health and Human Services requirements and other legal requirements, see Watson (2004), Pryor and Seifert (2003), Lagnado (2003), and T. G. Thompson (2004).
- 45. Centers for Medicare and Medicaid Services (2004b); T. G. Thompson (2004).

- 46. Out-of-network copayments, for example, usually include 30 percent of the in-network reimbursement rate plus 100 percent of the difference between the in-network price and the provider's list price, which is typically about double the in-network price. The patient's responsibility, then, amounts to a total of about 65 percent of the list price. Moreover, if a complication occurs in the course of out-of-network care, insurance often will not cover any of the costs related to the complication. As a result, the cost and risk of out-of-network care are prohibitive for many patients, even if the out-of-network provider is far superior. As we discuss in the section on limiting price discrimination, ending in-network contracting altogether is a better approach.
- 47. Individual patients will not negotiate prices in almost all cases. Instead, a health plan or service will negotiate on behalf of many patients and will have significant bargaining power.
 - 48. Roughly 2,000 heart transplants per year are performed in the United States.
- 49. The Commission on Systemic Interoperability published recommendations in October 2005 that included changing the Stark laws to enable information sharing and interoperable systems.
- 50. Such efforts are also a predictable response to a flawed pricing system in which low reimbursement rates for some services are subsidized by other, more profitable services that specialty hospitals target. Medicare reimbursement rates drive many of these cross subsidies. General hospitals worry that specialty hospitals will serve only patients with the DRGs that are profitable, and, within those DRGs, serve only patients with less complex problems that cost less to treat. Without the cross subsidies in DRG payments, the concern about specialty hospitals would be significantly reduced.
 - 51. U.S. General Accounting Office (2003a).
 - 52. Medicare Payment Advisory Commission (2004), 213-214.
 - 53. Romano (2004b).
- 54. Eventually, physicians should also have to regularly demonstrate competence. This could involve results data, as well as demonstrating competence using simulations or simulators, as airline pilots are required to do.
- 55. There have also been studies that found that mergers raise prices the most when they occur in highly concentrated markets, but increase prices less in less concentrated markets. A 2004 joint report by the Federal Trade Commission and U.S. Department of Justice (FTC/DOJ) includes a lengthy discussion of the debates about the reasons for and results of mergers. The report also cites David Dranove's statement: "I have asked many providers why they wanted to merge. Although publicly they all invoked the synergies mantra, virtually everyone states privately that the main reason for merging was to avoid competition and/or obtain market power" (Dranove, 2000, p. 122).
 - 56. FTC/DOJ (2004).
 - 57. FTC/DOJ (2004).
- 58. FTC/DOJ (2004) contains an extensive discussion of group purchasing organizations (GPOs); see its chapter 4, 34–46.
 - 59. FTC/DOJ (2004), chapter 4, 37.
- 60. Concerns raised in the FTC/DOJ hearings on GPOs also include side payments to gain exclusive contracts, GPO management compensation based on supplier fee income rather than on hospital savings, supplier payments to obtain market share, and new entrants with value-enhancing products being blocked from access to hospital sales.