## Competition In Health Care: It Takes Systems To Pursue Quality And Efficiency

If systems are the best locus of accountability for health care quality and efficiency, then competition should be designed to encourage evolution toward "systemness."

#### by Alain C. Enthoven and Laura A. Tollen

**ABSTRACT:** Many stakeholders agree that the current model of U.S. health care competition is not working. Costs continue to rise at double-digit rates, and quality is far from optimal. One proposal for fixing health care markets is to eliminate provider networks and encourage informed, financially responsible consumers to choose the best provider for each condition. We argue that this "solution" will lead our health care markets toward even greater fragmentation and lack of coordination in the delivery system. Instead, we need markets that encourage integrated delivery systems, with incentives for teams of professionals to provide coordinated, efficient, evidence-based care, supported by state-of-the-art information technology.

MERICANS ARE DISSATISFIED WITH THEIR health care system—its soaring costs, quality deficits, and growing numbers of uninsured people. Competition is a widely recommended cure for such ills, but there is disagreement over the appropriate nature of competition: Should it be among integrated systems of care, as we have long advocated under the managed competition framework? Or should it be among individual providers and highly specialized groups, as advocated by some proponents of the "consumer-directed," wide-choice products that are gaining in popularity?

In this paper we argue that the nature of competition affects the quality of the health care delivery system and that competition among systems of care is the best way to encourage high quality and efficiency. We begin by describing what we see as the best health care market model. We then contrast this with a 2004 proposal by Michael Porter and Elizabeth Teisberg in which they recommend competition at the individual provider level. We argue that their proposal leads us in the opposite direction from the type of markets we need: those that encourage the for-

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mation of high-quality, efficient, integrated delivery systems. We conclude by describing a path to a better competitive framework.

### **Competition Among Integrated Delivery Systems**

There is more to safe, appropriate, affordable health care than what is evident to a patient in an encounter with an individual provider. We need systems to ensure that health care providers are carefully selected, trained, and proficient in the specific diagnosis and treatment needed by the patient; deployed in the appropriate numbers and specialties to meet a population's needs efficiently; current on evidence-based practice and supported by tools (such as monitoring and reminders) to overcome widespread practice variations and quality failures; supported by a complete, up-to-date, and accurate medical history of each patient; supported by teams of colleagues sharing goals, work processes, and information and able to coordinate care across multiple settings; supported by a system that records test results, diagnoses, and treatments and transmits orders accurately; practicing in facilities with equipment selected based on evidence of safety and efficacy; and supported financially and logistically to participate in common efforts such as guideline development and pharmacy and therapeutics committees, which are important for evidence-based practice.

In short, as the Institute of Medicine (IOM) argued in Crossing the Quality Chasm, reform of U.S. health care needs to be based on delivery systems.<sup>3</sup> In this paper we refer to "integrated delivery systems" (IDSs), which are built on the core of a large, multispecialty medical group practice, often with links to hospitals, labs, pharmacies, and other facilities and often with a sizable amount of revenue based on per capita prepayment. Examples of IDSs include health plans such as Kaiser Permanente, HealthPartners, and Group Health Cooperative, and medical groups such as the Cleveland Clinic, the Mayo Clinic, and Geisinger Health System. Members of the American Medical Group Association that are or could become (under appropriate market conditions) IDSs care for more than fifty million Americans.<sup>4</sup>

What are the characteristics of the IDSs that form the basis of the IOM's vision for reforming health care? And if, as the IOM argued, systems, not individuals, are the best locus of accountability for health care quality, how can market competition support their formation? We believe that the health care market should be based largely on risk-adjusted prepayment and consumer choice of IDSs. The systems themselves would have the following characteristics: processes to ensure the provision of appropriate, evidence-based care; the full spectrum of care coordination; use of comprehensive, shared patient records; and the ability to improve efficiency on a large scale.

■ **Prepayment.** Per capita prepayment, in competition to attract premium-sensitive subscribers, is a powerful tool for aligning providers' incentives with patients' interests in choosing high-quality, affordable care. Prepayment rewards doctors for keeping patients healthy, for solving their problems in economical ways, and

"Properly aligned financial incentives can lead to a greater focus on quality as a system property."

for avoiding errors. It encourages superior ambulatory care for patients with chronic conditions, thereby reducing their need for hospitalization.<sup>6</sup> In contrast, the fee-for-service (FFS) payment system gives doctors powerful financial incentives to do more (and more costly) procedures, which may not be in patients' best interests, financially or clinically.

Further, a system prepaid for total costs can examine the full spectrum of care to find opportunities for cost reduction, not just shifting costs to other parts of the system. For example, a prepaid delivery system can evaluate new technologies for their cost-effectiveness and impact on quality and can deploy them as needed in the hands of proficient personnel. It can match resources to the needs of the population, including making decisions about services for which referral to high-volume centers of excellence is appropriate.

Properly aligned financial incentives can also lead to a greater focus on quality as a system property. Prepaid (and partially prepaid) IDSs are far ahead of small groups and individual doctors in the use of quality-enhancing decision support tools, disease registries, guidelines, automated reminders, performance feedback, patient self-management, linkages to community resources, and electronic medical records (EMRs).<sup>7</sup>

■ Other characteristics. Appropriate care. As noted, risk-adjusted prepayment should go hand in hand with IDSs that possess a number of characteristics. The first of these is a process to ensure the provision of "appropriate" care—the right intervention for the right person at the right time and in the right setting. To achieve appropriateness, a delivery system must encourage the development of teams focused on the patient, rather than on the particular procedure each doctor happens to do. RAND Health and others have documented the delivery of a great deal of inappropriate care, as well as a failure to deliver care that is known to be appropriate and effective. Also, John Wennberg and colleagues have documented wide variations in health care practices among different communities.

Individual doctors face an insuperable challenge keeping up with medical science and the professional literature to determine what is appropriate. The diffusion of best practices takes many years, as more than 10,000 randomized controlled trials are published annually. To make sense of this avalanche of information, providers need qualified professionals to develop guidelines. According to Donald Berwick and Sachin Jain of Harvard Medical School, "To accomplish this requires support systems that can (1) find the science, (2) embed the science in sound standards of practice, (3) make the relevant knowledge available to clinicians and patients at the point of care and at the time of care, and (4) track performance and improve it continually. In development of these systems, prepaid group

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practices are at the forefront." Examples of systems that have institutionalized processes for turning evidence into practice guidelines include Kaiser Permanente's Care Management Institute; the Quality Enhancement Initiative of the Veterans Health Administration; and the Institute for Clinical Systems Improvement, a collaborative of six health plans in Minnesota.

Coordinated care. The second important characteristic of IDSs is that they coordinate the full spectrum of care: at home, in the doctor's office, and in the hospital inpatient and outpatient settings. Providers must be able to deliver care in the least costly appropriate setting, considering total system costs, not just costs (and revenues) associated with one setting. IDSs can engage in this type of planning in a way that disaggregated providers cannot. For example, in an integrated system, it makes both clinical and financial sense to use a more costly drug that reduces the need for hospitalization. In the nonintegrated setting, such action would benefit the patient and the pharmacy but harm the hospital.

Furthermore, patients must be followed and resources transferred smoothly among settings as needs change. Doctors who see their patients in their offices must know what tests and procedures were done in the hospital and by other providers. The competing financial interests in the nonintegrated sector make such seamlessness difficult, if not impossible.

Shared information. A third desirable delivery system characteristic is a foundation of shared, comprehensive patient records. Large prepaid group practices (PGPs) and multispecialty groups have long maintained such records, giving providers a timely, accurate picture of each patient's health history and facilitating research on practice patterns. They are now converting these paper records to electronic formats, opening up tremendous possibilities for better research and convenient support tools for caregivers.<sup>12</sup>

Large-scale efficiency improvement. The fourth desired delivery system characteristic is an ability to drive efficiency improvement and cost containment on a large scale, not just in a few regional or specialty centers. In the seminal RAND Health Insurance Experiment, total per capita costs (premium and out of pocket) were 25–30 percent lower in PGPs than in FFS practice.<sup>13</sup> Although market conditions have changed since the study, PGPs generally remain less expensive or have richer benefits than FFS-based preferred provider organizations (PPOs) and indemnity plans.<sup>14</sup> If there were real competition among delivery systems to produce value for money, the cost advantage of IDSs would likely be greater.

**■ Empirical research.** We have enumerated the theoretical reasons to expect large IDSs and multispecialty group practices to provide higher-quality care than disaggregated providers can. However, there is also a growing body of empirical research that supports this notion.

Regarding use of recommended care processes, Lawrence Casalino and colleagues found that a medical group's increased size and affiliation with a hospital or health system were significantly associated with increased use of recommended

care management processes for the chronically ill.<sup>15</sup> Stephen Shortell and Julie Schmittdiel found that even among large medical groups, prepaid multispecialty groups were more likely than others to use care management processes.<sup>16</sup> A 2004 survey of California physicians found that those in the Permanente Medical Groups have adopted system-level care management tools to a much greater degree than physicians in independent practice associations (IPAs) or "cottage-industry" practices. Kaiser's two group practices in California were more likely to use care management processes and financial incentives linked to quality of care and patient satisfaction than were IPAs, solo practitioners, and other group practices.<sup>17</sup>

Regarding the use of information technology (IT), Casalino and colleagues also found that organized delivery systems are more likely than independent, FFS providers to have both the financial incentives and access to the capital to invest in clinical information systems. Anne-Marie Audet and colleagues found that the predominant factor affecting use of clinical IT is practice size. Eighty-seven percent of physicians in large group practices have electronic access to test results, compared with 36 percent of physicians in solo practice. Other information technologies follow a similar pattern. Physicians in large group practices are more likely than solo practitioners to use EMRs, receive electronic drug alerts, use email to communicate with colleagues and patients, and practice in a "high-tech" office (as defined by the survey). How doctors are compensated also affects use of IT, with 34 percent of salaried physicians working in a high-tech office, compared with 17 percent of nonsalaried ones.

Regarding the use of care teams, a 2002 survey of California physicians found that Kaiser Permanente physicians are more likely to work in interdisciplinary teams than physicians working in IPAs and other types of managed care networks. Regarding the ability to measure performance and outcomes, Casalino and colleagues' research supported the commonsense notion that large groups of physicians are better able than physicians in smaller groups or solo practice to monitor clinical performance and implement clinical protocols. <sup>21</sup>

The body of research regarding the performance of different forms of physician organization is growing.<sup>22</sup> A formal analysis of this work would help inform the debate about the most appropriate structure for improving quality for different types of conditions (acute versus chronic) and settings (rural versus urban).

#### **Individual-Level Competition**

Much of the public discourse about health reform focuses on the notion of empowered consumers accepting greater responsibility for the cost of their care in exchange for more control over where, how, and by whom it is delivered. Some believe that such consumers are best supported by a market in which their choices are unfettered by network boundaries—in other words, a market that encourages competition among individual providers, rather than among comprehensive systems.

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One version of this market model was put forward prominently by Michael Porter and Elizabeth Teisberg in 2004.<sup>23</sup> They argued that competition takes place at the wrong level: the level of health plans, networks, and hospital groups. They believe that value is added only at the level of diagnosis and treatment of individuals' diseases, and that is where competition should take place.

They summarize the failings of our current markets as follows: "Instead of competing to increase value at the level of individual diseases or conditions, the players in health care have entered into four unhealthy kinds of competition.... One is the annual competition among health plans to sign up subscribers. Because of strong network restrictions, however, signing up for a health plan blocks most of the competition at the level of diseases and treatments." They go on to say that "under positive-sum competition, all restrictions to choice at the disease or treatment level would disappear, including network restrictions and approvals of referrals." Further, "Some recently proposed reforms will even exacerbate zero-sum competition. For instance, some employer groups advocate 'system to system' competition, in which physicians are forced to commit to one closed network or another. This actually limits competition at the level of diseases and treatments." <sup>26</sup>

They make the following recommendations to employers: (1) Select plans that do not restrict employees' access to treatments or out-of-network providers. (2) Expect from providers information about their experience, use of prevailing standards, and outcomes. (3) Ensure employee access to information on diagnoses and alternative treatments. Share collected information regionally and nationally. (4) Insist that employees be treated by experienced providers. (5) Require a single posted fee for each service. (6) Require one bill per hospitalization or treatment cycle. (7) Eliminate billing of employees by health plans or providers. 27

We believe that competition among IDSs is a more promising approach than the disaggregated, largely solo- or single-specialty group-practice model Porter and Teisberg rely upon. Here, we address their recommendations directly, grouping them into four categories (which necessitated some paraphrasing).

Eliminate network restrictions on choice of providers. Porter and Teisberg believe that networks produce little clinical value and exist only to give health plans and physicians bargaining leverage relative to one another. We think, however, that it all depends on how one defines "network." If one is speaking of independent small-group or solo-practice physicians, then the value is largely as a bargaining unit. If one is speaking of providers sharing common management, practice style, information, and responsibility for a population's health, the value is much greater. If "eliminating restrictive networks" means foreclosing the possibility that consumers would commit annually to receive care from the latter kind of "network" (that is, an IDS), then we cannot support this recommendation.

Further, the elimination of network restrictions is essentially a return to the FFS indemnity system from which government and employers have struggled to escape for the past two decades. (While Porter and Teisberg do not specify a

mechanism by which these nonnetwork providers would be paid, FFS payment dominates indemnity plans and those that allow a wide choice of providers, such as most PPOs.)<sup>28</sup> FFS indemnity compounds the moral hazard inherent in all health insurance by paying providers more for doing more, whether or not more is likely to benefit the patient. As a result, neither patient nor physician is motivated to moderate spending, which leads to unnecessary care and contributes to wide variations in practice patterns (as factors other than clinical value enter into medical decision making).<sup>29</sup> In the past, this model did not lead to competition on quality and value. It led to a level and growth of spending that purchasers found unbearable.

Porter and Teisberg's answer to these failings of the FFS indemnity system—"reasonable copays and large deductibles combined with medical savings accounts [that] would let patients take some financial responsibility for their choices"—is insufficient.<sup>30</sup> Copays give patients some responsibility for the frequency with which they demand doctor visits but leave them insensitive to the costs of services provided during those visits. Deductibles aren't a solution because health care expenses are concentrated among patients whose costs exceed reasonable deductibles. By most estimates, the most costly 30 percent of patients account for 90 percent of total health care spending.<sup>31</sup>

This kind of insurance leaves patients cost-unconscious once they anticipate reaching the deductible or out-of-pocket spending limit. Coinsurance helps, but only to the point where limits on out-of-pocket spending—typical in most health insurance arrangements—are reached. Ironically, though, it is the very people who will exceed these limits (those who need expensive treatments) for whom Porter and Teisberg expect regional centers of excellence to compete on cost and quality.

■ Provide high-quality consumer information about providers' practices and outcomes and about diagnoses and alternative treatments. We agree that this type of information should be available and generally is not. We recognize that it is hard to obtain and communicate, and most patients find it difficult to process. A notable example of the type of information Porter and Teisberg recommend is the series of New York studies on risk-adjusted outcomes for coronary artery bypass graft (CABG) surgery. Risk-adjusted outcome studies have spread slowly, in large part because of provider resistance. The publication of outcomes by some providers has not created market pressure on those who do not report. The leaders of the New York CABG project reported that there was "no movement of patients away from hospitals with high mortality rates."

Two examples illustrate both consumers' and providers' indifference to the available data. First, the most high-profile CABG patient in the nation—former President Bill Clinton—chose to undergo this procedure at New York–Presbyterian Hospital/Columbia University Medical Center in 2004, although this hospital ranked twenty-second in risk-adjusted CABG mortality rates among thirty-six hospitals performing the procedure in the state. The nation of the procedure in the state of the procedure in the state.

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ple, the Pennsylvania Health Care Cost Containment Council published a consumer guide to CABG surgery with risk-adjusted mortality data.<sup>36</sup> In a random sample of 50 percent of Pennsylvania cardiologists, 87 percent said that the guide had little or no influence on their referral recommendations.<sup>37</sup> If referring cardiologists do not use this information, it is unlikely that patients will. Although it is important to provide this kind of information, much more work must be done to make it useable for patients.

■ Insist that employees be treated by experienced providers. On its face, this recommendation is sound. But we believe that Porter and Teisberg mean that patients should not be constrained by network boundaries in choosing the most experienced provider for their condition or procedure. Selective referral to high-volume providers is indeed important for volume-sensitive procedures. However, this recommendation conflicts with their first one ("eliminate network restrictions"), as it is often patients' preference for the local hospital—not network requirements—that sends people to low-volume providers.

Porter and Teisberg also overstate the importance of volume sensitivity to quality. A review of the literature found statistically significant results supporting a volume-outcome relationship in only thirty-six conditions/procedures.<sup>38</sup> There are other ways to ensure that patients go to high-volume providers for volume-sensitive procedures, short of eliminating networks. In fact, an IDS with a defined network is well positioned to determine which procedures should be centralized and then to contract with the most appropriate centers of excellence.

Make billing and pricing more transparent and easier to understand. Again, this recommendation is attractive on its face. Under Porter and Teisberg's proposal, all purchasers would pay the same price for the same service. There would be no discounts for large purchasers and therefore no price discrimination. Although admirable, this proposal is unenforceable. Medical care is the ultimate non-standard product. Moreover, the authors would ask government (Medicare and Medicaid) and employers to forgo large discounts, which they would surely oppose.

The authors also call for "one bill per hospitalization," but they do not provide further explanation. If this is a way to encourage doctors and hospitals to offer fixed, all-inclusive package prices, it is a good idea; it encourages integration and the efficiencies that come from it.

■ Questioning the focus on acute care. Finally, although this is not a response to a specific recommendation, we must address a flaw in Porter and Teisberg's formulation and in the provider-level competitive model generally: the implicit assumption that most of the care people require is acute or episodic and can be sought out from specialty or subspecialty centers of excellence. In fact, about 45 percent of noninstitutionalized Americans have chronic illnesses, and they account for 75 percent of personal health care spending.<sup>39</sup> These people require what the IOM calls "continuous healing relationships" with the same providers over time.<sup>40</sup>

Under a completely free-choice model such as that of Porter and Teisberg, a pa-

tient with diabetes would seek out the best providers for diabetes, and a patient with congestive heart failure would do similarly. Putting aside doubts that ill patients will regularly travel far from home to centers of excellence, the problem remains: Many patients have multiple chronic conditions. In addition, people with chronic illnesses also need primary care. It simply cannot be good medicine for people with multiple chronic diseases to receive primary care and care for each of their conditions in separate locations, with different sets of doctors who don't communicate regularly about the patient.

To be fair, under the provider-level competitive model, one could imagine regional specialty centers that treat a variety of conditions that often coexist with one another (for example, the diabetes center would include experts in hypertension and heart disease). However, this raises the question of whether there are natural limits to the expansion of that expertise that stop short of a fully integrated delivery system. We do not think so.

By focusing on competition among regional specialty centers for what is mostly tertiary care, Porter and Teisberg's model gives short shrift to prevention, primary care, and office-based secondary care (such as obstetrics and dermatology), all of which are important to health maintenance and to detection, treatment, and management of chronic diseases (and which most people want to access close to home). Most health care is local. National referral centers are an important but small part of the total health care system.

#### The Role Of Responsible Consumer Choice

If, as we contend, systems are the best locus of accountability for health care quality and efficiency, then competition should be designed to encourage evolution toward "systemness." This means that the critical driver of competitive markets—informed consumer choice—must be exercised at the delivery system level. However, today's markets are not structured to support system-level choice.

Much of today's competition is among managed care plans with loose networks of independent providers, not among IDSs. These "carrier HMOs" (health maintenance organizations) do not have the common medical management, integration, and leadership that "delivery system HMOs" have. 41 They are necessary transitional vehicles on the road to IDSs. However, market forces are not driving a speedy transition. Why not?

One reason is that the so-called managed care backlash effectively reversed two decades of increasing enrollment in HMOs. From 1987 to 1992, health insurance premiums grew at an alarming rate, leading President Clinton to attempt placing all health care spending under federal controls. When his proposal failed, employers panicked, forcing employees into HMOs with little choice and without visibly transferring to them the savings those HMOs created. Research shows that people without a choice were far more likely than people with a choice to be dissatisfied with managed care. <sup>42</sup> In contrast, experience shows that millions of people in mul-

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tiple-choice arrangements, such as the Federal Employees Health Benefits Program (FEHBP) and the California Public Employees' Retirement System (CalPERS), have chosen HMOs and been satisfied. In those models, consumers' choice of HMOs led to visible personal financial savings.

As a result of the backlash, conventional wisdom now has it that people don't like managed care. The more nuanced truth is that they don't choose managed care when their employers pay practically the full premium of whatever they choose. Then, there is little to be gained financially by accepting a limited provider network. In contrast, when employers pay a fixed-dollar amount and each employee can keep the full savings, experience shows that high percentages of employees choose economical care. For example, 70–80 percent of active employees and dependents covered by the University of California, CalPERS, and Wells Fargo in California choose HMOs.<sup>43</sup>

Another reason markets have not produced competition among IDSs is the widespread employer practice of offering only one insurance carrier, which, in turn, offers only one delivery system (although this is changing; see the discussion of tiered networks below). Seventy-seven percent of insured employees are offered only a single carrier. For a delivery system to market its superior efficiency, it usually needs to be affiliated with its own or a partner carrier. Thus, offering different carriers is a necessary but not sufficient condition for competition among delivery systems. Ten carriers all offering every FFS doctor in town is not competition, nor is one carrier offering three plan designs (HMO, PPO, point of service), all using the same doctors.

Competition to serve whole employer groups on a single-carrier basis has historically resulted in all-inclusive networks. But for these to be effective, carriers must select providers based on quality, efficiency, and willingness to work in teams and with evidence-based guidelines. However, people want to choose their own doctors. In a world of competitive delivery system-based managed care, therefore, people must have a choice among managed care organizations as well as "unmanaged care"—if they are willing to pay the excess cost.

Many small and mid-size employers offer only a single carrier and delivery system because they find it administratively burdensome to offer choices. Furthermore, from the insurers' perspective, smaller employer groups don't provide a stable base for spreading risks and administrative costs. Fearing adverse risk selection, insurers resist "slice" business and offer lower premiums to employers who give them the whole group.

Innovative "exchanges" may ameliorate the problems associated with multiple-choice offerings for small and mid-size employers. For example, California Choice, PacAdvantage, and the Connecticut Business and Industry Association each offer a range of carriers and delivery systems to the employees of small-employer members. 46

Another innovation in exchanges is BENU, now in operation in Seattle and

# "If everyone had a responsible choice, 70–80 percent of employees would choose HMOs that would be closely linked with IDSs."

Portland, and starting up in Washington, D.C. BENU offers employers the convenience of a single source of health insurance, while simultaneously offering employees multiple choices of plan designs and delivery systems from two carriers (Kaiser Permanente or Group Health Cooperative, and CIGNA). BENU uses risk adjustment technology to protect the carriers against uncompensated adverse selection so they do not need to build "selection-risk" margins into their premiums.<sup>47</sup>

Large employers are more likely to offer a choice of delivery systems, but they often do it in a manner that attenuates employees' incentives to choose the most efficient system. Most choice-offering employers contribute a fixed percentage of the premium of the employee's chosen plan or otherwise systematically pay more on behalf of plans that charge more. In 2000 fewer than 10 percent of Fortune 500 employees were offered a choice of carriers and a fixed-dollar employer contribution. In 2004, only 19 percent of covered workers in choice-offering firms received a fixed-dollar employer contribution, regardless of the plan chosen. In this structure prevents efficient delivery systems from taking market share from inefficient ones: If an employer pays 80 percent of the premium, a health plan must reduce its price by five dollars for employees to see a one-dollar price reduction.

Why do employers persist in this policy? Initially, it probably had to do with tax advantages; the employer contribution was tax-free to the employee, an incentive for the employer to pay the whole premium. Now, however, through salary reduction, employees can pay their own share with pretax dollars.

Some employers may fear that a change in their benefit contribution policy will alienate employees. Others see their current contribution strategy as a rough form of risk adjustment, subsidizing higher-cost plans on the assumption that they enroll sicker people. However, with risk-adjustment technology, the extent of adverse selection can be measured and compensatory payments made in the "background" without distorting employees' choices.

Some employers have successfully converted from fixed-percentage to fixed-dollar "defined" contributions, including Stanford, Harvard, the University of California, Wells Fargo, and Hewlett Packard. Their experience is favorable. If everyone had a responsible choice, experience suggests that over time, 70–80 percent of employees would choose HMOs that increasingly would be closely linked with IDSs. These plans would become the mainstream of a health care system that would be more efficient and of higher quality than the disaggregated FFS non-system. Ongoing competition to provide value for money would generate continuing innovation and efficiency improvement.

Although competition among fully integrated delivery systems is the desired state, we do believe there is hope for achieving improved quality outside of such

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systems by moving disaggregated providers in the direction of systemness. In fact, several innovations in the FFS sector are designed to achieve the benefits of systems among less integrated providers. Regional health information organizations (RHIOs), such as the Indiana Health Information Exchange and the Pittsburgh Regional Healthcare Initiative, are prominent examples. These organizations promote the development and use of comprehensive, longitudinal, patient-focused medical records across community providers.<sup>50</sup>

Other examples of ways in which disaggregated providers are moving toward systemness include narrow and tiered-network benefit plans such as those offered by Aetna and UnitedHealthcare. These plans direct patients to providers selected for their quality or cost, or both. "Pay for performance" initiatives, such as the one among California HMOs, are another example of a movement toward systemness. These payment arrangements help make the business case for innovations that support improved quality (for example, use of care management protocols and IT) but are not necessarily reimbursed under FFS. Still another class of examples is disease management demonstrations such as those sponsored by Medicare, designed to motivate teams of providers to focus on chronic illness.

OOSE NETWORKS OF SELECTED, high-performance providers from the FFS, disaggregated sector, supported by these innovations, might serve as transitional vehicles on the road to full integration. But without integration of finance and management, they are unlikely to achieve the performance of IDSs. However, they certainly should be given the same market opportunities as IDSs have

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#### **NOTES**

- A.C. Enthoven, "Consumer-Choice Health Plan," New England Journal of Medicine 298, nos. 12 and 13 (1978): 650–658 and 709–720; A.C. Enthoven, Health Plan: The Practical Solution to the Soaring Cost of Medical Care (Washington: Beard Books, 2002); and A.C. Enthoven and L.A. Tollen, eds., Toward a Twenty-First-Century Health System: The Contributions and Promise of Prepaid Group Practice (San Francisco: Jossey-Bass, 2004).
- 2. M. Porter and E. Teisberg, "Redefining Competition in Health Care," *Harvard Business Review* (June 2004): 65–76.
- Institute of Medicine, Crossing the Quality Chasm: A New Health System for the Twenty-first Century (Washington: National Academies Press, 2001), 31.
- 4. American Medical Group Association, "Who We Are," www.amga.org/WhoWeAre/index\_whoWeAre .asp (28 July 2005).
- 5. It is not necessary for a provider group to receive all of its revenue as prepayment to reap the benefits of this approach. By receiving even a portion of revenue as capitation, a group shows that it is capable of managing costs. Best practices developed for prepaid patients are likely to spill over to fee-for-service patients.
- 6. A.B. Bindman et al., "The Impact of Medicaid Managed Care on Hospitalizations for Ambulatory Care Sensitive Diagnoses," *Health Services Research* 40, no. 1 (2005): 19–38.
- S.M. Shortell and J. Schmittdiel, "Prepaid Groups and Organized Delivery Systems: Promise, Performance, and Potential," in Toward a Twenty-First-Century Health System, 1–21.

- 8. RAND Health, "Assessing the Appropriateness of Care," RAND Health Research Highlights, Pub. no. RB45-22, 1998, www.rand.org/publications/RB/RB4522 (28 July 2005); and E.A. McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," New England Journal of Medicine 348, no. 26 (2003): 2635–2645.
- Center for the Evaluative Clinical Sciences, Dartmouth Medical School, The Quality of Medical Care in the United States: A Report on the Medicare Program, The Dartmouth Atlas of Health Care 1999 (Chicago: AHA Press, 1999); and J. Skinner and J. Wennberg, "How Much Is Enough? Efficiency and Medicare Spending in the Last Six Months of Life," NBER Working Paper no. 6513 (Cambridge, Mass.: National Bureau of Economic Research, April 1998).
- 10. M.R. Chassin, "Is Health Care Ready for Six Sigma Quality?" Milbank Quarterly 76, no. 4 (1998): 565-591.
- D.M. Berwick and S.H. Jain, "The Basis for Quality Care in Prepaid Group Practice," in Toward a Twenty-First-Century Health System, 22–44.
- G.C. Halvorson, "Prepaid Group Practice and Computerized Caregiver Support Tools," in Toward a Twenty-First-Century Health System, 249–263.
- J.P. Newhouse and the Insurance Experiment Group, Free for All? Lessons from the RAND Health Insurance Experiment (Cambridge, Mass.: Harvard University Press, 1994).
- 14. For example, see A.C. Enthoven and B. Talbott, "Stanford University's Experience with Managed Competition," *Health Affairs* 23, no. 6 (2004): 136–140. See Exhibit 1, which shows that in 2004 the Kaiser Permanente annual family premium (age- and sex-adjusted) was 57 percent of the PPO premium. (Note that the benefits were not comparable; the PPO had a deductible, and the Kaiser Permanente plan did not.)
- 15. L. Casalino et al., "External Incentives, Information Technology, and Organized Processes to Improve Health Care Quality for Patients with Chronic Diseases," *Journal of the American Medical Association* 289, no. 4 (2003): 434–441.
- 16. Shortell and Schmittdiel, "Prepaid Groups and Organized Delivery Systems."
- 17. D.R. Rittenhouse et al., "Physician Organization and Care Management in California: From Cottage to Kaiser," *Health Affairs* 23, no. 6 (2004): 51–62.
- 18. Casalino et al., "External Incentives."
- A.M. Audet et al., "Information Technologies: When Will They Make It into Physicians' Black Bags?" Medscape General Medicine 6, no. 4, 7 December 2004, www.medscape.com/viewarticle/493210 (4 August 2005, registration required).
- K. Grumbach et al., California Physicians 2002: Practice and Perceptions, December 2002, www.futurehealth.ucsf.edu/pdf files/Phass2.pdf (28 July 2005).
- 21. L.P. Casalino et al., "Benefits of and Barriers to Large Medical Group Practice in the United States," Archives of Internal Medicine 163, no. 16 (2003): 1958–1964.
- 22. See, for example, A.M. Audet et al., "Measure, Learn, and Improve: Physicians' Involvement in Quality Improvement," Health Affairs 24, no. 3 (2005): 843–853; T. Bodenheimer et al., "What Are the Facilitators and Barriers in Physician Organizations' Use of Care Management Processes?" Joint Commission Journal on Quality and Safety 30, no. 9 (2004): 505–514; K. Chuang et al., "The Clinical and Economic Performance of Prepaid Group Practice," in Toward a Twenty-First-Century Health System, 45–60; R. Li et al., "Organizational Factors Affecting the Adoption of Diabetes Care Management Processes in Physician Organizations," Diabetes Care 27, no. 10 (2004): 2312–2316; R.H. Miller and H.S. Luft, "HMO Plan Performance Update: An Analysis of the Literature, 1997–2001," Health Affairs 21, no. 4 (2002): 63–86; and J. Schmittdiel et al., "The Use of Patient and Physician Reminders for Preventive Services: Results from a National Study of Physician Organizations," Preventive Medicine 39, no. 5 (2004): 1000–1006.
- 23. Porter and Teisberg, "Redefining Competition."
- 24. Ibid., 67-68
- 25. Ibid., 73.
- 26. Ibid., 69.
- 27. Ibid., 75.
- 28. Some degree of prepayment (on a per episode basis, for example) might be compatible with Porter and Teisberg's vision, but they do not provide details about this.
- 29. RAND Health, Assessing the Appropriateness of Care; and Center for the Evaluative Clinical Sciences, The Quality of Medical Care in the United States.

- 30. Porter and Teisberg, "Redefining Competition," 73.
- 31. M.L. Berk and A.C. Monheit, "The Concentration of Health Care Expenditures, Revisited," Health Affairs 20, no. 2 (2001): 9–18.
- 32. E.L. Hannan et al., "Improving the Outcomes of Coronary Artery Bypass Surgery in New York State," Journal of the American Medical Association 271, no. 10 (1994): 761–766.
- 33. P.S. Romano and H. Zhou, "Do Well-Publicized Risk-Adjusted Outcomes Reports Affect Hospital Volume?" Medical Care 42, no. 4 (2004): 367–377. (Note: Their short answer is "no.")
- M.R. Chassin, E.L. Hannan, and B.A. DeBuono, "Benefits and Hazards of Reporting Medical Outcomes Publicly," New England Journal of Medicine 334, no. 6 (1996): 394–398.
- 35. New York State Department of Health, Adult Cardiac Surgery in New York State: 2000–2002, October 2004, www.health.state.ny.us/nysdoh/heart/pdf/2000-2002\_cabg.pdf (28 July 2005).
- 36. Pennsylvania Health Care Cost Containment Council, Pennsylvania's Guide to Coronary Artery Bypass Surgery, 1994–1995, May 1998, www.phc4.org/reports/cabg/95 (28 July 2005).
- E.C. Schneider and A.M. Epstein, "Influence of Cardiac-Surgery Performance Reports on Referral Practices and Access to Care: A Survey of Cardiovascular Specialists," New England Journal of Medicine 335, no. 4 (1996): 251–256.
- R.A. Dudley et al., "Selective Referral to High-Volume Hospitals: Estimating Potentially Avoidable Deaths," Journal of the American Medical Association 283, no. 9 (2000): 1159–1166.
- C. Hoffman, D. Rice, and H.Y. Sung, "Persons with Chronic Conditions: Their Prevalence and Costs," Journal of the American Medical Association 276, no. 18 (1996): 1473–1479.
- 40. IOM, Crossing the Quality Chasm.
- 41. Preface to Enthoven and Tollen, eds., Toward a Twenty-First-Century Health System.
- 42. K. Davis and C. Schoen, "Assuring Quality, Information, and Choice in Managed Care," *Inquiry* 35, no. 2 (1998): 104–114; A.A. Gawande et al., "Does Dissatisfaction with Health Plans Stem from Having No Choices?" *Health Affairs* 17, no. 5 (1998): 184–194; and A.C. Enthoven et al., "Consumer Choice and the Managed Care Backlash," *American Journal of Law and Medicine* 27, no. 1 (2001): 1–15.
- 43. University of California, Human Resources and Benefits, *Quarterly Statistical Report—April 2005, Group Medical Plans* (Oakland: UC, 16 June 2005); California Public Employees Retirement System, *Facts at a Glance: Health*, 13 June 2005, www.calpers.ca.gov/eip-docs/about/facts/health.pdf (28 July 2005); and Sally Wellborn, vice president, Wells Fargo, personal communication, 12 November 2004.
- 44. M.S. Marquis and S.H. Long, "Trends in Managed Care and Managed Competition, 1993–1997," Health Affairs 18, no. 6 (1999): 75–88.
- 45. The Buyers Health Care Action Group (BHCAG) was an exception, an attempt to create competition among care systems. But its survival depended on a stable employer coalition, a condition that could not be fulfilled, given corporate and personnel instability. See J. Christianson and R. Feldman, "Exporting the Buyers Health Care Action Group Purchasing Model: Lessons from Other Communities," Milbank Quarterly 83, no. 1 (2005): 149–176.
- 46. See California Choice, "Our Health Plans," 2003, www.calchoice.com/HealthPlans.aspx (28 July 2005); PacAdvantage, "PacAdvantage Pool," 2005, www.pacadvantage.org/brokers/pool.asp (28 July 2005); and Connecticut Business and Industry Association, "Health Insurance for Connecticut Companies," www.cbia.com/ins/hlt/VR/default.htm (24 August 2005).
- 47. See Testimony of Jeffrey M. Closs, president and CEO, BENU, before the Joint Economic Committee of the U.S. Congress, 24 September 2004, jec.senate.gov/\_files/97228.PDF (28 July 2005), 10–12.
- 48. J. Maxwell and P. Temin, "Managed Competition versus Industrial Purchasing of Health Care among the Fortune 500," *Journal of Health Politics, Policy and Law 27*, no. 1 (2002): 5–30.
- Henry J. Kaiser Family Foundation and Health Research and Educational Trust, Employer Health Benefits: 2004 Survey, Pub. no. 7418 (Menlo Park, Calif.: Kaiser Family Foundation, 2004).
- C.A. Sirio et al., "Pittsburgh Regional Healthcare Initiative: A Systems Approach for Achieving Perfect Patient Care," Health Affairs 22, no. 5 (2003): 157–165; and J. Andrews, "Blame It on RHIOs," Healthcare IT News, July 2005, www.healthcareitnews.com/NewsArticleView.aspx?ContentID=3018&cContentType (28 July 2005).
- 51. See Integrated Healthcare Association, "Pay for Performance," www.iha.org/lhaproj.htm (24 August 2005).