Organizing and Managing Care in a Changing Health System

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Objective. To examine ways in which the management and organization of medical care is changing in response to the shifting incentives created by managed care.
Data Sources. Site visits conducted in 12 randomly selected communities in 1996/1997.
Study Design. Approximately 35–60 interviews were conducted per site with key informants in healthcare and community organizations; about half were with providers.
Data Collection. A standardized interview protocol was implemented across all sites, enabling cross-site comparisons. Multiple respondents were interviewed on each issue.
Principal Findings. A great deal of experimentation and apparent duplication exist in efforts to develop programs to influence physician practice patterns. Responsibility for managing care is being contested by health plans, medical groups and hospitals, as each seeks to accrue the savings that can result from the more efficient delivery of care. To manage the financial and clinical risk, providers are aggressively consolidating and reorganizing. Most significant was the rapid formation of intermediary organizations, such as independent practice arrangements (IPAs), physician-hospital organizations (PHOs), or management services organizations (MSOs), for contracting with managed care organizations.
Conclusions. Managed care appears to have only a modest effect on how healthcare organizations deliver medical care, despite the profound effect that managed care has on how providers are organized. Rather than improving the efficiency of healthcare organizations, provider efforts to build large systems and become indispensable to health plans are exacerbating problems of excess capacity. It is not clear if new organizational arrangements will help providers manage the changing incentives they face, or if their intent is to blunt the effects of the incentives by forming larger organizations to improve their bargaining power and resist change.

Key Words. Hospitals, physicians, managed care, integrated delivery systems

Managed care appears to be having only a modest effect on the way in which healthcare organizations deliver medical services despite the profound effect of managed care on provider organization. The rapid growth of intermediary organizations designed for contracting with managed care organizations

seems to be adding another administrative layer to the health system, but it is not yet resulting in a more efficient healthcare delivery system. At the present time, the "revolution" in healthcare is related more to the business of healthcare than to its actual delivery.

These are the findings from a series of site visits that were conducted in 1996/1997 to 12 different communities across the country (Kemper, Blumenthal, Corrigan, et al. 1996). This article describes ways in which the closely linked organization and management of care are changing across these study sites. The growth of managed care has altered payment methods to providers to put the provider at risk for service use, a change that has created incentives for greater coordination of care and attention to population outcomes (Robinson and Casalino 1996). These shifting incentives also have demanded the reorganization of care delivery. Larger medical groups and linkages between hospitals and physicians have the potential to make available a continuum of care and to create the infrastructure for tracking costs and outcomes of care. The effective management of care is difficult to accomplish without an efficiently organized delivery system; however, the presence of an organized delivery system does not automatically result in improvements in the management of care.

This study is unique in two respects. First, unlike most qualitative analyses that select a study site because of a particular characteristic or event, this study used a random process to select a cross-section of sites that are more representative of the changes happening across the nation (Metcalf et al. 1996). Second, the focus is on local communities. Although many firms operate in the health system nationally and regionally, the delivery of healthcare essentially happens in a local setting. Therefore, understanding health system change requires an understanding of local dynamics and variation.

Three areas are covered in this article. The first section describes the organizational changes being undertaken by providers, primarily the arrangements between hospitals and physicians to facilitate contracting with managed care plans. The second section describes efforts being undertaken

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to manage the delivery of medical services to patients through the use of financial incentives and nonfinancial mechanisms. Hospitals, health plans, and medical groups are all building the programs and information systems to monitor costs and manage utilization more effectively and to accrue the savings that can result from more efficient delivery of care. The third section examines whether or not the organizational changes and care management efforts appear to be making a difference in terms of producing a more efficient care delivery system.

METHODS

Site visits were conducted to 12 randomly selected metropolitan areas from May 1996 to mid-April 1997. Each visit consisted of approximately 35–60 interviews. Approximately half of the total number of interviews at each site were conducted with different types of providers, including hospitals, physician groups where present, medical society and hospital associations, and community health centers. In provider organizations and health plans, efforts were made to interview both an administrative leader and a medical leader.

This study examined communities that varied in population size, area of the country, and composition of the local health system (Table 1). The local health systems ranged from having a low of 1.8 beds per 1,000 population in Seattle to a high of 5.3 beds per 1,000 population in Little Rock. Similarly, the supply of physicians per capita was lowest in Greenville at 1.3, and highest in Boston at 2.3. For-profit hospitals were located in eight of the sites: Boston, Cleveland, Greenville, Indianapolis, Little Rock, Miami, Orange County, and Phoenix. However, it was only in Miami that they owned a substantial proportion of the beds. Academic medical centers (AMCs) were present in Boston, Cleveland, Indianapolis, Little Rock, Miami, Newark, Orange County, Seattle, and Syracuse; no AMCs were present in Greenville, Lansing, or Phoenix (Association of American Medical Colleges 1997).

CONCEPTUAL FRAMEWORK

The growth of managed care inserts greater price competition among providers as they vie for contracts to get patients (Miller 1996). It is assumed that this greater competition will lead to lower prices and the development of more efficient production processes (Robinson and Luft 1987). Capitation payment methods, in particular, put providers at risk for service use, creating incentives

Table 1: Study Sites

Region	*Site*	*Population**	*Hospital Beds per 1000 Population*†	*Physicians per 1000 Population*‡
East	Boston MA	4,335,694	3.05	2.28
	Syracuse NY	750,090	2.94	1.53
	Newark NJ	1,936,096	4.42	1.85
South	Greenville SC	884,306	3.03	1.31
	Little Rock AR	543,568	5.28	2.06
	Miami FL	2,031,336	3.94	2.24
Midwest	Cleveland OH	2,224,974	3.68	1.96
	Lansing MI	437,633	2.29	1.98
	Indianapolis IN	1,476,865	3.40	1.75
West	Phoenix AZ	2,563,582	2.31	1.54
	Orange County CA	2,563,971	2.38	1.85
	Seattle WA	2,197,451	1.82	1.94
Metropolitan areas with population over 200,000			3.04	1.82

*U.S. Bureau of Census (1996).

†American Hospital Association, 1995 Annual Survey of Hospitals database (1996). Based on staffed beds in community hospitals.

‡1996 American Medical Association Master File and 1996 American Osteopathic Association Master File. These include nonfederal physicians in direct patient care, excluding anesthesiology, pathology, and radiology, and residents and fellows.

to re-engineer clinical processes to manage both the costs and outcomes of care for enrolled populations (Miller and Luft 1997).

These changes produce two distinct responses by healthcare organizations: (1) the building of organizational arrangements and partnerships for contracting with managed care organizations, and (2) the building of internal systems to manage care to actually affect healthcare costs and medical practice. While both activities could be developed simultaneously, there is likely a sequential order to the development. The first stage assembles the pieces of a local delivery system, while the second stage tries to make the pieces of the system work together (Miller 1996).

Organizational innovation is designed to gain greater leverage in contracting and economies of scale for resource management. The creation of intermediary organizations aims to bring together partners for contracting yet still permit each partner to remain independent. It also allows variation in use to be managed over a large base of volume (Hillman 1991). Independent practice associations (IPAs) bring together physicians in community practice with

the IPA performing the administrative and contracting functions, but without owning the practice as in a traditional medical group (Robinson and Casalino 1996). Management services organizations (MSOs) provide management services to physician practices, including billing, record-keeping, and contract negotiations (Physician Payment Review Commission 1997). Physician-hospital organizations (PHOs) are formed for hospitals and physicians jointly to obtain managed care contracts. The American Hospital Association annual survey differentiates between open PHOs, which have no restrictions on who may join, and closed PHOs, which have entry restrictions.

Once there is a means for the partners to obtain contracts, systems for managing care are implemented through projects for developing practice standards, creating aligned financial incentives within the arrangements, and building the information infrastructure to coordinate services in a system of care. Whereas the organizational arrangements create a structure that enables the partners to come together, care management represents the creation of systems that help the partners work together and function as a unit by sharing information and allocating resources.

Mechanisms for managing care fall into two general categories: financial incentives and nonfinancial mechanisms, or "rules" (Hillman 1991; Iglehart 1992). Financial incentives include various forms of risk sharing, including capitation and the use of withholds or bonuses (Gold, Hurley, Lake, et al. 1995; Blumenthal 1996; Conrad 1993). The more services covered under a single payment, the stronger the economic incentive for a closer relationship between providers in the continuum of care (Conrad 1993). Nonfinancial, or administrative, mechanisms to manage care include a wide number of techniques that can be used to improve, control, or influence the delivery of care to patients. These can include quality assurance programs, clinical practice guidelines, utilization management, and other quality improvement programs (Gold, Hurley, Lake, et al. 1995; Blumenthal 1996). Many of these programs rely on the collection, aggregation, and use of information and feedback to alter practice patterns.

The remainder of this article describes the findings obtained on the site visits.

ORGANIZATION OF CARE

The key finding across all of our study sites was the organizational turmoil and rapid development of new provider arrangements to manage the financial

incentives and nonfinancial mechanisms. Most were related to hospital-physician arrangements and the growth of intermediary organizations, such as independent practice associations (IPAs), physician-hospital organizations (PHOs), or management services organizations (MSOs). It is not clear if these organizations are being formed to manage the financial incentives placed on providers by managed care, or if their intent is to blunt the effects of the incentives by forming larger organizations that can resist change. Another possibility is that organizations pursue both strategies simultaneously: adapting to the incentives they face today and becoming larger in an effort to resist future changes or to have more control over them. That is, their motives are mixed.

Horizontal Consolidation

Hospital consolidation was happening rapidly across all study sites. In 10 of the 12 markets, over 50 percent of the volume was captured by the top four hospitals or hospital systems (Table 2). Lansing was evolving into a market with two competing systems. Despite the attention in the trade press to activities of the national, for-profit firms, their acquisitions were limited relative to mergers among local firms. For example, in Cleveland, Columbia/HCA acquired three local hospitals (a total of about 650 beds), whereas the Cleveland Clinic Foundation acquired two local hospital systems (a total of almost 1,500 beds) (Healthcare InfoSource, Inc. 1997).

Compared to the rapid pace of hospital consolidation that has already occurred, physician organization has lagged, although the pace is reportedly accelerating. Many physicians continue to practice in one-to-two-person arrangements (Table 2), with Orange County, Newark, and Miami having the highest percentage of physicians in small practice. However, information obtained during the site visits suggests that although the survey figures look similar, the organization of practice in these areas is actually quite different. The high percentage in Orange County is consistent with the prevalence of IPAs in that area as a mechanism for physicians to organize while remaining in solo or small group practice, whereas the high percentage in Newark and Miami reflects a reported general lack of physician organization.

There is no apparent pattern between hospital consolidation and physician consolidation in these sites, and no evidence from these data that the two are moving in concert.

Table 2: Delivery System Consolidation by Study Site

Site	*Hospital Four-Firm Concentration Ratio**	*Percentage of Physicians in One- or Two-Person Practices†*
Lansing MI	100	28
Greenville SC	76	28
Miami FL	76	58
Little Rock AR	71	35
Syracuse NY	71	34
Indianapolis IN	65	26
Orange County CA	62	59
Cleveland OH	59	35
Seattle WA	57	35
Phoenix AZ	51	45
Newark NJ	47	59
Boston MA	37	33

**Source:* American Hospital Association, *1996 Annual Survey of Hospitals*, Chicago (1997). Represents the percentage of total adjusted patient days captured by the top four hospitals or hospital systems.

†*Source:* Community Tracking Study. The remainder of physicians are in larger groups or are employed by an HMO, medical school, or hospital.

Hospital-Physician Arrangements

Hospitals were aggressively developing organizational arrangements with physicians to accomplish a virtually uniform strategy of "indispensability" with the goal of building a larger organization with geographic coverage and a large base of primary care physicians. A delivery system becomes indispensable if health plans have no choice but to contract with the system. And because it is indispensable, the delivery system gains increased leverage in negotiations. Building a primary care base is important because managed care plans need to contract with primary care physicians; if the hospital can forge links with primary care physicians, the hospitals can ensure their place at the negotiating table. The delivery system also seeks to provide as comprehensive a range of services as possible in order to retain referrals and to manage care within its own system rather than referring it out.

The most common strategies for hospital-physician alignment were practice acquisition or the formation of new organizations in which the hospital and physician were expected to function as partners in the marketplace.

For several reasons, however, practice acquisition has been de-emphasized recently by some hospitals as an approach for physician integration.

First, hospitals have cited a loss of productivity because of the perception that physician behavior changes when they move into employment arrangements. This could reflect the occurrence of hospitals acquiring practices without creating the incentives to integrate physicians into the system. Second, competition among buyers has resulted in very high asking prices and a bidding war for primary care practices. Third, after purchasing a few practices, some hospitals have found that continuing the strategy requires a significant amount of capital, making acquisitions slow to accomplish, whereas contractual arrangements can be executed faster.

PHOs were commonly found across all markets, although the function of such organizations varied a great deal. The formation of PHOs was generally initiated by hospitals, which targeted physicians on the medical staff. In some cases the PHOs were able to negotiate contracts that included inpatient care and accepted full risk, as in Indianapolis. In Syracuse, one PHO "coordinated" contracting (i.e., the hospital and physicians executed separate contracts, but negotiations were done in concert), and the PHO played a significant role in directing the quality assurance/utilization review (QA/UR) activities at the hospital and shared in the savings accrued.

In most markets, however, the PHOs were generally organized loosely and had few contracts. Characteristic of open PHOs, barriers to physician entry were generally low, allowing physicians to join individually and at a low price that made it easy to enter several PHOs in a single market. These overlapping memberships diminished the PHO's impact as an entity for the organization of hospitals and physicians into a cohesive delivery system. From the hospital's perspective, the importance of the PHO to an overall market strategy was not clear, because little investment was usually made in them in terms of human or financial resources. From a physician's perspective, a PHO may be little different than any other IPA, with the exception of the added hospital–medical staff politics involved.

DEVELOPING SYSTEMS TO MANAGE CARE

Our site visits resulted in two key findings about care management. First, a great deal of experimentation and apparent duplication have occurred in efforts to develop programs that are designed to influence physicians' clinical decisions and practice patterns. These are being implemented by health plans, medical groups, hospitals, and intermediary organizations. Second, responsibility for care management is being contested by these same parties. In part,

the contest for clinical control reflects competition for the premium dollar and the potential to accrue the savings by bringing down utilization and costs (Grossman 2000). But it also reflects uncertainty regarding the appropriate application of care management techniques to influence physician behavior.

Use of Financial Incentives

Despite the widespread attention capitation has gathered and extensive positioning by providers in their efforts to assume financial risk, our survey respondents generally reported relatively little use of capitation. This perception is reinforced in data from the physician survey section of the Community Tracking Study. These data show that, on average, 94 percent of physicians are in practices that receive at least some revenue from managed care generally; 54 percent of physicians are in practices that receive at least some revenue specifically from capitation; and among those practices with capitated revenue, capitation accounts for only 25–30 percent of total practice revenues (Lake and St. Peter 1997; Ginsburg 1997). This suggests that although many physician practices are being affected by managed care, fewer are affected by capitation and, even among those, the majority of their practice revenues come through other payment mechanisms.

When capitated payments were made to a medical group or intermediary organization, we found that separate or joint risk pools may have been set up for hospitals and physicians. Hospitals and physicians may have received payments separately or, alternatively, one amount was paid into a shared risk pool and the providers in that risk pool determined the proportion of moneys to allocate among primary care physicians, specialists, and the hospital. In Orange County, it was quite common to have separate risk pools created for hospitals and physicians. However, the physicians also shared in the hospital risk pool, putting them at risk for hospital utilization (and gaining from reductions in use) even though separate risk pools existed for physicians and the hospital.

Although examples of providers that assumed full risk could be found in almost every market, these generally were isolated examples and were not very common except in Indianapolis and Orange County. In Indianapolis, capitation was reportedly low, but was for full risk through the site's physician-hospital organizations (PHOs). Full-risk contracts were relatively more common in Orange County. These were implemented through contractual arrangements among hospitals, physicians, and health plans that were written to comply with California's HMO laws. (These are laws that permit

providers to assume risk only for those services they are licensed to provide unless they obtain a limited HMO license known as a Knox-Keene license.)

Use of Nonfinancial Mechanisms

Traditional UR or QA programs were in place at hospitals and health plans in all markets. Insurers and health plans typically offered at least one gatekeeper HMO product, and survey data show that 91 percent of primary care physicians reported serving as a gatekeeper for at least some of their patients (St. Peter 1997). Healthcare organizations were continuing these efforts in the belief that they were maintaining recent achievements in care delivery, such as reductions in length of stay or shifts in the provision of services to an outpatient setting, or both.

At the organizational level, a wide range of care management programs were being developed to reduce variation in practice and standardize it to agreed-upon and cost-effective norms. These programs were usually information-based efforts that aggregated data and looked for patterns. They explicitly or implicitly defined best practice by using the information for benchmarking or developing practice guidelines. A great deal of experimentation is under way in these efforts, but the most commonly mentioned technique was physician profiling.

Physician profiling was used to identify outliers and to reduce variation in practice patterns. The more comprehensive efforts were made by insurers in Seattle, Little Rock, and Cleveland. In Seattle, Regence Washington Health (formerly King County Medical Blue Shield) implemented a product in which the provider panel was initially composed of the top 40 percent of physicians based on profiles of use and cost. Because almost all physicians in the area were under contract with the plan, this profiling system affected virtually the entire community of physicians. Across our study sites, concerns voiced by providers about profiling efforts in general related to a lack of adequate risk adjustment; an emphasis on resource use rather than on outcomes or more direct measures of quality; and, for some, a focus on inpatient care and on the inability to track across treatment settings over the course of an illness.

Organizations that assumed full risk were more likely to assume responsibility for care management as well. For example, in Orange County, medical groups that reportedly received more capitated revenues appeared to implement more rules to preserve the group's viability. In addition, the full-risk systems usually used rewards rather than punitive measures to motivate change in practice behaviors. Regence Washington Health used its profiling

system to select physicians into the provider panel for a new product. In Cleveland, Anthem used physician profiling results to determine whether or not a physician received an add-on to the per member per month rate. Medical groups in Seattle and Orange County linked patient satisfaction results, utilization, and other measures to physician bonuses.

On the other hand, hospitals were more likely to use care management primarily for information and education, on the assumption that the provision of information would be sufficient to motivate change. Competition for physicians and inpatient volume likely contributed to the reluctance of hospitals to implement any actions that had the risk of alienating physicians.

The Contest for Control of Care Management

It is not yet clear if responsibility for care management will fall primarily onto the insurers and health plans, or if it will be carried out jointly by insurers and providers. The contest for managing care reflects the desire to gain the benefits from the potential savings that can be achieved. Three factors are likely to affect this contest: which party retains risk for service use, which party is able to collect the information needed to track patients across different settings of care and over time, and which party can directly influence the way in which care is delivered to patients.

To the extent that health plans increasingly delegate financial risk, providers are likely to take on the responsibility for care management, as already noted. However, in these study sites, health plans—even when they delegated risk—retained an oversight role to collect the information required to maintain accreditation status, to monitor the capability of groups to manage financial risk, and to pull the delegated responsibility back when problems arise. This suggests some level of joint responsibility.

From an informational viewpoint, insurers and health plans have the advantage compared to the providers. Because of the nature of the information they collect, especially if they are processing claims, they are more able to track patients across different settings of care and over time. Providers typically are unable to track use and costs outside of their own setting.

However, plans tend to have broad networks and to form contracts with many physicians and hospitals in a market (Grossman 2000). As a result, they may have very few patients with any given provider, especially physicians, and therefore may have difficulty evaluating performance information, analyzing patterns of care, and influencing care delivery. Provider systems may be in a better position to influence the delivery of care more directly, but they are only in the beginning stages of building the systems to do so.

EASE OF BUILDING THE SYSTEM COMPARED TO MANAGING CARE

Based on this first round of site visits in the Community Tracking Study, it was evident that a great deal of organizational change was taking place, with new arrangements and partnerships being attempted with varying degrees of success. However, changes that can affect the delivery of care by these organizations are happening more slowly.

The organizational changes taking place today appear to focus primarily on merging the business functions of healthcare organizations but not their clinical activities. Hospital mergers may have centralized finance and administration, but typically they have left the medical staffs and clinical programs untouched. One five-hospital system merged its administrative and financial activities across its institutions but retained separate medical staffs, each operating within its own rules. In Boston, two large systems formed, and one was putting a great deal of effort into combining academic and clinical programs as well as financial operations; however, the other was not. Thus, even in the same markets, the systems are making different decisions on ways to implement the mergers. The reasons cited for combining or not combining functions related to the difficulties of blending different corporate cultures, the goal of the new system to increase market share and leverage with health plans, and the anticipation that operating efficiencies would come later. In some cases, new systems may have been so large and geographically dispersed that combining business activities made sense but combining clinical activities (such as consolidating clinical services) did not.

One of the most striking characteristics of the efforts to reconfigure and manage care was the excessive duplication found. In terms of care management, rather than improving coordination, it almost seemed as if every hospital, physician group, and health plan was developing its own practice guidelines and profiling systems. The same was also true for information systems, which were being developed in ways that made separate parts of an "integrated" delivery system unable to speak to each other. (In one particular case, a hospital was putting in its own information systems while its affiliated medical group was installing its own separate system, rendering the two systems totally incompatible.) Such duplication will affect the ability of systems to monitor costs and utilization effectively for populations that use services across different settings and over an extended period of time. It may also signal a weak commitment to the partnership. Joint efforts require a long-term commitment and a degree of stability if they are to undertake the

human and capital investments necessary for managing care and reengineering care processes. The pace of organizational change and the formation and dissolution of various arrangements suggest that it may be some time before more stable partnerships can develop.

The duplication of efforts also results in an information overload, especially for physicians receiving large amounts of data from multiple sources. Physicians may respond to information that has the potential to improve quality, but health plans and hospitals have reportedly been "falling all over each other" to provide such information, running the risk of being both duplicative and in conflict.

If one of the goals of reorganization was improved efficiencies, little evidence—in terms of hospitals, at least—was found of their making the "hard decisions" to close facilities, reduce beds, or eliminate duplicative services, although some exceptions were identified. Hospital closures occurred in Seattle and Newark; however, Little Rock continued to add hospitals, despite having a bed-to-population ratio that exceeded the national average by more than 50 percent and an occupancy rate of 61 percent. Despite a number of mergers, hospitals in Orange County still operate at an average occupancy of less than 50 percent (American Hospital Association 1996).

Evidence also pointed to increased competition among health systems as a factor that may even have encouraged duplication of services as the developing systems endeavored to expand services in order to retain all volume within their own system of care rather than refer it out. In Greenville, one hospital opened a new obstetric unit in 1995, after having closed its original OB unit in 1977. This hospital perceived that managed care organizations wanted to enter into contract with full-service hospitals and that its lack of obstetric services made it fall short. While, theoretically, some duplication is necessary to create competition, duplicated services can also exacerbate problems of excess capacity.

DISCUSSION

At least two possible explanations can be given for the speed of organizational change yet slowness of change in care delivery. First, providers may be in the early stages of system development. That is, although we observed the initial formation of the local delivery systems—with consolidation, vertical arrangements between hospitals and physicians, and formation of new intermediary organizations—the work of making these entities function as coordinated

systems of care is still to come. This explanation would be consistent with the findings of other researchers. Shortell's multi-year study of 11 organized delivery systems found generally low levels of clinical integration and slow progress over time. The slow progress was attributed to the complexity involved in reorganizing people, processes, technologies, and practices (Shortell, Gillies, Anderson, et al. 1996). Similarly, Zelman (1996) found that few organized delivery systems had successfully achieved clinical integration, particularly the loosely organized arrangements most commonly identified in our study sites, such as PHOs, IPAs, and MSOs.

This early phase of organizational innovation may still be too unstable in many markets. As one physician commented, the system "can't look at things like integration until some time after a merger is completed and, by then, there's usually another merger."

A second possibility is that the financial and nonfinancial incentives in place today are not yet strong enough to change care delivery. The predominance of price discounting creates an incentive for providers to consolidate to become bigger and thus to afford bigger discounts. Eventually, if the provider system can get large enough to be indispensable, it can begin to resist deep discounts. Delegation of risk has actually been rather limited in the markets we observed. As a result, there is currently less incentive to manage care and a stronger incentive to consolidate for increased leverage and market power in negotiations to blunt the effects of price pressures.

Some of the new organizations being formed are quite large and diverse, covering extensive geographic areas and including many different providers. Larger organizations may make the most sense for managing financial and administrative functions and for spreading financial risk. But it is unclear if this is an optimal arrangement for delivering care, or whether smaller groups that are more homogeneous may be better. Such new arrangements may be able to deliver care more efficiently and effectively, but little evidence of this has arisen to date.

Additional research can shed light on the continuing transformation of the healthcare delivery system. The following nonexhaustive list suggests some areas for further analysis:

- Are certain types of organizational arrangements more effective than others for bringing together partners, especially hospitals and physicians, in a care delivery system? Ownership arrangements have the ability to coordinate and allocate resources within an organized system of care; however, centralized organizations may not be the most flexible in a changing environment, suggesting that contractual arrangements may be more able to adapt to change (Robinson and

Casalino 1996). What organizational innovations can provide both the flexibility and stability needed over time?

- What is the appropriate mix of financial incentives and nonfinancial mechanisms for changing practice patterns? When asked directly, it was not unusual for respondents to voice a preference for using nonfinancial care management techniques with partners in a collaborative effort. However, they also acknowledged that financial incentives have more "teeth" to produce faster response. Will the balance in the use of financial and nonfinancial incentives change over time as the organization of the delivery system evolves?
- How will the delivery system move from building the organizational arrangements to operating more efficient delivery systems? It has been stated that it is easier to assemble the pieces than to make the pieces work together (Miller 1996). What factors will influence the pace and direction of this transition? What is the role of changing payment methods, consumer preferences, and purchaser demands on the organization and performance of local delivery systems? What are the implications of advances in information technology on the efficiency of care delivery and its quality?

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