

Something Old, Something New: Recent Developments in Hospital–Physician Relationships

*Timothy Lake, Kelly Devers, Linda Brewster,
and Lawrence Casalino*

Objective. To describe recent developments in hospital–physician relationships in 12 metropolitan areas.

Methods. We analyze qualitative data from a third round of biannual site visit interviews conducted in 12 randomly selected metropolitan areas from 1996 to 2001. The study interviewed 895 respondents during the third round of site visits, conducted in 2000 and 2001.

Principal Findings. As HMO enrollment and capitation contracting has failed to grow in local markets, hospital executives have returned to a strategic focus on improving relationships with specialists in pursuit of fee-for-service revenue. Yet, 65 percent of hospitals interviewed in 2000 and 2001 continued to own primary care physician practices, with ownership more prevalent in highly concentrated hospital markets. A majority (55 percent) of hospitals have decreased the size of these practices in the past two years.

Conclusions. Interest in forming integrated delivery systems has waned. The potential for quality improvement through these organizations systems—by emphasizing primary care and coordinating hospital and physician services—has not been realized. The new emphasis on hospital–specialist partnerships may improve the financial status of hospitals and participating specialists in local markets, and may improve quality of care in selected service areas, but it may also increase health care costs incurred by employers and consumers.

Key Words. Hospital, physician, integrated delivery system, managed care

For more than a century, physicians in private practice in the United States maintained autonomy from hospitals, using the facilities as their “workshops” in mutually beneficial arrangements with no formal financial ties (Pauly and Redisch 1973; Starr 1982; Stevens 1989). With the rapid growth of health maintenance organizations (HMOs), selective contracting, global capitation, and other provider risk-sharing arrangements from the late-1980s to the mid-1990s, many physicians and hospitals developed new and more closely aligned financial and legal relationships, often emphasizing primary care

physician (PCP) services. Hospitals anticipated that close affiliation with or employment of PCP gatekeepers would enhance their market power, help them capture capitation contracts, and help them manage costs under these contracts. In the past few years, interest in these selective HMO networks and in risk contracting has declined, as expectations for the future growth of managed care have waned and an emphasis on fee-for-service payments has returned.

To date, there is no nationally representative information available on recent developments in hospital–physician relationships in the new market environment. This paper discusses findings from the third round of the Community Tracking Study’s (CTS) biannual site visit interviews, conducted in 2000 and 2001, with hospitals and physician organizations in 12 randomly selected metropolitan markets. We assess recent trends in hospital–physician relationships for the 12 markets as a whole, but also examine market-level variation in these trends, and identify key market characteristics associated with this variation.

We find that hospitals are now focused on developing relationships with selected specialists in local markets—establishing joint ventures and enhancing hospital–specialist collaboration through clinical initiatives in high-profit service areas. Our interviews confirm general impressions and recent case study evidence of the reduced focus on hospital–PCP arrangements (see, for example, Engbert and Emery 1999 and Ray and Kirz 2000). However, most hospitals in the 12 visited markets continue to own PCP practices. Primary care ownership remains especially prevalent in highly consolidated hospital markets, where PCP groups are reluctant to be independent of major systems and where the systems themselves worry about losing patient referrals to competing systems by divesting from these practices.

Emerging hospital–physician relationships represent both the old and the new in today’s markets. Efforts to build clinical ties between hospitals and specialists appear to be a return to a previous era, while formal financial arrangements, such as joint ventures, are more of a contemporary development.

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Address correspondence to Timothy Lake, Ph.D., Mathematica Policy Research, Inc., 50 Church St., Cambridge, MA 02138. Kelly Devers, Ph.D., is with the Center for Studying Health System Change, Washington, DC. Linda Brewster, M.B.A., is also with the Center for Studying Health System Change. Lawrence Casalino, M.D., Ph.D., is with the University of Chicago.

Thus far, hospitals are keeping their existing PCP practices, but are looking at new ways to make them financially viable.

BACKGROUND

The analysis presented in this paper builds on previous research from the Community Tracking Study and other peer-reviewed studies and on a longitudinal framework for understanding how hospitals and physicians have responded to changing market conditions since the mid-1990s (see Figure 1). We view market responses by hospitals and physicians as occurring in three main phases during the rise and decline of expectations about managed care growth. These phases involved changes in both forward-looking hospital-physician strategies and changes in the prevailing rationales for maintaining or modifying existing arrangements.

In the first phase, as expectations for future managed care growth peaked in the mid-1990s, hospitals were still actively engaged in purchasing primary care practices and working with physicians in developing integrated delivery systems, with a focus on bolstering their primary care capacity. These new arrangements included hospital ownership of primary care physician (PCP) practices, physician-hospital organizations (PHOs), hospital-sponsored management services organizations (MSOs), and hospital-sponsored independent practice associations (IPAs) (Burns and Thorpe 1993; Alexander et al. 1996; Kongstvedt and Plocher 1996). Results from the first round of CTS visits in 1996 and 1997 indicate that hospitals and physicians were pursuing a diversity of new hospital-physician arrangements in anticipation of continued managed care growth (Kohn 2000). Many of these arrangements included physician members from a broad range of specialties. However, certain arrangements, such as hospital ownership of physician practices, tended to emphasize primary care physicians. To increase the capacity for risk sharing, these arrangements were also designed to manage the delivery of physician and hospital services in an attempt to contain health care costs.

During this phase (mid-1990s), growth in HMO products, global capitation, and selective provider contracting were seen as the primary factors encouraging the formation of new relationships between hospitals and physicians (Shortell, Gillies, and Anderson 1994; Robinson and Casalino 1996; Robinson 1997; Morrisey et al. 1996; Burns et al. 1997; Alexander et al. 2001; Bazzoli, Dynan, and Burns 2000). Global capitation in HMO products was the main fuel feeding the formation of arrangements such as PHOs,

Figure 1: Recent Trends in Hospital-Physician Relationships

<i>Dimension of change</i>	<i>Early to mid-1990s</i>	<i>Late 1990s</i>	<i>2000 to 2001</i>
Market conditions	HMO and risk-sharing growth begins to peak.	HMO and risk-sharing trends slow or reverse direction.	Trends of the late 1990s continue.
Hospital-physician strategies	Hospitals aggressively acquire PCP practices.	Hospitals cease acquiring PCP practices and develop downsizing and cost-containment approaches. Increased focus on specialists.	Increased acceptance that managed care growth will not return at least in the near future. Many IDS arrangements become dormant or operate on a smaller scale than originally anticipated.
Reasons for changing strategies	Hospitals and physicians build IDS arrangements, including PHOs, IPAs, and MSOs.	Further IDS development slows or stops in local markets.	Hospitals continue a shift in their strategic focus towards building specialist relationships.
	Primary care-based IDS are seen as the key to capturing capitation contracts.	Hospitals no longer see increased demand or need for IDS and PCP ownership.	Fee-for-service revenue, not capitation, is seen as the predominant payment source.
	IDS can meet demand for PCP gate-keeping and offer a wide range of hospital and physician services within a single system	Concerns about losing or market share abandon existing approaches.	Specialists and specialty services are now seen as keys to financial viability for hospitals.
		High costs, low productivity, and limited revenue associated with PCP ownership become important factors.	Competition from specialists for growing ambulatory services is seen as most important threat by hospitals.

MSOs, and hospital ownership of primary care practices. These vertical integration efforts were intended to increase hospitals' and physicians' joint negotiating power with health plans and also make it possible to profit from any savings generated from reducing both hospital and physician services. They also had the potential to improve coordination and quality of care.

Integration of primary care services with other health care services was seen as particularly important for responding to growth in managed care. The HMOs typically assign their enrollees to specific physician groups within integrated organizations for the purposes of providing primary care services and coordinating care. The PCPs often served as gatekeepers in HMO products, attempting to limit unnecessary services and guide patients to the most appropriate source of care within HMO provider networks. Capitation payments to integrated provider organizations were usually determined on the basis of the assignment of enrollees to physician groups affiliated with these organizations. Thus, recruitment of physicians who provide primary care services was viewed as a key ingredient for the success of integrated provider organizations in obtaining and managing capitation contracts.

Though the expected growth of HMOs and global capitation provided strong incentives to form integrated systems, such integration efforts were not necessarily easy. Hospital-physician integration efforts faced significant internal and external barriers, including fixed costs of establishing new organizations, reconciling potentially conflicting goals of hospitals and physicians, and surmounting other administrative or managerial challenges (Conrad and Dowling 1990; Burns and Thorpe 1993; Shortell et al. 1993; Shortell, Gillies, and Anderson 1994).

In the second phase, as expectations for further growth began to fade, and as a consumer backlash against selective contracting and financial incentives for limiting care began to develop, hospitals and physicians increasingly recognized the difficulties they were facing with the existing arrangements that had been established. Some hospitals pulled back from active investment in primary care arrangements and no longer worked aggressively to expand managed care contracting vehicles, such as PHOs and hospital-owned IPAs and MSOs. During CTS site visits conducted in 1998-1999, hospitals and physicians were reassessing their efforts to pursue joint managed care contracting vehicles for several reasons (Lesser and Ginsburg 2000). For example, the growth in capitation contracts slowed across all of the markets in the study and the challenges of aligning physician and hospitals in order to achieve mutually beneficial goals through these vehicles were increasingly evident, especially at a time when market

incentives for maintaining specific structures were weakening. A range of barriers to alignment have also been documented in recent research, including changing public policies, conflicting payment incentives within integrated systems, a lack of attention to physicians' professional priorities, and the lack of physician leadership (Budetti et al. 2002 and Shortell et al. 2001.) Finally, integrated organizations also frequently experienced higher than expected operational expenses and financial losses on the contracts they did have.

During this second phase, hospitals and physicians were trying to decide what to do with existing arrangements that no longer seemed as relevant as they once did. The market demand for these IDS arrangements was not as high as expected, but complete abandonment of these arrangements also appeared to be a risky strategy, particularly for hospitals, given uncertainty about managed care and risk-sharing and concerns about the potential loss of referrals resulting from divestiture of PCP practices. As shown in Table 1, roughly half of the hospitals in the 12 markets studied in the CTS have retained some type of hospital-physician arrangement (PHO, MSO, or IPA) throughout the latter half of the 1990s. Instead of complete divestiture and dismantling of these hospital-physician arrangements, hospitals began taking steps to contain the costs associated with them.

A third phase has emerged in the recent evolution of hospital-physician strategies, now that managed care has clearly failed to achieve original growth expectations. In a review of the most recent case studies and trade publication literature, Burns and Wholey (2000) indicate that integrated systems are now reconstituting their arrangements with physicians in response to changing

Table 1: Hospital-Physician Arrangements in Twelve Metropolitan Areas, 1994 to 2000

<i>Type of Arrangement</i>	<i>Percentage of Hospitals</i>			
	<i>1994</i>	<i>1996</i>	<i>1998</i>	<i>2000</i>
Physician-hospital organization (PHO)*	32	36	32	30
Hospital affiliated management services organization (MSO)	16	20	18	17
Hospital affiliated independent practice association (IPA)	33	35	28	22
Any PHO, MSO, or IPA	54	59	51	50

Source: American Hospital Association Survey of Hospitals

*Includes either open or closed physician-hospital organizations.

market conditions. Three different approaches were identified. First, hospital-based systems may completely divest from IDS arrangements such as primary care practice ownership. Second, they may reengineer existing IDS approaches with cost-cutting strategies and add incentives for physician productivity. Third, they may shift the emphasis of these delivery systems from owning or contracting with PCPs to fostering relationships with specialists, through financial arrangements such as joint ventures, or other approaches, such as attempts to improve specialists' clinical practice conditions within hospitals.

DATA AND METHODS

The results presented here are from the CTS, which has collected longitudinal data on a nationally representative, random sample of 12 metropolitan areas in the United States with a population of more than 200,000 since 1996 (Kemper et al. 1996).¹ Visits to each of these communities have been made by research teams every two years (1996–1997, 1998–1999, and 2000–2001).

This article presents findings on developments in hospital-physician relationships from the most recent round (2000–2001) of site visits. Interviews were conducted with a total of 895 people during this round, using semistructured protocols. Interviewees included senior executives and staff from the three or four largest hospitals or hospital systems and their affiliated physician organizations at each site (a total of 43 hospitals or hospital systems).

At each site, we selected the three largest systems or freestanding hospitals in the metropolitan area, and a smaller hospital (often in a surrounding suburban area). More than 70 percent of hospitals now belong to hospital system or network, so the sample frame in most communities consisted of large systems and a few free-standing hospitals. In many of the small markets, we were able to interview representatives from all of the major systems or hospitals. We also interviewed physician organizations that were closely affiliated with or owned by the systems or hospitals in the market, including hospital-owned physician practices, PHOs, and hospital-sponsored IPAs. Finally, we interviewed four of the largest physician-owned organizations in each market, including a mix of organization types, such as consolidated medical groups versus IPAs, and multispecialty versus single-specialty practices.

At each hospital, we typically interviewed the chief executive officer, a vice president for planning, a director of managed care contracting, a director

of physician–hospital integration, and a medical director. At affiliated or independent physician organizations, we typically interviewed a senior executive responsible for business or market strategies (such as the president or CEO) and a senior medical director responsible for clinical issues.

During the interviews, we asked respondents to describe recent changes in hospital–physician relationships, including a number of specific arrangements, such as hospital ownership of practices, PHOs, MSOs, and joint ventures. We also asked why changes had occurred. In addition, we asked about future strategies regarding hospital–physician arrangements, why strategies had changed in recent years, and how hospital–physician strategies fit into their overall strategies in the local market.

Following the third round of site visit interviews, handwritten notes from each interview were typed into Microsoft Word documents and a synthesis of all interviews was written after each site visit. All interview notes and syntheses were then coded for relevant content and analyzed in the qualitative analysis software package, *ATLAS.ti* (Muhr 1997). The coding allowed for sorting of text passages according to relevant topic areas discussed, or specific questions asked during the interviews. This allowed us to provide a rigorous, qualitative assessment of the weight of the evidence supporting particular findings. In addition, we tallied selected interview responses across the 43 interviewed hospitals on (a) hospital ownership of PCP practices and (b) hospital–specialist joint ventures for ambulatory care services. The paper presents estimates of the prevalence of these two types of arrangements according to two market characteristics: HMO penetration levels and level of hospital concentration in our local markets. Respondents from multiple organizations agreed about trends in the use or discontinuation of specific arrangements, or the pursuit of particular strategies in local markets, except where noted.

RESULTS

Renewed Focus on Hospital–Specialist Relationships

During the third round of CTS site visit interviews, the strategic attention of hospital leaders was most strongly focused on improving relationships with selected specialists. In many respects, efforts to foster hospital–specialist relationships resemble a return to an era before managed care, when hospitals were seen as physicians’ “workshops.” Hospitals once again see specialists as the type of physicians most able to help or hurt them in local health care

markets. These physicians can attract patients needing high-cost services to hospitals, bringing in added revenue under fee-for-service arrangements, or, if they are not satisfied with the hospital or hospital system, they can direct patients elsewhere.

Hospitals were trying to attract specialists through multiple strategies, such as building new clinical centers and developing initiatives in specific, highly profitable clinical areas, such as new clinics or ambulatory centers for cardiology, oncology, and orthopedic services. Many of these initiatives were limited to enhancing clinical collaboration between physicians and hospitals—providing clinical support for laboratory and other ancillary services, and sometimes the development of practice guidelines—with no formal financial or ownership ties. These types of initiatives were viewed favorably by both participating hospitals and specialists in the new market environment. Respondents suggested that the new relationships can enhance their respective market positions, increase the availability of needed services, and improve the overall quality of hospital-specialist relationships.

But managed care appears to have introduced some important differences that have remained in place even though its overall influence has receded. In particular, some new hospital-specialist initiatives are based on formal financial ownership arrangements, which were relatively rare before the 1990s, but which emerged as managed care became more dominant. Hospital and physician respondents indicated that hospital-physician joint ownership ventures in ambulatory surgery and diagnostic imaging centers have become increasingly common. Thirty-seven percent of the hospitals we visited during the third round of interviews reported at least one new joint venture in the past two years (Table 2). While the study designs are different, the new joint venture activity appears notable given that 33 percent of hospitals in a 1993 nationwide survey reported any existing joint ventures (Burns et al. 1998). Although most of these new efforts involve development of outpatient services, inpatient services—in particular construction of new “heart hospitals”—have also been recently developed (or are under construction) in 3 of the 12 sites: Indianapolis, Indiana, Little Rock, Arkansas, and Phoenix, Arizona.

Through joint ventures, specialists obtain hospital capital to purchase costly facilities and technologies, which make it possible for them to gain access to relatively high streams of facility-based, fee-for-service revenue, in addition to traditional office-based professional fees. These new revenue streams include health plan payments for ancillary services. Respondents

Table 2: Selected Trends in Hospital-Physician Arrangements in Twelve Metropolitan Areas

	<i>Primary Care Physician (PCP) Arrangements</i>		<i>Specialist Arrangements</i>
	<i>Percentage of Hospitals Owning Physician Practices in 2000-2001^f</i>	<i>Percentage of Hospitals Reducing or Eliminating Practice Ownership, during the Previous Two Years^g</i>	<i>Percentage of Hospitals with New Specialist Joint Ventures for Ambulatory Care in Past Two Years</i>
Level of hospital concentration ^a			
High concentration markets ^b	92	45	33
Low concentration markets ^c	55	60	39
HMO penetration level			
High penetration markets ^d	56	65	32
Low penetration markets ^e	78	43	44
All 12 markets	65	55	37
(Total number of hospitals/systems)	(43)	(31)	(43)

Source: Community Tracking Study sponsored by the Robert Wood Johnson Foundation

^aConcentration is measured by a Herfindahl index based on total adjusted hospital admissions in 1999, based on analysis of the American Hospital Association Annual Survey of Hospitals. On a scale from 0 to 1, a market with a Herfindahl index of less than 0.18 is considered by the federal government to have low to moderate concentration, and those with an index higher than 0.18 are considered highly concentrated. U.S. Department of Justice and Federal Trade Commission, "Horizontal Merger Guidelines." Issued April 2, 1992; revised April 8, 1997. Section 1.5.

^bIncludes, Cleveland, OH, Greenville, SC, Lansing, MI, and Little Rock, AR.

^cIncludes Boston, MA, Indianapolis, IN, Miami, FL, northern NJ, Orange County, CA, Phoenix, AZ, Seattle, WA, Syracuse, NY.

^dMarkets with HMO penetration rates of 30 percent or higher. Includes Boston, MA, Orange County, CA, Miami, FL, northern NJ, Cleveland, OH, Lansing, MI, Phoenix, AZ.

^eMarkets with HMO penetration of 21 percent or lower. Includes Greenville, SC, Seattle, WA, and Syracuse, NY, Indianapolis, IN, Little Rock, AR.

^fExcludes faculty practice plans and community health clinics.

^gIncludes only hospitals that owned practices in 1998.

noted that the apparent return of predominantly fee-for-service environment has enhanced incentives for joint venture activity. Under fee-for-service arrangements, new ventures are not viewed as cost centers, as they were under capitation contracts, but as sources of additional revenue.

Hospitals also benefit from joint ventures by preempting potential ambulatory care competition or defection of specialists to other competing hospitals, although they must share profits with physician investors. In some markets, hospital respondents noted that the emergence of consolidated specialty groups have greatly enhanced the incentives for joint ventures or even made them necessary from the hospitals' perspective in order to avoid increased competition over outpatient services. These large specialty groups command considerable market power and may have the ability to invest independently or with national companies in their own outpatient technologies or even inpatient facilities, allowing for direct competition with existing hospitals (Christianson 2001).

As shown in Table 2, the prevalence of new joint ventures tended to be higher in low HMO penetration markets (44 percent of hospitals) we visited than in higher HMO penetration markets (32 percent of hospitals) where capitation and risk-sharing are more common.² This is consistent with our findings that the return of fee-for-service payments is a major impetus for growth in joint venture activity. Orange County, California, for example, continues to have a high level of HMO penetration and risk-sharing, with few single-specialty groups and little joint venture activity. In contrast, Little Rock, Arkansas, has a low HMO penetration rate, several large single specialty groups, and new joint ventures in two of the three major hospital systems we visited.

We found little difference in the rates of new joint venture activity according to the level of hospital concentration across markets (Table 2). All else being equal, we would expect that hospitals in higher concentration markets would have more market power over specialists and thus may feel less pressure to engage in joint ventures in order to avoid direct competition from specialists. This is consistent with the results, but the differences are small.

Specialist consolidation, may be another important driving factor. Our interviews indicate that large specialty groups with considerable market share are able to bring even the largest multihospital systems to the table to consider joint ventures.³ As Christianson (2001) observed during the second round of CTS visits, intense rivalry among large systems over certain highly valued service lines in some markets may actually benefit large groups that are seeking joint ventures. This type of effect was particularly evident in Indianapolis, Indiana, where hospital competition for outpatient services was rapidly intensifying. All four of the major hospital systems in the market were developing new joint ventures with local specialist groups.

Current Status of Hospital-PCP Arrangements

Many hospital-PCP arrangements that were developed during the 1990s—such as PHOs, MSOs, or hospital-affiliated IPAs—continued to exist in some form in most of the hospitals we interviewed in 2000 and 2001 (consistent with results reported in Table 1). However, they were viewed as a less important part of future strategies than they had been in the previous rounds of CTS site visits. Many of these arrangements have experienced operating losses and have failed to attain the enrollment levels that were originally anticipated. Yet, these arrangements were not seen as a significant management concern by hospital leaders in 2000 and 2001 because they can be maintained with relatively low overhead, relying primarily on contractual arrangements among providers to provide services to existing enrollees.

Hospital ownership of primary care practices, on the other hand, remains a significant management and strategic issue for hospitals because of the fixed costs and overhead involved in maintaining these practices. In total, 65 percent of the hospitals or hospital systems we interviewed continue to own practices (Table 2). The size of these hospital-owned practices ranged from 10 to 1,200 physicians, most of whom were primary care physicians.

Only three of the hospitals/systems we visited had completely divested from practice ownership over the past two years. Respondents attributed the lack of practice divestiture to hospital concerns about loss of referrals from affiliated physicians and to physician concerns about the viability of physician-owned practices when returned to independence. They also indicated that practice ownership can be an important defensive strategy designed to keep up with a large local competitor that was purchasing practices or prevent other hospitals from acquiring the practices. A hospital respondent in Greenville, South Carolina, stated that “the reason that practices were purchased originally is that during the 1994 to 1996 period there was a feeling in the area that risk contracting was coming... the reason to retain the practices now that risk contracting does not appear to be coming is to retain referrals from the physicians.”

This defensive strategy was especially evident in highly consolidated hospital markets. In Lansing and Cleveland, in particular, where the local marketplace is dominated by only two major hospital systems, decisions about purchase and divestiture of PCP practices were seen as a zero-sum game by hospital respondents. One hospital system’s loss of a PCP practice might mean a realignment of the practice with its only major competitor, and thus a loss of referrals by one system and an equal gain for the other. Similarly, with the

strong presence of only two systems in these markets, physicians felt pressure to “choose a side” or potentially be treated unfavorably by both systems. Thus, there was a clear incentive to align more closely with one hospital system in these highly consolidated markets, including selling the practice to the system. In Cleveland, physician respondents consistently cited the dominance of two hospital systems as a key deterrent to the development of independent physician organizations.

Analysis across the 12 markets in our sample indicates that high hospital concentration was associated with a high rate of hospital ownership of PCP practices (Table 2). In the four markets we visited with a high concentration of hospitals or hospital systems—Cleveland, Greenville, Lansing, and Little Rock—nearly all (92 percent) owned physician practices. In the remaining eight markets, practice ownership was relatively less common (55 percent of hospitals).⁴

Health maintenance organization penetration level in the 12 markets was not associated with hospital ownership of PCP practices in the way we expected. In particular, hospitals in lower HMO penetration markets were more likely to own PCP practices than those in higher HMO penetration markets (30 percent or more). Given that HMO contracting is seen as a major impetus for PCP practice ownership, we expected to see an association in the opposite direction. These results may be at least partially explained by an inverse and potentially confounding relationship between HMO penetration and hospital consolidation in our sample of markets. Lower HMO penetration markets were more likely to have high hospital concentration levels, which, as noted above, appears strongly associated with high rates of PCP practice ownership. In our sample, two of the five (40 percent) low HMO penetration markets had high levels of hospital concentration, compared with two of the seven (29 percent) high HMO penetration markets.

In all markets, hospital executives noted that practice acquisition never resulted in the market gains that were expected. As a hospital respondent in Phoenix, Ariz. noted “[hospitals] made the mistake of buying practices of physicians who were already loyal to them, so [they] didn’t get market share from this.” Nearly all respondents agree that future market share growth from the current ownership arrangements is very unlikely.

In fact, most hospitals that continued to own physician practices were reducing the number of employed physicians and restructuring their physician employment contracts. Fifty-five percent of the hospitals that we interviewed reduced the size of these practices during the previous two years, either through reductions in the number of employed physicians or

divestitures of owned practices (Table 2). Most hospital respondents noted financial losses on these practices from low productivity as the most significant concern, and many stated that hospitals were not oriented toward, or well structured for, managing physician practices.

Hospitals had once viewed owned practices as “cost centers” necessary for capturing “covered lives” and delivering care under capitation contracts. With capitation waning, hospitals are restructuring physician contracts to tie compensation to practice productivity, often based on a percentage of revenue that the practice generates. Consistent with other recent research (Alexander et al. 2001), respondents indicated that these changes were unpopular with individual physicians and may ultimately contribute to further downsizing of the owned practices.

DISCUSSION

During the early to mid-1990s, hospitals and physicians used a variety of organizational forms to affiliate more closely with one another, but these efforts were being reassessed by the late 1990s. As the expectation for continued managed care growth has waned, hospitals have begun to shift their focus from employing primary care physicians and building PHOs, MSOs, and IPAs aimed at acquiring capitated contracts to building stronger relationships with specialists to benefit from high margin specialized services and to avert potential competition in delivering outpatient services. As a respondent from a physician organization noted during our most recent round of interviews: “In the late 1980s and early 1990s, hospitals didn’t care about [primary care physicians (PCPs)] and were making deals with specialists. Then managed care came along, and hospitals started buying PCP practices, which wasn’t very successful. Now hospitals are out there looking for revenue streams, entering into joint ventures, [developing] heart hospitals. . . . Hospitals perceive the revenue stream coming from specialists, not PCPs.”

An intriguing finding from our study is that high hospital concentration in four of the local markets we studied was associated with an increased likelihood of continued hospital ownership of primary care practices. To our knowledge, a relationship between PCP ownership and concentration has not been documented in previous research. Hospitals in high HMO penetration markets were found to be less likely to own primary care practices, perhaps because of the confounding influence of hospital concentration. We also found higher rates of hospital–specialist joint venture activity in lower HMO

penetration markets, but no apparent association between hospital concentration levels and joint ventures.

Our results showing cross-sectional relationships between market characteristics and hospital-physician arrangements were based on a small sample of markets. Other variables, such as the size of the markets and other market and hospital characteristics, would need to be controlled for in larger study in order to develop stronger conclusions about these relationships. Yet, qualitative interviews with local respondents provide support for the importance of the distribution of local hospital market share in determining whether primary care physicians decide to sell their practices to hospitals. These preliminary results indicate a need for future research in this area. Our findings also suggest the need for further development and testing of conceptual models that incorporate the effects of market variables on hospital relationships with different types of physician specialties, especially PCPs versus specialists. Some market developments may affect all physicians equally, while others may have differential effects.

Our findings from this study have implications for the way health care is delivered. Though empirical evidence is lacking, many anticipated that integrated delivery systems would ultimately improve the quality of care by increasing continuity and coordination of services, emphasizing more preventive and primary care, and increasing accountability for overall clinical performance. But because plans to develop these systems have now stalled or been abandoned, the promise of improving delivery of services through broader integration strategies appears unlikely to be fulfilled. The renewed emphasis on hospital-specialist partnerships and the pursuit of fee-for-service revenue from profitable specialty services may improve the financial status of both hospitals and specialists, but these new developments may also increase health care costs for consumers and employers. On the other hand, closer working relationships between hospitals and selected specialists—with the possibility of developing consensus on practice guidelines—may have the potential to increase the quality of care or improve cost-effectiveness at least in specific clinical areas.

Whether these recent trends are here to stay for the long term is uncertain. In the near term, an important issue for ongoing study is whether recent specialty-based initiatives undertaken by hospital systems in local markets cause new areas of overcapacity. The anticipated financial benefits of these initiatives for participating hospitals and physicians could be overestimated if they result in duplication of certain services. Finally, changing market conditions are likely to lead to continued changes in physician and

hospital strategies. For example, if rising costs lead employers and health plans to regain an interest in capitation—possibly in some modified form—and narrower provider networks, physician and hospital pursuit of broader integration strategies could return, though perhaps in a more a more cautious manner than in the 1990s.

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NOTES

1. The sites are Boston, MA, Cleveland, OH, Greenville, SC, Indianapolis, IN, Lansing, MI, Little Rock, AR, Miami, FL., northern NJ, Orange County, CA, Phoenix, AZ, Seattle, WA, and Syracuse, NY.
2. We defined high HMO penetration markets as having penetration rates of 30 percent or higher. The highest penetration rate among those in a low HMO penetration category was 21 percent.
3. In a few cases, we found that specialty groups may not even need local hospital cooperation or financial backing for developing new ambulatory care or surgery centers. They can raise capital on their own or from nonhospital sources.
4. High hospital concentration was defined as a Herfindahl index score of 0.18, based on Department of Justice and Federal Trade Commission guidelines.

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