THE MILBANK QUARTERLY
A MULTIDISCIPLINARY JOURNAL OF POPULATION HEALTH AND HEALTH POLICY

Original Investigation

The Dynamics of Community Health Care Consolidation: Acquisition of Physician Practices

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Policy Points:

- In order to develop effective policies on the consolidation of community health systems, policymakers must understand both the motivations and processes for consolidation.
- We found that physician practice consolidation is often a strategic response by providers to public and private cost containment efforts; therefore, it will be difficult to reverse using traditional policy options.
- Many current health care cost containment policies incentivize continued provider consolidation, which presents a direct challenge to health care reform models that rely on competition among providers to accomplish cost control and quality improvement.

Context: Health care delivery systems are becoming increasingly consolidated in urban areas of the United States. While this consolidation could increase efficiency and improve quality, it also could raise the cost of health care for payers. This article traces the consolidation trajectory in a single community, focusing on factors influencing recent acquisitions of physician practices by integrated delivery systems.

Methods: We used key informant interviews, supplemented by document analysis.

Findings: The acquisition of physician practices is a process that will be difficult to reverse in the current health care environment. Provider revenue uncertainty is a key factor driving consolidation, with public and private attempts to control health care costs contributing to that uncertainty. As these efforts will likely

The Milbank Quarterly, Vol. 92, No. 3, 2014 (pp. 542-567)

continue, and possibly intensify, community health care systems now are less consolidated than they will be in the future. Acquisitions of multispecialty and primary care practices by integrated delivery systems follow a common process, with relatively predictable issues relating to purchase agreements, employment contracts, and compensation. Acquisitions of single-specialty practices are less common, with motivations for acquisitions likely to vary by specialty type, group size, and market structure. Total cost of care contracting could be an important catalyst for practice acquisitions in the future.

Conclusions: In the past, market and regulatory forces aimed at controlling costs have both encouraged and rewarded the consolidation of providers, with important new developments likely to create momentum for further consolidation, including acquisitions of physician practices.

Keywords: health facility merger, integrated health care system, community health systems.

THERE IS GROWING EVIDENCE THAT HEALTH CARE DELIVERY systems are becoming increasingly consolidated in medium and large metropolitan areas across the United States.[1] Recently, the hospital, or integrated delivery system (IDS), acquisition of physician practices has become integral to the consolidation process at the community level. These acquisitions could benefit consumers by improving quality of care through several mechanisms. For instance, larger systems may be better positioned to access the financial resources required to install potentially quality-enhancing, but costly, electronic medical records systems and new medical technologies. They may be able to do this at a lower cost per patient by leveraging size to negotiate favorable purchase prices with suppliers and by spreading the cost of acquiring technology across a larger patient base. Their size also could support development of the expertise needed to implement standardized treatment protocols, improve care coordination, and undertake other, similar activities that improve quality and patient safety. There is no guarantee, however, that greater efficiency, lower costs, and better quality will emerge as physician practices transition from independent entities to components of large, multifaceted organizations. Nor is it certain that any cost savings would be reflected in lower prices for private payers (community employers and their contracting health plans), health plans, and patients at the point of service. Instead, a frequently expressed concern is that when hospitals or IDSs acquire physician

practices or hire physicians directly, they will be able to use their enhanced market power to obtain higher reimbursements for physician services from private payers than would be the case if the practices remained independent.[1-4] Current Medicare reimbursement policies that pay more for physician services when they are billed as hospital outpatient services reinforce the economic case for acquiring practices.

In our study, we viewed consolidation as a process that takes place over time in communities, rather than as a single event or collection of events at a point in time. In this context, the acquisition of physician practices can be seen as the latest manifestation of a community-level consolidation trajectory. We used document analysis and in-depth interviews (see Appendix) to examine the vertical consolidation that took place in a single community's health care system over the last decade through hospital and IDS acquisitions of physician practices. We discuss how the participants involved saw these acquisitions and how they assessed the consequences of the acquisitions to date. Community health care systems clearly vary in their consolidation trajectories and, consequently, also in their recent experiences with acquisitions of physician practices. Nonetheless, we believe that by closely examining a single community, our study can help policymakers better understand the dynamics of physician practice acquisitions in community health care systems, as well as the factors (national and local) influencing the acquisition decisions.

Background

We chose Minneapolis-St. Paul (the "Twin Cities") as the focus of our analysis for several reasons. Its health care system is widely viewed as "successful," with a high national ranking on health and health care indicators, relatively low costs for Medicare beneficiaries, and a low percentage of uninsured persons.[5] The Twin Cities also have a long history of innovation in care financing and delivery,[6] drawing the attention of health services researchers and the media at several points in its evolution.[7-10] While this history provides a useful context for understanding the Twin Cities' consolidation trajectory, the primary reason that we decided to focus on this community is that its health care system is highly consolidated. Although this consolidation has taken place over several decades, it has greatly accelerated recently because of hospital

and IDS acquisition of physician practices. Therefore, it provides a rich environment for an in-depth study of physician/hospital consolidation, and an analysis of the consolidation process could provide useful insights for other communities that are at earlier stages of consolidation.

Phases of Consolidation

At present, the Twin Cities' health care system is dominated by 3 not-for-profit health plans and 4 not-for-profit IDSs (Table 1). The IDSs include several hospitals, large medical groups with physicians employed by the IDSs, a full array of other services along the continuum of care, and, in 1 instance, a health plan (Table 1). In addition, these systems now have a significant presence in health care delivery in "out-state" Minnesota. Consolidation of the Twin Cities' health care system began in the 1970s and progressed through several "phases."

The first phase consisted primarily of hospital mergers and acquisitions. In the late 1970s there were 35 independent hospitals in the Twin Cities and suburbs; 7 health maintenance organizations (HMOs); and 2 local multihospital corporations (Fairview and Health Central), each with 3 urban hospitals.[11] Three significant hospital mergers already had occurred. Both community payers and an influential civic organization had embraced a private-sector, "competing HMO" strategy for containing health care costs.[11,12] To compete for enrollees, the HMOs focused on containing costs by controlling inpatient expenses,[12] by reducing first admissions and then lengths of stay.[6,13] They also negotiated aggressively with hospitals for lower rates. The HMOs were successful in these negotiations because there was excess inpatient capacity, a relatively large number of independent hospitals competed for their business, and each hospital controlled a relatively small proportion of the community's bed supply.[14] To combat their declining leverage in rate negotiations, the hospitals continued to merge or be acquired by larger hospital systems into the 1990s, with some hospitals closing as well. By 1995, the Twin Cities had 20 general acute care hospitals, with most of the inpatient capacity concentrated in 3 hospital systems: Health East (4 hospitals); Health Span (5 hospitals), and Fairview (4 hospitals). Several independent hospitals remained, but the stage was set for the emergence of the hospital systems and IDSs that play a large role in the Twin Cities' health care market today.

Table 1. Structure of Twin Cities' Health Care Market

Organizations	Description
Health Plans[a]	
Blue Cross/Blue Shield	$9.3 billion revenues (2011), 2.64 million total members (2011)
HealthPartners	$2.25 billion operating revenue on HMO products, 1.4 million total members, 535 beds (also a care system)
Medica	$3.1 billion revenues (2012), 1.5 million total members (2012)
Others	UCare (Medicare/Medicaid), PreferredOne
Integrated Delivery Systems[b]	
Allina Health	1,555 beds, $2.16 billion outpatient revenues
Fairview	1,138 beds, $1.88 billion net patient revenues
Health East	644 beds, $.69 billion net patient revenues
Park Nicollet Health Services	346 beds, $.46 billion net patient revenues (recently merged with HealthPartners)
Others	North Memorial Health Care (448 beds), Hennepin County Medical Center (332 beds), Ridgeview (105 beds)
Single-Specialty Groups[c]	
Associated Anesthesiologists	51 physicians, 4 hospital practice locations

Continued

Table 1. *Continued*

Organizations	Description
Center for Diagnostic Imaging	10 clinics
Consulting Radiologists, Ltd.	3 clinics, 70 physicians
Metropolitan Anesthesia Network	62 physicians, 17 locations
Minneapolis Heart Institute	6 clinics, > 61 physicians
Minnesota Gastroenterology	6 clinics, > 60 physicians
Minnesota Radiology	5 clinics, 22 physicians
Northwest Anesthesia	35 physicians, multiple hospitals
St. Paul Radiology	6 clinics, > 65 physicians
St. Croix Orthopaedics	5 clinics
Suburban Imaging	6 clinics, > 60 physicians
Summit Orthopedics	9 clinics, 38 physicians
Tria Orthopedics	1 clinic, 42 physicians
Twin Cities Orthopedics	27 clinics, 84 physicians
United Heart and Vascular Clinic	7 clinics, 26 physicians

[a]Health plan information was taken from health plan websites. Blue Cross/Blue Shield and Medica data include all products and all market areas (not confined to the Twin Cities). HealthPartners data are before merger with Park Nicollet Health Services, with members including those with dental plan only.[15] All health plan numbers should be viewed as approximate estimates and do not permit exact comparisons of plans.
[b]All data pertain to the 2011 reporting year.[15]
[c]Data on specialty groups were abstracted from group websites and yellow pages. Numbers are approximate.

The next phase of market consolidation, which overlapped with hospital consolidation, was mergers of health plans. As with hospital consolidation during this same period, the quest for market advantage drove the HMO consolidation. The pace of health plan consolidation accelerated during the 1990s with the merger of SHARE and Physicians Health Plan (PHP) in 1992 to form Medica, followed by the merger of Group Health and MedCenters to form HealthPartners.[7] This created the Twin Cities' 3 largest health plans (including Blue Cross/Blue Shield) in terms of current enrollment.

A third phase of health system consolidation was precipitated by state legislation enacted in 1993 that required health systems to be structured as integrated service networks (ISNs).[7] Providers who chose not to join ISNs were to be subject to state reimbursement regulation. The legislature's vision was that competing ISNs, operating under close government supervision, would help control costs and improve quality. In fact, though, the legislation led to a massive restructuring of the Twin Cities' health system that integrated health plans and hospitals. Group Health acquired a hospital; Medica merged with the Health Span hospital system to form Allina (a merger later dissolved); and Methodist Hospital and Park Nicollet Medical Center merged to form HealthSystem Minnesota (later changed to Park Nicollet Health Services). Fairview merged with the University of Minnesota Hospital and Clinics in 1997, after both parties first engaged in joint venture discussions with Blue Cross/Blue Shield.[7] Numerous joint ventures also were created that stopped short of a full merger of assets but resulted in a closer alignment of providers and health plans and of physicians and hospitals. By the late 1990s, the current configuration of health plans and delivery systems in the Twin Cities had essentially been established, setting the stage for the next phase of consolidation.

Consolidation Through Vertical Integration: The Acquisition of Physician Practices by Integrated Delivery Systems

Because of the longstanding presence of multispecialty practices, the Twin Cities has always had some degree of physician consolidation.[3,6] During the early 1990s, not wanting to be excluded from a market

featuring competing ISNs, some primary care physicians sold their practices to hospital systems or health plans, although many joined physicians' hospital organizations instead in order to participate in ISNs and negotiate with health plans. This strategy, favored by physician practices as a way to preserve their independence, began to erode in the late 1990s, however, when the Twin Cities' hospital systems started to employ more primary care physicians and acquire their practices. During this same period, mergers of single-specialty, non–primary care practices increased as specialists tried to strengthen their negotiating positions with health plans and IDSs while at the same time preserving their independence (see Table 1). Table 2 shows the principal acquisitions of physician practices by Twin Cities' IDSs since 2007.

Next we discuss the motivations for acquiring these practices, the processes used to complete the acquisitions and integrate the physicians into IDSs, and the perceived consequences (to date) of these acquisitions for the IDSs and the local community. We collected the data used to address these issues through interviews with participants who were directly involved in acquiring physicians' practices or who were close observers of the acquisitions (for a description of the data collection process, see the Appendix).

Motivations for Acquiring Physician Practices

The interview respondents consistently listed the same IDS motivations for acquiring physician practices and the same reasons that the practices themselves wanted to be acquired. These motivations differed, however, in regard to multispecialty or primary care physician practices versus specialty practices.

Multispecialty and Primary Care Practices. Almost all respondents cited the practices' perceived need to invest in electronic medical records (EMRs) as the most important reason for wanting to be acquired by an IDS. Private purchasers supported the use of EMRs for their potential to improve quality through better care coordination and embedded standardized clinical guidelines. EMRs also were seen as important to moving beyond claims data for measuring and publicly reporting patient outcomes.

Given the relatively limited revenue opportunities in primary care, many practices did not believe they could afford to pay for EMRs on

Table 2. Chronological Summary of Major Physician Practice Acquisition Activity (Twin Cities, 2007-Present)

2007

1. Allina acquires Aspen Medical Group.[16]
   - 8 clinics and 4 urgent care clinics
   - 130 physicians and medical professionals
2. Fairview acquires Columbia Park Medical Group.[17,18]
   - 6 clinics
   - 520 employees, including physicians
3. Allina acquires Crossroads Medical Centers.
   - 3 clinics

2008

1. Allina acquires Quello.
   - 5 clinics

2009

1. HealthPartners acquires Physician Neck and Back clinics.[19]
   - 6 clinics and 15 physicians

2010

1. St. Paul Heart Clinic (34 physicians) dissolves, with physicians subsequently employed by Health East and by Fairview.[20]
2. HealthPartners acquires Cottage Grove Clinic.

2011

1. Fairview acquires Bloomington Lake Clinic.[21]
   - 2 locations and 22 physicians
2. HealthPartners acquires Lakeview Health.
   - Lakeview Hospital
   - Stillwater Medical Group with 4 clinics
3. HealthPartners acquires Eagan clinic.

2012

1. HealthPartners and Park Nicollet Health Services agree to merger under HealthPartners name.[22-28]
   - Park Nicollet with 19 clinics, 6 urgent care centers, and 670 employed physicians, plus Methodist Hospital and 8,100 employees.
   - Merged organization has 70,000 employees, 1,500 physicians, 5 hospitals, and 1 health plan.

their own. As they saw it, an EMR entailed not only the initial direct cost of the purchase and subsequent implementation, and ongoing maintenance costs, but also the revenue lost during its implementation (owing to lower physician productivity). (Note that IDSs acquired most

of the practices before EMR funding became available through the federal government.) For instance, one primary care practice leader pointed out that "We put in our own EHR back in 2007 and we figure that . . . in the first six months we lost half a million dollars, not counting what the system cost itself." These practice leaders also did not feel that they had sufficient leverage with health plans to secure the reimbursement increases that would be needed to maintain EMRs while also paying for quality improvement, performance measurement, reporting, and activities associated with achieving certification as "health care homes." Some practice leaders questioned their ability to retain their physicians and/or attract new ones without making major investments in infrastructure, which they did not deem feasible with the limited reimbursements for primary care. One respondent observed that "Independent physicians have no negotiating power at all with the major health plans," and another stated that "There isn't an independent medical group out there that believes the answer is to continue to be a small independent medical group." All together, these factors created a sense of urgency for some independent practices to be acquired, which was characterized as "we need to get on board at some place and get affiliated with somebody before we get left behind."

Because IDSs see primary care physicians—who are linked to other IDS components through organizational structures, financial incentives, and a common EMR—as essential to developing a continuum of care, they have been aggressively recruiting new physicians. One respondent estimated that about two-thirds of the IDSs' physicians had been recruited, compared with one-third through practice acquisitions. Faced with debt repayment obligations, newly minted physicians have become increasingly receptive to employment in IDSs. Many prefer the salary security, job stability, regular hours, access to technology, and staff support offered by an IDS to what they see as a more "risky" career in independent practice. The availability of a pool of employable physicians (new graduates and physicians moving to the community or leaving existing groups) has allowed IDSs to be relatively selective in their practice acquisitions.

The practice often takes the first step toward being acquired, either informally or through a formal request-for-proposal. In response, the IDS assesses the practice's motivations and expectations, its geographic and cultural fit with the IDS's medical group, and the financial cost of the acquisition. One IDS uses a formal "scoring" methodology to determine

whether to discuss acquisition with physician groups that approach it. This contrasts with the way that many hospitals reportedly pursued acquisitions in the 1990s, when they engaged in a sometimes frenzied competition to purchase primary care practices and consequently paid too much for them.[29] One respondent noted that in the Twin Cities, "The equity being paid for primary care practices today is far less than 15 years ago." This may reflect the diminishing value of the remaining independent practices, as the practices first acquired had the greatest strategic importance for IDSs. Or it could reflect the IDSs' growing ability to meet their goals through direct hires, as noted earlier. Recent acquisitions in the Twin Cities typically are practices already closely affiliated with IDSs. Compared to earlier practice acquisitions, IDSs may see less risk of losing these practices to competitors and therefore may have felt less urgency to acquire them. Acquisitions of closely affiliated practices also offer less disruption for the acquired practice, and integrating the practice costs less as well. Such acquisitions do not, however, generate significant increases in referrals for IDSs.

Not all discussions result in an acquisition, with—from the IDSs' perspective—small practices sometimes "overvaluing" their patient panels and real estate holdings. But one IDS respondent noted that "It's unusual for negotiations to break apart when you've been working with a group and have a pretty long relationship." According to most of the respondents, multispecialty and primary care practice acquisitions now have reached the point that there is little opportunity for IDSs to expand their primary care bases through further acquisitions. Only a small number of independent practices remain, and these are closely affiliated, historically and geographically, with an IDS. Physicians have "selected into" and remain with these practices because they place a high value on independence. Nevertheless, our interview respondents thought that growing market and financial pressures would make it increasingly difficult for them to remain independent.

Specialty Practices. In the past, specialty physician practices generally did not seek to be acquired by IDSs, preferring instead to grow through mergers, with the hope that their larger size would enhance their bargaining power with health plans and IDSs, provide them with financial security, and improve the quality of specialty care available to the community's residents. This strategy now faces new challenges, however. First, to maintain their market positions and attract and retain physicians, specialty groups must continually invest in new

technologies, including EMRs. But their profits may not be sufficient to allow these groups to be technologically "cutting edge" and at the same time compensate their physicians at "market rates," with both being important to the group's stability. This raises the possibility that some of the group's physicians could "split off" to seek employment in IDSs. A second challenge faced by large, single-specialty groups is that a large share of their profits can be generated by only one or a few procedures, making the group's finances highly vulnerable to rate cuts by payers when relative value units (RVUs) are recalculated or new technologies emerge. Several respondents cited the dissolution of a cardiology group as an example of how this can happen: Medicare reduced reimbursement rates for cardiac imaging at the same time that new imaging equipment came on the market and quickly became the standard for care. The cardiology group felt that if it remained independent, it could no longer maintain its compensation levels for its physicians and have access to the equipment needed to practice "state of the art" medicine. As a consequence, the group dissolved, and 2 different IDSs, which owned hospitals where the group's physicians practiced, hired its physicians.

The Process of Acquiring and Integrating Physician Practices

The details of the practice acquisition and integration process vary considerably depending on the characteristics of the practice being acquired and any "sticking points" along the way. Acquisitions of primary care practices are more systematic, and acquisitions of specialty practices are more opportunistic.

Multispecialty and Primary Care Practices. The transaction culminating in an IDS's acquisition of a multispecialty or primary care physician practice has 3 components: the purchase agreement, the employment contract, and the compensation plan. The purchase agreement specifies the amount that the IDS will pay for the practice's assets, including the practice's facilities and the stock held by the partner physicians, and may include "bonuses" for the practice physicians. Not surprisingly, as already noted, IDSs believe that practices often overvalue their assets, so reaching an agreement may be a significant obstacle. In addition, purchase agreements sometimes specify future IDS investments in facility upgrades, recruitment of additional physicians for the practice clinics,

maintenance of the practice's organizational structure and governance within the IDS, and the practice's rebranding.

Provisions in the employment contract typically tie the practice's physicians to the IDS for a specified number of years, with financial penalties for leaving early. In addition, contracts spell out expectations regarding work hours, physicians' participation in various medical group activities, and use of the IDS's EMR. For some practices, assurance of employment for their nonphysician employees, especially the practice's middle managers, can be a key issue in reaching and executing an agreement.

Agreeing on physician compensation can be the most complex part of the transaction, especially when the physicians in the acquired practice have been compensated according to a formula based solely on productivity. IDSs commonly transition physicians over a 2-year period into the compensation formula used by their medical groups, with some portion of their compensation based on performance measures beyond revenue generation. Physicians in the acquired practice may receive guarantees that their incomes will not fall below a specified preacquisition level for the duration of this transition period. In the first acquisitions, IDSs guaranteed income stability for physicians in acquired practices for a longer period than in recent acquisitions, for which 1 to 3 years is common. Again, this could reflect the IDSs' belief that more recent acquisitions have less strategic value than earlier ones did.

IDSs assign project management teams to carry out the terms of purchase agreements and accomplish clinical and fiscal integration, including alignment of practice operations, human resources, contracts, information systems, and accounting processes. The respondents noted that it can take from 6 months to 5 years for these components to be fully integrated, depending on the practice's size and complexity, but the transition to the IDS's billing system and the physicians' agreed-on compensation are immediate. Although use of the IDS's EMR also is initiated upon completion of the purchase, it can take many months to take effect, and even years before the acquired practice is fully utilizing all EMR capabilities. In some cases, physicians in acquired practices are not held to the performance goals of physicians in the IDS's medical group until the EMR is fully implemented in their practices. While achieving operational integration can pose many challenges, the interview respondents also observed that it can take considerable time to "work through" clinical issues regarding the IDS medical group's culture, the use of IDS

specialists versus external specialists for referrals, standardization of care processes, and expectations concerning measurement and performance on patient outcomes. These issues are more readily addressed in practices already closely affiliated with an IDS.

The integration of new practices into IDSs does not always go smoothly. One physician leader of an acquired practice suggested that IDSs may have unrealistic expectations of how quickly physicians will change their behavior to conform to IDS norms, especially the expectation that they will direct their referrals, when possible, to IDS specialists:

> The business people certainly just wanted all the business to flow, but it's not easy for a clinician and can generate a clash between . . . physician leadership and business plan writers. It is not simply a flip-of-a-switch; those of us that have practiced medicine understand that is not the dynamic that is best for patients.

The respondents spoke of several factors that supported the integration of an acquired practice into the IDS medical group. One respondent felt that "If there's anything to be learned from this, it is that you [the IDS] need a dedicated person to organize the work, make sure that there are no loose ends, and to set some timetables for the work to get accomplished" and that IDSs underestimated the need to aggressively manage the transition process and failed to devote sufficient resources to this task. At a less operational level, another respondent felt that "Controlling the tension for change is a very important factor to keep everybody optimally engaged and moving forward and to avoid resistance to change." A third respondent cited the need to "Communicate with group physicians and try to build excitement and positivity about the change they're going through."

Specialty Practices. Possibly because there have been fewer acquisitions of single-specialty practices than of multispecialty or primary care practices, the respondents generally felt that acquisitions of specialty practices should be viewed as distinct events, reflecting the unique challenges faced by each specialty group.

As a first step, the IDS stabilizes the specialty practice's finances and determines the number of specialists that it will need. Then the specialist physicians are transitioned to the IDS's EMR and engaged in collaborative quality improvement programs.

The respondents cited several challenges that make the purchase and integration of specialty practices different. As one respondent observed,

"The greatest challenge for the system is moving an acquired group's thinking from a silo-centered approach to that of defining success on a broader continuum." This is particularly difficult in specialty-practice acquisitions because specialists usually want to maintain some degree of self-governance and autonomy within the IDS. A second respondent noted that when initiating acquisition discussions, "The specialty group approaches the health system that already has the majority of group business" and "desires the longest guaranteed compensation contract" that it can negotiate. Establishing market compensation rates for most specialists is more difficult than for primary care physicians. Finally, acquisition of a specialist practice typically requires negotiation of the IDS commitment of funds toward the purchase of new technology, in order to assure the specialists that in the IDS they will be able to practice the most current and sophisticated medicine.

Consequences of Acquiring Practices

IDSs' acquisitions of physician practices raise several questions, including, Will the acquired physicians (especially primary care physicians) have to change their referral patterns within the community, and how might this affect patients? Will costs increase or decrease as a result of the practice's acquisition? How will the movement of physicians from an independent practice into employment in an IDS affect the quality of care? We asked our interview respondents each of these questions, and they cautioned that to date there was little hard evidence to support their views.

Referrals. Primary care physicians in acquired practices were expected to make referrals to specialists within the IDS whenever possible. Indeed, the interview respondents felt that in addition to wanting to increase their size and negotiating leverage with health plans, a big reason that IDSs acquire practices is to be able to count on referrals from these physicians. This was a significant motivating factor in the initial round of practice acquisitions during the 1990s and continues to be important today. Furthermore, according to the respondents, one reason that some specialty groups have sought acquisition by IDSs is to ensure that they have access to the secure patient base generated by IDS-employed primary care physicians.

Whether actual referrals have changed as a result of a particular acquisition is less certain. As noted, primary care practices seeking to be acquired typically first approach the IDS with which they have the

closest historical affiliation. These acquisitions result in little change in existing referrals in the community. When an IDS acquires a less closely aligned practice, during the negotiation period it makes sure that the practice physicians will use IDS specialists whenever possible. The IDSs' approach to accomplishing this was described by one respondent as "deliberate but not aggressive." According to another respondent, "Keeping patients within the system has sometimes been problematic. When this 'leakage' occurs, the medical directors will become involved with physicians."

In the future, IDSs may become more adamant about retaining referrals within their systems of care if the proportion of their revenues flowing through total cost of care (TCOC) contracts increases, as expected by the respondents. The assumption is that treating attributed (under TCOC contracts) patients within the system gives the IDS a better opportunity to control costs and meet quality targets: "Everybody being in the care system, the name of the game is going to be controlling leakage. Everybody will be trying to tighten down care that their attributed members are receiving and ensuring that they stay within the care system whenever possible." But several interview respondents felt that it was too soon to observe any "TCOC effect" on referral retention.

Costs. Most of the interview respondents believe that consolidation through the acquisition of physician practices has increased payer costs for health care in the Twin Cities because (1) it has strengthened the systems' ability to negotiate higher reimbursement rates for their services across the board, and (2) in some cases, physicians in acquired practices are reimbursed for their services at the higher rates previously negotiated for IDS physicians.[30,31] There was less agreement concerning whether the costs of providing services actually are lower within IDSs. Most of the respondents who commented on this issue felt there was no convincing evidence yet that IDSs had significantly reduced or increased costs. They were hopeful, though, that because TCOC contracts reward IDSs for efficiency, they would lead to lower costs in the future.

Quality. The interview respondents agreed that in theory, IDSs' acquisition of physician practices should improve quality because IDSs have the resources to make full use of EMR capabilities, standardize system processes, improve care coordination, and implement team models of primary care all more effectively than independent practices can. The respondents also agreed that ambulatory care quality was good and improving in the Twin Cities owing to the efforts of the local Institute for Clinical Systems Improvement (ICSI) and Minnesota Community

Measurement[31] and that determining the incremental contributions of acquisitions of physician practices in this environment was problematic. In fact, some independent practices have performed just as well on Minnesota Community Measurement measures of quality of care as have physician practices owned by IDSs.

A Next Phase for IDS/Physician Consolidation?

Nearly all the interview respondents believed that there was little opportunity in the Twin Cities for many more acquisitions of multispecialty group or primary care physician practices by IDSs. Instead, it seemed more likely to them that IDSs would hire primary care physicians directly, as needed. They agreed less on the likelihood of IDSs' acquisitions of specialty groups. Unlike primary care, there clearly remain opportunities for IDSs to acquire all or a part of currently independent specialty practices. As one respondent remarked, "What has surprised me most over the last decade is the degree to which specialists now are interested in being acquired." Another felt that "The battleground for the marketplace is now in acquiring specialty practices, especially oncology and orthopedics."

Most of the respondents questioned whether large, single-specialty groups in the Twin Cities could remain independent over the next decade while at the same time maintaining affiliations with multiple hospitals within different IDSs. One respondent predicted that "The market for specialty services will destabilize, and they [specialty groups] will be challenged by plans [and IDSs] on price and utilization." The independence of these groups also was thought to be at risk due to possible changes in Medicare reimbursement levels for key services, the lack of sufficient capital to purchase cutting-edge technology, and practice physicians' unrealistically high and unsustainable income expectations. According to another respondent, "Specialists are fearful of losing referral sources and increasingly see themselves better off inside some system rather than outside." The threat of being cut off from IDS referrals could lead to internal tension in large groups, resulting in some specialists leaving these groups to seek IDS employment. Several respondents pointed to the breakup of a local cardiology group (described earlier) as illustrative of why specialty groups will have difficulty maintaining their independence.

Nevertheless, even though some specialty groups may have an interest in being acquired, the respondents did not believe that IDSs would necessarily want to acquire these practices. In some cases, the respondents thought the practices simply were too big to be absorbed by a single IDS, especially when IDSs are trying to find the "right size" to effectively manage the cost of providing services to a defined population base. Accordingly, IDSs might be more amenable to employing specialists from a group that was dissolving. Or they could avoid having to manage specialists who are used to autonomy and high incomes by simply changing their relationships with existing groups, using their purchasing leverage to negotiate new contracts that tied the groups more closely to the IDS through different risk-sharing arrangements. Because specialty groups face these challenges to different degrees, some combination of group dissolutions and contractual tightening of relationships between individual groups and IDSs could occur. At the same time, however, the respondents raised the possibility that mergers among local or regional IDSs could increase the size of specialty groups within IDSs.

The respondents regarded the future impact of TCOC contracting on acquisitions of specialty practices by IDSs as possibly significant but difficult to determine at present. Under TCOC contracts, specialty practices have "downstream" contracts with IDSs in addition to their contracts with health plans. Despite the drawbacks already noted, in an environment dominated by TCOC contracts, the negotiations by IDSs and large specialty groups over reimbursement rates and referrals may encourage acquisitions. The benefit for IDSs would be greater certainty in budgeting for specialty services, consistent with their assumption of greater financial risk for total costs of care. But some respondents noted that acquisition of specialty practices by IDSs is more complex than the acquisition of primary care practices and carries a greater financial risk because of the larger cost base of the acquired practices and uncertainty about reimbursement levels for specialty care. Also, very large specialty groups serving multiple IDSs may be better able to achieve efficiencies and provide higher quality than could a larger number of smaller, single-specialty groups, each serving the needs of a single IDS. Therefore, the respondents believed that the IDSs would see specialty-practice acquisition as a "last resort" in building a cost-effective continuum of care and might prefer to maintain current contractual arrangements for as long as they can, even if their revenues under TCOC contracts increased.

Conclusions

Drawing general conclusions from a single case study is difficult, particularly from a highly consolidated community. For instance, other communities' independent physician practices may be in a stronger financial position to maintain their independence.[34] If so, conclusions drawn from the Twin Cities' experience regarding acquisition motivations and processes may have little relevance to these settings at present. Recent accounts in trade journals nonetheless suggest widespread acquisitions of physician practices across communities.[33] Moreover, research that tracked consolidation over 14 years in 12 nationally representative communities documented increased health system consolidation in all of them, including efforts by physician practices to merge with other practices and to forge closer links with hospitals and IDSs, sometimes through acquisitions.[1] Therefore, even though the path toward greater consolidation varies across these communities, many appear to be moving toward the same stage of consolidation as the Twin Cities.

Recognizing that consolidation trajectories vary across communities, including experiences with acquisitions of physician practices by IDSs, two general conclusions from the Twin Cities appear to have broad relevance. First, with very few exceptions, the movement toward community health system consolidation has progressed without retreat. It thus seems very unlikely that the most recent consolidation phase—acquisitions of physician practices by IDSs—will be reversed, given the scope of this activity, the processes used to integrate acquired practices (especially movement of physicians to the IDS's EHR), and the financial incentives for IDSs to coordinate service delivery efficiently across the care continuum in order to succeed under risk-bearing contracts. These factors seem likely to be present in other communities as well.

Second, the forces that reward consolidation are likely to grow, suggesting further consolidation of community health care systems. The nature and pace of that consolidation will depend on current market structures, which in turn reflect consolidation trajectories in the past. A major factor driving provider consolidation in the Twin Cities over time, particularly recent acquisitions of physician practices, has been providers' concerns about maintaining revenues. Attempts by local payers, the state legislature, and federal programs to implement strategies to restrain growth in costs have contributed to this uncertainty and

helped lead to market consolidation. Assuming that purchasers in all communities try to control health care costs and will continue to do so, pressures on provider revenues are not likely to abate. In fact, as the proportion of total health care spending through public programs rises, driven by growth in the number of Medicare and Medicaid beneficiaries, it seems reasonable to expect these efforts to intensify. One such effort has been the institution of TCOC contracting in the public and private sectors. While its importance to overall organizational revenues varies across organizations, it could provide an important, continuing stimulus for consolidation and, consequently, the further acquisition of physician practices.

Interestingly, there is yet no clear verdict on the net impacts of consolidation on consumers in the Twin Cities, despite the relatively advanced state of consolidation in this community. Past research on consolidation impacts (more generally) has focused on consolidation "events," but this approach is not adequate for understanding the motivations for consolidation, the process of consolidating community health care systems, or the impacts of system consolidation over time. Moving beyond single-event merger studies to a systems approach faces many challenges, including the limited availability of longitudinal data sources constructed at the community level. Nevertheless, until researchers can provide a better understanding of the dynamics and the impacts of consolidation over time at the community health system level and can contrast the outcomes associated with different consolidation trajectories, it will remain difficult to develop sensible public policy, including antitrust policy, regarding consolidation in general and the acquisition of physician practices by IDSs in particular.

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Funding/Support: This project was funded by a grant from the Commonwealth Fund to the Medica Research Institute and the University of Minnesota.

Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Jon Christianson received a research grant to evaluate a primary care redesign project at Allina Health. No other disclosures were reported.

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Appendix

Interview Data Collection

Our research can be categorized as a single-community descriptive case study. The data collection regarding acquisitions of physician practices was guided by policy issues that have been raised in the literature and media (see Yin's *Applications of Case Study Research*.[34]) and are summarized at the beginning of Yin's *Applications of Case Study Research*.[1] In order to gather information about the motivations for IDSs' acquisition of such practices, the processes used by IDSs to acquire and integrate the practices, and the possible impacts of their acquisition, we conducted telephone interviews with 20 individuals in the Twin Cities who were selected based on their involvement in acquisitions and general expertise regarding these issues. After reviewing the interview protocols, proposed interviewee recruitment process, and proposed informed consent process, the University of Minnesota Institutional Review Board granted exempt status to the project.

Selection of Interview Respondents

Our goal was to recruit 20 expert respondents representing 4 different perspectives on acquisitions of physician practices by Twin Cities' IDSs: market observers with knowledge of such acquisitions and their impacts on the Twin Cities' health care market; IDS physicians or other administrators involved in 1 or more acquisitions; physicians or other administrators in practices that were acquired; and physicians or

other administrators in practices that remained independent but considered being acquired by an IDS. We used information collected as part of a previous research project and a nomination process to identify potential respondents. As a result of this process, we interviewed 5 market observers, 3 who had helped facilitate acquisitions by IDSs and 2 who had provided health plan or employer perspectives on practice acquisitions. We interviewed 8 individuals affiliated with IDSs or other large organizations who had been involved personally for their organizations in the acquisition of physician practices. These individuals represented 5 different organizations. We interviewed 4 who had been part of independent practices acquired by larger organizations and who were involved to varying degrees in the actual acquisition process. Finally, we interviewed 2 people who represented practices that had chosen to remain independent but had considered (typically several times) accepting offers to join or otherwise affiliate with larger organizations.

Recruitment of Interview Respondents

We initially contacted potential interview respondents by email, explaining the general nature of the study and the topics that would be addressed in the interview. If the potential respondent expressed interest, we sent a second email containing the informed consent statement and possible times for a 45- to 60-minute interview. The informed consent contained additional descriptive information regarding the study and topics to be addressed in the interview. Once a time was scheduled for the interview, we sent an email confirming the time and providing a call-in number. All the potential interview respondents who were contacted agreed to participate and also to be contacted, if necessary, after the interview to clarify their responses, which did not prove to be necessary.

Interview Administration

Jon Christianson led all 20 interviews, and Caroline Carlin participated in 5 of them. All the interviews were conducted between September 6, 2012, and February 13, 2013. At the beginning of each one, the respondent was asked if she or he had read the informed consent form, understood its contents, was willing to have the interview recorded, and had any questions about the study or the interview process. The recorder then was turned on, and the interviewee was asked again to affirm that

she or he had read the consent form and had given permission for the interview to be recorded. Separate interview protocols were used for each type of respondent, with the protocols overlapping substantially in their content. (Table A1. summarizes the topics of each of the 4 protocols.) The respondents were asked to address each of the topics or questions in the relevant protocol, and the interview usually lasted for 60 minutes, with sufficient time to complete the protocol. None of the respondents ended their interviews early, although one had less time available for the interview than was initially scheduled. At the end of the interview, the interviewer reminded the respondent of how the interview information would be processed and used in the study.

Processing and Using the Interview Data

The recordings of the interviews were transcribed within 2 to 3 weeks after being completed, with transcripts returned to the interviewers for analysis and also entered into a secure electronic database for storage. Louise Warrick, who was not involved in conducting the interviews, read the transcripts, identified areas where clarification was necessary, and organized the responses in tables according to topic and category of respondent, which we used to construct a first draft of our findings. Christianson and Carlin then reread the interview transcripts to make sure that this draft did not overlook or inaccurately portray important points made by the respondents. Finally, we revised the draft in accordance with this rereading of the transcripts and subsequent discussion among the researchers.

Table A1. Interview Protocol Topics

	Market Observer	Large Organization	Acquired Practice	Independent Practice
Total Cost of Care Contracts				
Which organizations involved, how long in place	X	X		
Preparation of patients/members receiving care under contracts	X (if plan)	X		
Structure of contracts	X (if plan)	X		
Effect on physician compensation design		X		
Organizational changes based on contracts		X		
Success of contracts and changes likely in future	X (if plan)			
General Views on Consolidation				
Most significant consolidation events in last 10 years and why	X	X	X	X
Most important factors driving consolidation and why	X	X	X	X
Acquisition of Physician Practices				
Why organization sought to acquire practices or be acquired; most important factor		X	X	
Importance of local market versus national factors		X	X	
Process used to decide whether to acquire practice or to be acquired; arguments for or against acquiring or being acquired		X	X	
Pace of acquisition process		X	X	
Changes occurring in physician practice after being acquired (physician compensation, relations with other community providers, participation in community activities, electronic health records, referral patterns, internal organization governance)	X	X	X	
Strategies used to integrate acquired practice in larger organization (type, effectiveness)		X	X	
Impact of physician practice acquisition on organization		X		