Large Independent Primary Care Medical Groups

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ABSTRACT

PURPOSE In the turbulent US health care environment, many primary care physicians seek hospital employment. Large physician-owned primary care groups are an alternative, but few physicians or policy makers realize that such groups exist. We wanted to describe these groups, their advantages, and their challenges.

METHODS We identified 21 groups and studied 5 that varied in size and location. We conducted interviews with group leaders, surveyed randomly selected group physicians, and interviewed external observers—leaders of a health plan, hospital, and specialty medical group that shared patients with the group. We triangulated responses from group leaders, group physicians, and external observers to identify key themes.

RESULTS The groups' physicians work in small practices, with the group providing economies of scale necessary to develop laboratory and imaging services, health information technology, and quality improvement infrastructure. The groups differ in their size and the extent to which they engage in value-based contracting, though all are moving to increase the amount of financial risk they take for their quality and cost performance. Unlike hospital-employed and multispecialty groups, independent primary care groups can aim to reduce health care costs without conflicting incentives to fill hospital beds and keep specialist incomes high. Each group was positively regarded by external observers. The groups are under pressure, however, to sell to organizations that can provide capital for additional infrastructure to engage in value-based contracting, as well as provide substantial income to physicians from the sale.

CONCLUSIONS Large, independent primary care groups have the potential to make primary care attractive to physicians and to improve patient care by combining human scale advantages of physician autonomy and the small practice setting with resources that are important to succeed in value-based contracting.

Ann Fam Med 2016;14:16-25. doi: 10.1370/afm.1890.

INTRODUCTION

Physicians face a rapidly changing world of value-based payment,[1] public reporting of physician performance,[2] electronic health records (EHRs), patient-centered medical homes,[3] and accountable care organizations (ACOs).[4,5] Success is likely to require substantial investments in health information technology and skilled leadership and staff.[6,7] Large organizations have the scale to make these investments while negotiating higher payment rates from insurers[8] and providing physicians a more secure and stable lifestyle with regular hours, less time on-call, and little or no responsibility for managing the business side of practice.[9]

Increasingly, physicians are choosing to become employed by large organizations.[10,11] Some join large multispecialty or single-specialty medical groups. This opportunity is often not available, however, and many physicians are becoming employed by hospitals.[12,13] For primary care physicians, an additional option is available: the large, physician-owned, primary care medical group. Very few physicians and policy experts are aware of these groups; we have been unable to find a peer-reviewed article on this topic. In this article we describe 5 large primary care groups, their advantages and disadvantages, and the challenges they face.

Conflicts of interest: Dr Casalino is a member of the American Hospital Association Committee on Research, the American Medical Association Expert Panel on Physician Professional Satisfaction, and the boards of directors of the Health Research and Education Trust and the American Medical Group Foundation. Dr Lynch and Dr Staub are leaders in ProHealth Physicians.

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METHODS

We identified 21 medical groups that were physician owned, included at least 40 physicians, and had at least 77% primary care physicians. We identified these groups using 2 prior national surveys of medical groups,[14,15] the membership list of the American Medical Group Association, the list of first-year participants in the Medicare Pioneer and Shared Savings ACO programs, and groups known to our team and knowledgeable experts whom we consulted. We then selected 7 groups chosen to represent a variety of sizes and geographic areas; 5 agreed to participate. Each group completed a short form supplying basic information about the group.

For each group participating, we conducted a 45- to 60-minute telephone interview with the president or chief executive officer, medical director, and nonphysician quality improvement leader. To gain external perspectives, we attempted to interview a hospital chief executive officer, a health plan medical director, and a specialist group leader, identified by having each group provide us with the names of several individuals familiar with the group in each of these external observer categories. We promised confidentiality to all interviewees.

Based on our team's knowledge of primary care groups and on review of medical group surveys from RAND, the Medical Group Management Association, Mathematica, the Center for Studying Health System Change, and the National Survey of Physician Organizations, we developed a semistructured interview protocol for each of the 6 categories of interviewees. This protocol can be found in Supplemental Appendix 1 (available at http://annfammed.org/content/14/1/16/suppl/DC1).

One or more team members conducted the interviews; a specially trained research coordinator took verbatim notes. Team members repeatedly discussed the interview notes and survey results to identify key themes based on triangulating[16] responses from group leaders, external observers, and the physician surveys.

We sent a draft of our findings to each group. All corrected minor factual inaccuracies; none suggested that we alter our interpretations of the data.

After we designed and pilot tested a Web-based survey (Supplemental Appendix 2, available at http://annfammed.org/content/14/1/16/suppl/DC1), we distributed it to a random sample of 50 physicians in each group. The identity of respondents was kept confidential.

Throughout the article, quotes come from group leaders unless otherwise specified. Comments (within the survey questionnaire responses) from rank-and-file physicians are identified as such.

The Weill Cornell Medical College Institutional Review Board approved the study.

RESULTS

The 5 groups that agreed to participate were Arizona Community Physicians, Central Ohio Primary Care Physicians, Infinity Primary Care, New West Physicians, and ProHealth Physicians (Table 1). We conducted 28 interviews (in 2 cases we were able to interview individuals in only 2 of the 3 external categories). ProHealth team members did not read the interviews with ProHealth leaders or external observers of ProHealth.

Arizona Community Physicians

Arizona Community Physicians (ACP) was created in 1994 through a merger of 2 groups totaling 9 primary care physicians. Risk contracting and primary care gatekeeping were gaining popularity, and hospitals and large corporations were buying primary care physician practices—which ACP physicians wanted to avoid. To "keep as much of the health care dollar as possible within our group," ACP sought risk contracts and developed imaging and laboratory services. By adding already existing small primary care practices, ACP grew to include 54 sites with 130 physicians.

ACP spans a broad geography in the Tucson area but has not focused on developing a brand name. Patients who visit physicians at individual practice sites may not know they are seeing an ACP physician. Each site is responsible for its own expenses, relies on the central ACP office for health plan contracting and administrative services, and contributes a 7.5% management fee to support ACP. Physicians are paid almost entirely based on the volume of services they generate. ACP engages in ACO-like contracts with health plans, participates in a Medicare Shared Savings Program through the Commonwealth Primary Care ACO, and is applying to the Centers for Medicare & Medicaid Services to start its own ACO. An outside observer stated:

> Physicians in Arizona Community Physicians get better management infrastructure than small practices—big league management and ancillary revenues, plus autonomy. The ACP physicians have their cake and eat it too.

ACP leaders and external observers suggest 3 challenges going forward: first, declines in reimbursement for ancillary services—especially for computed tomography and magnetic resonance imaging—have reduced an important source of ACP revenue. Hospital-owned imaging facilities are paid at a much higher rate by Medicare and health insurers, putting physician-owned practices at a disadvantage compared with hospital-employed physicians. Second, to succeed in value-based contracting, ACP will have to invest heavily in creating systematic processes to improve the

Table 1. Characteristics of the 5 Primary Care Groups

Characteristic	Arizona Community Physicians	Central Ohio Primary Care Physicians	Infinity Primary Care Physicians	New West Physicians	ProHealth Physicians
Location	Arizona	Ohio	Michigan	Colorado	Connecticut
Year started	1994	1996	2004	1994	1997
Physicians, No.	130	255	49	65	242
Physicians as owners, %	91	83	60	81	75
Physicians in primary care,[a] %	88	69	100	82	95
General internal medicine physicians, %	32	31	33	31	31
Family medicine physicians, %	45	20	67	51	29
Geriatricians, %	0	0	0	0	0
Hospitalists, %	0	22	0	14	0
Pediatricians, %	12	18	0	0	35
Outpatient practice sites, No.	54	53	9	17	90
Other specialties	Dermatology, endocrinology, gynecology, pediatrics, rheumatology	Allergy, endocrinology, infectious disease, pediatrics, physical medicine and rehabilitation	None	Cardiology, gastroenterology, psychiatry	Gastroenterology, otolaryngology, neurology, pediatrics, plastic surgery
Nurse practitioners and physician assistants, No.	36	25	1	27	142
Nurse care managers, No.	1	6	2	6	6
NCQA PCMH sites, No.	44	44	4	17	71
Ancillary services	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory
	Imaging, including bone density test, CT, MRI, mammography, ultrasound	Imaging, including bone density, CT, MRI, nuclear stress tests, and stress echocardiograms, ultrasound, physical therapy	Imaging, including bone density test, CT, nuclear stress tests and stress echocardiogram, ultrasound	Imaging, including bone density test, CMIT, stress echocardiogram, ultrasound	Imaging, including ultrasound, echocardiogram, bone density test
Annual revenue, in millions, $	95.8	122.0	22.5	52	158.9
Gross revenue from payors					
Commercial, %	53	62	71	78	68
Traditional Medicare, %	22	20	17	0	13
Traditional Medicaid/ SCHIP, %	0.3	3	1	<1	10
Medicare Advantage, %	17	8	6	22	4
Medicaid HMOs, %	4	0	3	0	0
Other, %	4	7	2	0	3
Patients in risk contracts					
Medicare Shared Savings or Pioneer, No.	26,382[b]	0	5,044[c]	0	32,858
Medicare Advantage, No.	20,000	20,000	4,130	13,000	10,500
Medicaid ACO, No.	0	0	0	0	0
Other form of risk for patient care, including ACO-like or pay-for-performance contracts with health insurers, No.	15,000	160,000	37,984	50,000	109,300
Participate in an IPA	No	No	Yes	No	No
Physician compensation					
Base salary, %	0	0	0	60	0
Productivity, %	100	90	90	20	90
Other,[d] %	0	10	10	20	10

ACO = accountable care organization; CMIT = carotid intima-media thickness test; CT = computed tomography; HMO = health maintenance organization; IPA = independent practice association; MRI = magnetic resonance imaging; NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home; SCHIP = State Children's Health Insurance Program.

Note: Information for 2014 provided in writing by the 5 medical groups.

[a] Includes family practitioners, general internists, geriatricians, and general pediatricians. Does not include hospitalists.

[b] Through the Commonwealth Primary Care ACO.

[c] Through the Physician Organization of Michigan ACO.

[d] Components include quality, cost control, panel size, patient satisfaction, other.

quality and decrease the cost of care and will have to gain support from its physicians for these investments and processes. Not all ACP physicians may be enthusiastic about such investments. An external observer commented, "I think they have a strong foothold…. Getting their group a little more 'group-like' and not so individual, they can be even stronger." Third is whether ACP will maintain its independence. To date, ACP has declined many offers to be purchased by a hospital or merge with specialist medical groups. An ACP physician leader explains:

> I worked in a multispecialty group for many years.... [In our primary care group] we have the advantage that we get to pick our specialists, so we can pick the best in town. There is less political battle within the group because we are on a similar page financially and operationally, so governance-wise it's easier. Multispecialty means more politics.

But ACP leadership is aging; the mean age of ACP physicians is 56 years (Table 2), the oldest of any of the groups. Physicians who leave ACP do not receive a buyout. At some point, ACP physicians could decide that the best way to prepare for retirement would be to monetize the value of their group by selling it.

Central Ohio Primary Care Physicians

Central Ohio Primary Care Physicians (COPCP) was created in 1996 from the merger of 11 practices totaling 33 physicians. The physicians wanted to develop more ancillary services, better administrative leadership, processes to improve quality, and joint contracting with health insurers, as well as include a hospitalist service to help cover inpatient responsibilities. Risk contracting "was not even a thought at the time."

COPCP now includes 255 physicians at 53 practice sites; 69% are primary care physicians (20% general internal medicine) and an additional 22% are hospitalists (Table 1). COPCP physicians pay their site's overhead—staff and office expenses, including rent—and contribute to COPCP's administrative costs. Physicians' income is based primarily on the volume of services they provide, with up to an additional 10% based on individual physicians' quality of care scores.

During the past few years, COPCP has increased its value-based contracting through Medicare Advantage plans and ACO-like contracts with health insurers.[17] Health plans have helped to fund COPCP's 6 nurse care coordinators and development of its 46 patient-centered medical homes. COPCP's 60 hospital-

Table 2. Characteristics of Physicians in the Primary Care Groups

Characteristic	Mean for all Groups (N = 168)	Arizona Community Physicians (n = 29)	Central Ohio Primary Care Physicians (n = 33)	Infinity Primary Care Physicians (n = 37)	New West Physicians (n = 39)	ProHealth Physicians (n = 30)
Response rate, %	67	58	66	74	78	60
Age, y	50.7	55.7	47.4	48.6	48.9	54.0
Sex, female, %	39.5	20.7	51.5	52.8	51.3	13.3
Specialty						
Family practice, %	58.1	62.1	45.5	75.0	66.7	36.7
Internal medicine, %	38.9	34.5	48.5	22.2	33.3	60.0
Other	3.0	3.4	6.1	2.8	0.0	3.3
Years in the group	10.9	11.9	10.3	10.2	10.8	11.6
Physician as owners, %[a]	84.2	96.6	97.0	66.7	89.5	72.4
Previous practice setting						
Solo/small primary care, %	48.8	65.5	39.4	13.5	59.0	73.3
Multispecialty, %	6	20.7	6.1	2.7	0.0	3.3
Hospital based, %	25	13.8	21.2	67.6	7.7	10.0
Academic medical center, %	7.7	6.9	15.2	5.4	5.1	6.7
Community health center/ public, %	3.6	6.9	3.0	0.0	5.1	3.3
VA/government, %	0.6	0.0	3.0	0.0	0.0	0.0
Residency or fellowship training, %	21.4	13.8	30.3	13.5	35.9	10.0
Office visits per day, No.	18.8	18.2	18.6	19.0	18.0	20.4
Hours worked per day	10.3	9.8	10.7	10.2	10.0	10.9

VA = Veterans Affairs.

Note: Data from physician survey; see Supplemental Appendix 2 (http://annfammed.org/content/14/1/16/suppl/DC1) for a copy of the survey instrument.

[a] This percentage may differ from the percentage in Table 1. Table 1 gives the percentage reported by group leaders; Table 2 gives the percentage of respondents who reported being owners/shareholders.

ists, its transition care nurses, and its relationships with post–acute care facilities aim to reduce patients' hospital length of stay and avoid unnecessary admissions and readmissions. Despite its increasing involvement in value-based contracting, COPCP faces challenges: "We [still] function a little bit as independent practices, and I want to see us coalesce into a cohesive organization; less individual sites, more commonality."

COPCP's extensive ancillary services have become less profitable as payment rates for these services decline. COPCP leadership believes, however, that owning these services is nevertheless valuable for risk contracting because they cost less than services in hospital-based facilities.

A health plan executive stated: "COPCP is one of our strongest partners nationally and regionally. They are outperforming most of the groups that we contract with."

The executive added that COPCP, as a "primary care based, physician-owned group" has more opportunity to "bend the cost curve" compared with hospital-based groups burdened with hospitals' "high cost structure." This observer also argued that hospital-employed physicians and physicians in multispecialty groups face pressure to refer to specialists employed by their organization, whereas independent primary care groups can steer patients to hospitals and specialists who provide cost-efficient care.

COPCP physicians are relatively young, with a mean age of 47.4 years (Table 2) and both COPCP leaders and outside observers report that COPCP has no trouble recruiting physicians and adding practices. Physicians receive no buyout, however, if they leave or retire, so if COPCP remains independent, its physicians will be forgoing the substantial revenue they could gain from selling their group.

Infinity Primary Care Physicians

Infinity Primary Care, located in the Detroit suburbs, began in 2004 when a local hospital divested a large number of its employed physicians; 33 divested primary care physicians created a medical group.[18] Infinity currently includes 49 physicians at 9 practice sites (Table 1). Sixty percent are shareholders. Infinity has a diagnostic testing center that provides imaging and laboratory services. Cuts in payments for imaging services have significantly reduced Infinity's profit margin for these services.

Infinity has engaged in value-based contracting for both commercial and Medicare patients since 2006 through Oakland Southfield Physicians, a physician-owned independent practice association (IPA). These contracts are more profitable for the group than traditional health insurer contracts; Infinity has gained bonuses for both cost and quality performance each year:

> We couldn't even exist without this. It would be very difficult. Because we've provided cost-effective care and were responsible for where the dollars were flowing, it allowed us to make significant amounts of money.

Infinity's care managers have been funded via multiple demonstration projects. One-half of Infinity sites have National Committee for Quality Assurance Medical Home designation; all have Blue Cross of Michigan medical home designation. Infinity also helps lead family medicine and internal medicine residency programs. A hospital executive stated:

> Infinity has been very successful on a number of fronts. They have been a large practice for over 10 years and maintained autonomy. They are financially savvy and have a good clinical reputation as PCPs [primary care physicians]…. They were early adopters of the state of Michigan program for patient-centered medical homes.

Infinity has had stable leadership, and continues to maintain its independence, but it has not grown as rapidly as anticipated, raising the possibility that the group could at some point become part of a larger multispecialty group or sell to a hospital.

New West Physicians

New West Physicians was created in 1994 by 18 primary care physicians in 6 practices after 2 years of nearly weekly meetings. The physicians believed that small practices were in a weak negotiating position with insurance companies and lacked economies of scale to decrease administrative costs.[19] New West received $5 million from a private equity firm; the group bought out the firm's ownership stake in 2006. New West now has 65 physicians at 17 sites in the Denver area. New West physicians are paid a base salary supplemented substantially by measures of individual performance, such as cost control, panel size, quality, and patient satisfaction (Table 1).

New West focused on risk contracting, particularly through Medicare Advantage, from the beginning, modeling itself on the large Bristol Park primary care medical group in California (since sold to a hospital). New West takes full risk for primary care and specialist physician services and substantial shared risk for hospital and ancillary services, and claims to have been very successful financially in these contracts year after year—a claim that was supported in our interviews with external observers.

> New West employs a number of strategies to reduce hospital utilization–including provision of its own 24/7 hospitalist coverage, aggressive follow-up in home and post–acute care settings to prevent readmissions, and provision of after-hours access to ambulatory care.[19]

Table 3. Physicians' Satisfaction With Work Life and Medical Group

Area of Satisfaction	All Groups (N = 168)	Arizona Community Physicians (n = 29)	Central Ohio Primary Care Physicians (n = 33)	Infinity Physicians (n = 37)	New West Physicians (n = 39)	ProHealth Physicians (n = 30)
Overall satisfaction						
Satisfaction with their medical group	4.1	4.5	4.5	3.1	4.6	3.4
Somewhat or very satisfied, mean %	74.3	89.7	87.9	42.9	94.9	53.3
Very satisfied, mean %	48.2	69.0	66.7	11.4	71.8	20.0
Very dissatisfied, mean %	1.2	0.0	0.0	2.9	2.6	0.0
Satisfaction with their career in medicine	4.0	4.4	3.8	3.5	4.2	3.9
Somewhat or very satisfied, mean %	80.8	93.1	78.8	63.9	92.3	75.9
Very satisfied, mean %	38.0	51.7	36.4	25.0	43.6	34.5
Very dissatisfied, mean %	4.2	0.0	6.1	8.3	2.9	3.4
Income and quality of life						
Satisfied with income	3.8	4.2	3.8	2.9	4.5	3.5
Agree or strongly agree, mean %	69.9	92.6	72.8	32.4	97.4	53.4
Strongly agree, mean %	27.6	29.6	27.3	5.9	53.8	16.7
Strongly disagree, mean %	2.5	0.0	3.0	8.8	0.0	0.0
Satisfied with clinical workload	3.3	3.6	3.5	2.7	3.9	2.9
Agree or strongly agree, mean %	57.5	72.4	60.6	35.3	79.5	36.6
Strongly agree, mean %	13.9	20.7	21.2	26.5	15.4	3.3
Strongly disagree, mean %	7.3	6.9	3.0	17.6	0.0	10.0
Satisfied with work/life balance	3.3	3.5	3.3	2.4	3.8	2.9
Agree or strongly agree, mean %	52.7	65.5	57.6	31.3	74.3	30
Strongly agree, mean %	15.3	20.7	15.2	6.3	25.6	6.7
Strongly disagree, mean %	7.4	6.9	3.0	18.8	0.0	10.0
Intragroup relations and processes						
Satisfied with ownership in the group	4.2	4.4	4.4	3.8	4.4	4.0
Agree or strongly agree, mean %	85.4	89.7	93.9	72.7	87.2	83.4
Strongly agree, mean %	43.9	55.2	54.5	21.2	66.7	16.7
Strongly disagree, mean %	0.6	0.0	0.0	0.0	2.6	0.0
Satisfied with input into key decisions	3.5	3.8	3.9	2.7	4.2	3.0
Agree or strongly agree, mean %	60.1	67.8	75.7	27.3	84.6	40
Strongly agree, mean %	24.5	32.1	24.2	6.1	48.7	6.7
Strongly disagree, mean %	4.9	0.0	3.0	12.1	0.0	10.0
Group's quality improvement efforts						
Group invests in processes that improve the quality of care	4.2	4.1	4.6	3.7	4.8	3.9
Agree or strongly agree, mean %	88.5	93.1	100.0	73.5	97.4	76.6
Strongly agree, mean %	47.9	27.6	69.7	17.6	89.7	23.3
Strongly disagree, mean %	1.8	0.0	0.0	5.9	2.6	0.0
Group's compensation formula rewards physicians who provide high quality care	3.4	3.2	3.7	2.6	4.2	3.1
Agree or strongly agree, mean %	53	31	69.7	24.3	87.2	43.3
Strongly agree, mean %	20.7	17.2	24.2	6.1	41.0	10.0
Strongly disagree, mean %	5.5	3.4	3.0	12.1	0.0	10.0

continued

New West focuses its referrals on 250 specialists—reduced from 700 during the 1990s—whom New West believes provide high-quality, cost-effective care, and are responsive to the group's concerns. In addition, given its commitment to risk contracting, New West is working with a nearby IPA to construct a 70-bed skilled nursing facility to provide better post–acute care and reduce hospital readmissions.

The substantial cost savings and quality bonuses that New West gains through risk contracting enable the group's physicians to earn considerably more than the average US primary care physician or primary care physicians in the other groups in this study. New West physicians reported the highest levels of satisfaction in our survey (Table 3). A hospital executive described New West:

Table 3. Physicians' Satisfaction With Work Life and Medical Group *(continued)*

Area of Satisfaction	All Groups (N = 168)	Arizona Community Physicians (n = 29)	Central Ohio Primary Care Physicians (n = 33)	Infinity Physicians (n = 37)	New West Physicians (n = 39)	ProHealth Physicians (n = 30)
Relations with hospitals and specialists						
Physician ownership offers less pressure from external entities, eg, hospitals	4.1	4.4	4.4	3.7	4.1	4.1
Agree or strongly agree, mean %	82.4	93.1	90.9	67.6	76.9	86.6
Strongly agree, mean %	44.8	51.7	63.6	23.5	51.3	33.3
Strongly disagree, mean %	0.6	0.0	0.0	0.0	2.6	0.0
Satisfied with autonomy in practicing medicine	4.0	4.3	4.2	3.5	4.2	3.6
Agree or strongly agree, mean %	78.6	89.6	84.9	59.4	92.3	63.3
Strongly agree, mean %	34.4	44.8	45.5	28.1	41.0	10.0
Strongly disagree, mean %	1.2	0.0	0.0	6.3	0.0	0.0
Primary care group = more cohesion	3.9	3.9	4.4	3.4	4.4	3.6
Agree or strongly agree, mean %	78.2	79.3	97	55.9	89.7	66.7
Strongly agree, mean %	30.9	20.7	45.5	8.8	56.4	16.7
Strongly disagree, mean %	2.4	0.0	0.0	5.9	2.6	3.3
Easy access to specialty care	4.3	4.1	4.5	4.2	4.5	4.0
Agree or strongly agree, mean %	93.3	93.1	100	88.2	94.8	90
Strongly agree, mean %	41.2	24.9	51.5	38.2	61.5	23.3
Strongly disagree, mean %	0.6	0.0	0.0	0.0	0.0	3.3

Note: Responses were on a scale from 1 to 5, where 1 = strongly disagree and 5 = strongly agree or 1 = very unsatisfied and 5 = very satisfied, as appropriate. See Supplemental Appendix 2 at http://annfammed.org/content/14/1/16/suppl/DC1 for a copy of the survey instrument.

They are almost a Kaiser Permanente-type group; they are very clear about their attributes and philosophies; they make tight group decisions; they are very careful which physicians they hire. I have never seen in 20 years splintering off of physicians from New West; they are very different from other groups and IPAs.

A health plan executive stated, "They are a good value proposition–good quality and cost." Despite its success to date, New West leadership and external observers believe that the group needs to grow larger if it is to remain independent. An external observer stated: "Whether it's IT [information technology] or other types of new programs that require access to capital, their ability to attain capital funding is difficult unless they show they are growing."

ProHealth Physicians

ProHealth, created in 1997, has grown to include 242 physicians and 142 nurse practitioners and physician assistants at 90 sites around Connecticut (Table 1). The group was created because "PHO [physician hospital organization] structures often have a pecking order between the relationships of hospital and specialists and PCPs were at the caboose." Furthermore, "Larger multispecialty groups spend a lot of time on resources and how they are going to split the compensation…. We have less of that wasted energy."

A hospital administrator reinforced this view:

ProHealth didn't end up in a multispecialty model with income disparities and disparate interests, where some partners are making 6 to 7 times what their other partners, who are working equally hard, are making. That dynamic doesn't work.

ProHealth physicians are responsible for their own practice expenses and are paid primarily based on the volume of services they generate, but 10% of their income is based on individual performance on such measures as generic prescribing, use of preferred specialists, patient satisfaction, emergency department visits, and "citizenship" within ProHealth.

ProHealth owns a large clinical laboratory, 7 diagnostic imaging centers, a sleep center, a hearing center, 4 physical therapy centers, a Sinus Institute, and an attention deficit hyperactivity disorder center:

The profits afford us to have a better infrastructure. Elsewhere, ancillary revenues are usually seen as profits for individual doctors. For us, only 15% of the profits from ancillaries goes to the doctors, the majority goes for ProHealth overhead.

ProHealth moved gradually toward risk contracting during the past decade as fee-for-service payment increases were diminishing.[20] ProHealth is among the original Medicare Shared Savings program ACOs; its ACO is composed of ProHealth physicians only and

does not include hospitals or specialists. The group also has ACO-like contracts with health insurers. A health plan executive states: "They have been good partners—favorable quality and costs."

For 2013, ProHealth earned $9 million in pay-for-performance bonuses: "If we hit them (efficiency targets, cost of care, access targets) then we make money—that has become a larger revenue stream than ancillary services."

As ProHealth assumes more responsibility for the cost and quality of care, it is beginning to work with hospitals (eg, hospitals notify ProHealth promptly when a ProHealth patient arrives in the emergency department or is about to be discharged from the hospital) and specialists to gain better coordination. "In our 17 year history, the notion that we can direct our referrals to specialists or given hospitals has been an untapped resource."

ProHealth's size gives the group leverage with specialists, though it has been used lightly, in part because physicians within ProHealth have their own opinions about where they want to refer patients. Recently, ProHealth has been signing agreements with selected specialist groups, home health agencies, and skilled nursing facilities that describe mutual expectations in terms of access, communication, collaborative care, and transitional care management.

ProHealth is "slugging it out" with cash-rich hospitals, which offer physicians substantial sums for their practices:

> We don't acquire practices from the cash perspective the way they do. If you have a practice where you have late career doctors getting cash up front, of course they are going to switch over. If you have young doctors, we are a better bet because they have a stake in the future.

Survey Results

Overall, 81% of the groups' primary care physicians reported being somewhat or very satisfied with their career in medicine (Table 3). This level of satisfaction is as good or better than that reported in the literature, which is somewhat dated[21,22] and does not reflect possibly increasing physician dissatisfaction.[22] Seventy-four percent of primary care physicians reported being somewhat or very satisfied with their medical group (no comparable data exist). Overall, most of the groups' physicians reported agreeing or strongly agreeing that they had autonomy in practicing medicine, less pressure from such external entities as hospitals, more cohesion because they were a primary care group, and easy-access-to specialty care. Most reported that their group invests in processes to improve the quality of care; however, (with the exception of New West), most physicians did not strongly agree that their group's compensation formula rewards physicians who provide high-quality care.

Overall, physicians' satisfaction with their clinical workload and work/life balance was moderate and somewhat lower than their satisfaction with their career and with their group. Infinity and ProHealth physicians reported lower satisfaction in all 4 of these areas and in response to other survey questions as well. In free-text comments in the questionnaire, some Infinity physicians expressed frustration with their electronic health record (EHR) system. For example: "Our EHR is a disaster, which has slowed down productivity and required many additional hours of work with lower income."

Some ProHealth physicians criticized their group's large investments in infrastructure to succeed at risk contracting, using funds that could otherwise go to physicians. ProHealth leadership was aware of this problem:

> Capital is a major challenge. This is a very expensive transition to develop the tools to develop population management. Right now our major source of capital is our physicians.

The previous work setting for nearly 50% of respondents was a solo or small group practice (Table 2); 25% joined their large primary care group from hospital employment and 21% from residency or fellowship training. The most common reasons for joining the groups were to gain negotiating leverage with health insurers, to gain the groups' "expertise in the business side of medicine, allowing me to focus on practicing medicine," the potential for higher income, and the potential for greater autonomy (Table 4). Only 5.4% of physicians cited their group's clinical quality programs as a reason for joining.

DISCUSSION

Primary care physicians are generally perceived to be essential for organizations to succeed at improving population health and value-based purchasing,[23] but relatively few US physicians choose to practice primary care.[24-26] Our findings suggest that large physician-owned primary care groups can present an attractive option. They make it possible to work in the small practice setting that some physicians prefer while gaining substantial help with the business side of medicine plus economies of scale to develop health information technology, ancillary services, and care management processes.

Nevertheless, the groups' physicians report only moderate satisfaction with their clinical workload and their work-life balance, suggesting that these groups have not fully resolved the difficulties of practicing primary care medicine.

Large independent primary care groups can benefit

patients and society. Their scale makes it possible for them to develop systematic processes to improve the quality of care, while their multiple practice sites offer patients easy geographic access and the small practice environment that some patients seem to prefer.

Though large groups' negotiating leverage can lead to higher payment rates from health insurers, primary care costs are only 5% of health care costs.[27] When engaged in risk contracting, primary care groups can focus on controlling the other 95% of costs without conflicting incentives to keep specialists busy or hospital beds filled.[27-29] This logic is leading venture capital funds to flow into corporations that focus on engaging multiple independent primary care physician practices in ACO contracts.[27,30]

Strengths and Limitations

An important and uncommon strength of our study is that we are able to triangulate—to compare information from interviews with group leaders with information from interviews with external observers and with survey responses from groups' rank-and-file physicians. Responses from the 3 sources were consistent. Nevertheless, our project has 2 limitations. First, we studied 5 groups selected because they vary in size and geographic location; our findings could be different if other groups were studied. Second, though the groups were highly regarded by external observers, we were unable to obtain consistent, comparable data on their cost and quality performance.

Future of Primary Care Practice Groups

These primary care groups' potential appears to be far from fully realized. With the exception of New West, which has long made risk contracting central to its strategy, they have only gradually moved into risk contracting, though at an accelerating pace. Most of the groups' care management infrastructure is at a relatively early stage. The groups are similar in their use of multiple small rather than a few large practice sites, their volume-based methods for paying physicians (again, with the exception of New West), their extensive development of ancillary services, and their struggle to balance physician autonomy with group objectives (eg, limiting the pool of specialists to whom physicians refer). The groups differ in size, extent of risk contracting, and employment of hospitalists. With the exception of ProHealth, employment of hospitalists is related to the group's extent of risk contracting. The groups face 3 serious challenges:

First, each group must balance its culture of autonomy with the need created by value-based contracting for greater standardization. Second, ownership of imaging facilities can be advantageous in risk contracting, because these facilities cost less than competing hospital-based facilities. With the exception of New West, however, the groups are still mainly supported by fee-for-service revenues, which have been decreased by cuts in imaging payment rates.

Third, despite large independent primary care groups' potential advantages in a risk-contracting envi-

Table 4. Physicians' Reported Reasons for Joining Their Medical Group

Reason	All Groups (N = 168) %	Arizona Community Physicians (n = 29) %	Central Ohio Primary Care Physicians (n = 33) %	Infinity (n = 37) %	New West (n = 39) %	ProHealth (n = 30) %
Greater negotiating leverage with health insurers	45.2	58.6	42.4	21.6	38.5	73.3
Group's business expertise allows physician to focus on medicine	41.7	58.6	45.5	16.2	53.8	36.7
Potential for higher income	38.1	75.9	33.3	32.4	23.1	33.3
Greater autonomy than in other large organizations	33.3	37.9	45.5	37.8	23.1	23.3
Opportunity to become an owner	25.0	13.8	15.2	43.2	33.3	13.3
Alignment with group values, culture	23.2	3.4	24.2	40.5	23.1	20.0
Prefer primary care to multispecialty group	22.6	10.3	27.3	18.9	30.8	23.3
Better work-life balance	22.6	20.7	27.3	21.6	23.1	20.0
Technological infrastructure (eg, emergency medical response)	8.9	6.9	0.0	10.8	10.3	16.7
Need to relocate geographically	6.0	0.0	3.0	5.4	10.3	10.0
Group's clinical quality programs	5.4	0.0	0.0	10.8	10.3	3.3

Note: Data from the physician survey conducted for this project. Each physician was asked to choose up to 3 reasons for joining his or her current medical group. Percentages are the percentages of physicians who selected that reason for joining their group. See Supplemental Appendix 2 (http://annfammed.org/content/14/1/16/suppl/DC1) for a copy of the survey instrument.

ronment, success will require capital for infrastructure and growth.[31] Each group perceived growth as important to gain increasing economies of scale to build health information technology and care management infrastructures necessary to succeed in value-based contracting and to spread the risk for the costs of care over larger numbers of patients. The groups are capital-poor compared with hospitals and corporate buyers of physician practices and must continually decide whether to remain independent or to sell. A sale can provide capital for infrastructure and significant one-time revenue for the physicians. This decision may become particularly pressing as groups' physicians—and their leaders—approach retirement.

To read or post commentaries in response to this article, see it online at http://www.annfammed.org/content/14/1/16.

Key words: primary care; medical groups

Submitted August 25, 2015; submitted, revised, October 19, 2015; accepted November 8, 2015.

Funding support: The Commonwealth Fund supporting this project (grant #20130522).

Acknowledgments: We thank the many individuals who gave their time and expertise during interviews.

Supplementary materials: Available at http://www.AnnFamMed.org/content/14/1/16/suppl/DC1.

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