



CHAPTER ONE

PREPAID GROUPS AND ORGANIZED DELIVERY SYSTEMS

Promise, Performance, and Potential

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I tell our trustees, "When you walk into [name of medical group], you are walking into the arms of an organized group practice. You walk into our competitor, you walk into the equivalent of a farmers' market where there are a bunch of people sitting there in stalls, selling their wares, and leaving at the end of the day when they are done. They don't particularly care what the farmers' market is like as long as the bathrooms are clean and the lights are on. They don't particularly care who is selling stuff next to them because they are not integrated."

PHYSICIAN LEADER OF AN ORGANIZED DELIVERY SYSTEM

The American health care system is the poster child for underachievement. As stated in the Institute of Medicine report *Crossing the Quality Chasm*, "Between the healthcare we have and the care we could have lies not just a gap, but a chasm."¹ The reasons for this are well documented.² The largest limiting factor is not lack of money, technology, information, or even people but rather lack of an *organizing principle* that can link money, people, technology, and ideas into a *system* that delivers more cost-effective care (in other words, more value) than current arrangements. Given the growing number of Americans with chronic illness (currently estimated at 125 million at an annual cost of \$173 billion and accounting for 60 to 75 percent of personal health care expenditures),³ the emerging application of genetic medicine, and the potential for a more health-informed and "activated" citizenry, the lack of an organizing principle for the delivery of health care in the twenty-first century has serious consequences.

The current system has been based largely on the fee-for-service or indemnity model of financing, operating within the context of highly individualistic models

of care delivery. It is difficult to discern an organizing principle for such arrangements other than that of maximizing the autonomy of each of the individual parties involved. The current system might best be described as a collection of autonomous professionals providing largely self-defined expert care within organizational, payment, and regulatory environments involving conflicting incentives, goals, and objectives.

But a very different organizing principle is also available—that of prepaid group practice (PGP), which has roots going back more than sixty years. A PGP is an organized delivery system based on an accountable, multispecialty group of physicians and other health professionals who work together in teams to provide comprehensive care for a voluntarily enrolled population within a per capita, prospectively determined budget (see the Preface to this volume). This chapter examines the promise, performance, and potential of PGPs and similar organized delivery systems to address the problems of fragmentation embodied in our current health care system. In the discussion that follows, we use the term *PGP* to refer to closely related organized delivery systems as well.

Some prepaid groups, such as Group Health Cooperative and Kaiser Permanente, have an exclusive relationship between the insurance carrier and the physician organization. Such arrangements have the advantage of fully internalizing the rewards of prudent resource use. In other cases, prepaid groups may also contract with health plans other than the one owned by the system. In turn, the system-owned health plan may also contract with other physician groups. Examples of such nonexclusive arrangements include the Henry Ford Health System, Intermountain Health Care, and the Mayo Clinic. Such organized delivery systems have been defined as a “network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and health status of the population served.”⁴

Table 1.1 compares the fee-for-service, indemnity, or autonomous unit model (or what Enthoven and Tollen refer to as the “carrier-HMO model” in the Preface) with the PGP model on some key parameters of health care delivery. Evidence to support the idea that organized delivery systems actually achieve the desired elements summarized in Table 1.1 is mixed (see Chapter Three).⁵ The point of the table is to indicate that PGPs at least have the *potential* for achieving the desired elements, while it is clear that the fee-for-service or indemnity model that has been dominant for most of the past century cannot meet the needs of the next.

The PGP approach, however, needs to be critically examined so that its promise and potential may be realized in its actual performance. This chapter highlights the inherent promise of the PGP model as contained in its core features. Then the six aims for a quality health system identified in the Institute of

TABLE 1.1. COMPARISON OF FEE-FOR-SERVICE AND PREPAID GROUP PRACTICE OR ORGANIZED DELIVERY SYSTEM APPROACHES.

Health Care System: Ideal Elements	Fee-for-Service, Indemnity, or Autonomous Units	Prepaid Group Practice or Organized Delivery System
Focuses on meeting the population's health needs Matches service capacity to the population's needs	Focuses on individual sick patient Occurs by chance only	Focuses on enrolled populations Potential for coordination and economies of scale and scope
Coordinates and integrates care across the continuum	Difficult to accomplish	Ownership and alliances provide potential for integrated care
Has information systems to link patients, providers, and payers across the continuum of care	Has neither the resources nor the elements of the system in place	Has elements in place for linkage to occur
Is able to provide information on cost, quality outcomes, and patient satisfaction to multiple stakeholders: patients, staff, payers and purchasers, community groups, and external review bodies	Insufficient volume per provider to trust the data, even if it could be produced	Infrastructure exists to provide reliable data over time
Uses financial incentives and organizational structure to align governance, management, physicians, and other caregivers in support of achieving shared objectives	Has little capacity to do this	Potential exists; some evidence that it occurs
Is able to improve continuously the care that it provides	Depends on individual motivation and skill	Potential exists given the existence of infrastructure to do it
Is willing and able to work with others to ensure that the community's health objectives are met	Highly variable, dependent on individual interest	Broad-based potential exists due to population focus

Source: Adapted from S. M. Shortell and others, *Remaking Health Care in America: The Evolution of Organized Delivery Systems*, 2nd ed. (San Francisco: Jossey-Bass, 2000), p. 21.

Medicine's *Crossing the Quality Chasm* report are used as criteria for evaluating PGP performance. Next, interview information obtained from six PGPs—Group Health Cooperative, HealthPartners, the Henry Ford Health System, Intermountain Health Care, Kaiser Permanente, and the Mayo Clinic—is used to assess the model's potential for geographical diffusion. Finally, the conclusion provides a discussion of the role of PGPs within the evolving health system of the future.

Components of Prepaid Group Practice

The key components of prepaid group practices (or organized delivery systems) are multispecialty group practices, health care teams, defined populations, and aligned financing and payment arrangements. These components combine to produce three resulting characteristics that are key to the potential success of PGPs: effective partnerships between medicine and management, enhanced information management capability, and accountability. Each of the key components and the three resulting characteristics is discussed in turn. It is the interdependence and alignment of these components and characteristics that distinguish the value of PGPs.

Multispecialty Group Practice

In 1932, the Committee on the Costs of Medical Care suggested group practice of physicians as the cornerstone for the development of an effective health care system. More than seven decades later, relatively little progress has been made in realizing this recommendation. Today, 47 percent of private physicians still work in practices of one or two doctors, and 82 percent work in practices of nine or fewer.⁶ The practice of medicine, even in the twenty-first century, remains largely a cottage industry.

This is cause for concern, as the basic building block of an organized delivery system is the medical group that works together to care for a defined panel of patients. The first prepaid group practice in the United States was the Ross-Loos Clinic, founded in Los Angeles in 1929, followed by a progenitor of Kaiser Permanente in 1933. Other early group practices (although not necessarily having their origins in prepayment) include the Mayo Clinic, founded in Minnesota in 1888; the Scott White Clinic in Texas, 1897; the Geisinger Clinic in central Pennsylvania, 1915; and the Marshfield Clinic in Wisconsin, 1919 (see Appendix).

Such groups are more than collections of doctors loosely related to each other through independent practice associations. Rather, they are entities with a

psychological sense of belonging and identification with the group fostered by a common vision, a shared culture, and accountable leadership. Among the advantages of such groups is the ability to consult and learn from each other, provide coverage and on-call services, coordinate specialist referrals, and achieve economies of scale and scope in staffing, facilities, supplies, and technology purchases.

Health Care Teams

The medical group is the base structure or “house” for the operation of health care teams. In organized delivery systems, teams, not individuals, deliver most health care. The importance of well-functioning teams is growing with the increased prevalence of chronic illness in the population.⁷ Teams have been referred to as “microsystems,” constituting the smallest replicable unit of an organization that relates to the patient.⁸ Teams operating within an organized system of care are part of an *organizing principle* for health care delivery in the twenty-first century. To use a biological analogy, teams are the RNA that links the medical group structure (or protein) with the DNA of clinical information and knowledge. It is *not* information itself that integrates care but rather the team that *uses* the information, including the patient as a central member of the team. In large part, the failure of American medicine has been its resistance to the organizing principle of the team, making it difficult to link the various pieces of the system together.

Defined Populations

A third key element is that PGPs care for defined populations of potential patients and strive to “know” these people. This will vary by the extent to which the organized delivery system is an exclusive owner or contractor with a health plan (for example, Kaiser Permanente and Group Health Cooperative) or whether the organized delivery system also provides care to patients other than those of the plan owned by the system (for example, Henry Ford Health System and Intermountain Health Care). The focus on populations enables these systems to plan resources in relation to population needs. When combined with appropriate financing and payment incentives, it also results in an emphasis on disease prevention, health promotion, and appropriate longitudinal follow-up care.

Aligned Financial and Payment Incentives

The fourth key element of PGPs is the existence of financial and payment arrangements that promote cost-effective care. These include prepayments to medical groups and in turn arrangements by which a group’s individual physicians have

incentives to practice cost-effective care within the group's budget. Combined with the emphasis on enrolled populations, aligned financial and payment incentives provide each physician and health professional with a rationale to use resources prudently, to provide care only where evidence indicates that it would benefit the patient, and to eliminate wasteful practices that contribute to inefficient and potentially harmful care. At the same time, the prepayment or capitated payment feature can lead to the withholding of services that might benefit the patient. However, the three associated properties of organized delivery systems—medicine-management partnerships, enhanced information capability, and enhanced accountability—act as powerful countervailing forces to potential underprovision of care.

Medicine-Management Partnership

When health care teams work within the context of organized medical groups, focusing on defined populations with aligned financial and payment incentives, the ingredients for a productive interface between medicine and management are present. The technical, clinical skills of medicine and the health professions must be linked to the managerial and organizational skills of executives and managers to create a consistently outstanding experience for patients. Prepaid group practices provide the setting and incentive structure for this to occur, as everyone is focused on the same set of goals and potentially shares in the rewards of achievement. Clinical and cost performance data are shared by clinicians and managers so that priorities can be set and trade-off decisions can be made based on evidence.⁹ There is a need for greater use of both evidence-based medicine and evidence-based management.¹⁰ Prepaid group practices also provide the potential for the integration of evidence-based medicine and evidence-based management. This integration and partnership will be key to the ability of the health care industry to implement the care delivery innovations needed to meet the challenges posed by the many advances in the biomedical and informational sciences and the public's response to them.

Enhanced Information Management Capability

PGPs typically have the size and resources to invest in information technology (IT) capabilities and are in the best position to capture their benefits. Small, autonomous practices must rely on large health plans or linkages with hospitals or health systems to gain access to the capital needed for enhanced IT capability. To date, these partnerships have been largely restricted to claims processing and back-office administrative functions as opposed to enhancing clinical capabilities. In contrast, a number of organized delivery systems, such as Kaiser

Permanente, the Mayo Clinic, Intermountain Health Care, the Henry Ford Health System, and Geisinger Clinic, have made major, multibillion-dollar investments in IT over several years, some with partners such as IBM and 3M.¹¹ The investments are intended to lead to the development of electronic medical records that can (1) provide timely, accurate information to the health care team at the point of care; (2) provide information for continuing improvement of practice and longitudinal research; and (3) yield data for purposes of meeting the legitimate accountability demands of external groups.

Accountability

With organized groups, teams, defined populations, aligned incentives, medicine-management partnerships, and information capabilities, a basis exists for enhanced accountability to all stakeholders—governing boards, employers and purchasers, governmental and accreditation bodies, individual patients, and the community. Accountability involves taking responsibility for what one does and comparing one's performance to stated objectives or goals. It involves setting explicit standards of performance, measuring performance against the standards, communicating the results to those with legitimate interests, and following up to remedy performance deficits. Public reporting of quality and outcome data in addition to cost data is growing. The development of a national quality report card and various “pay for performance” initiatives will stimulate further demands, as will consumers who are being asked to bear more of the costs of their care. Organized delivery systems are likely to be best positioned to respond to these demands.

As we have suggested, these seven elements reinforce each other in their potential to promote value in health care delivery. Furthermore, organizational arrangements for the delivery of health care can be evaluated using these elements. The greater the extent to which each of the seven features exists, the greater the probability of providing value in health care delivery. When all seven exist to the fullest extent possible, resources and energies are focused on *care management* and *care coordination*. When various elements are missing altogether or little weight is given to them, organizational arrangements tend to maximize market power, bargaining leverage, and economies of scale but leave care management virtually untouched.

The Performance of Prepaid Group Practice

The performance, or value, created by prepaid group practice can be assessed using the six criteria for health care system quality identified in the Institute of Medicine's *Crossing the Quality Chasm* report: safety, effectiveness, efficiency,

patient-centeredness, timeliness, and equity. In brief, care should be provided in such a way that patients are not injured by care that is intended to help them. Care should be provided in such a way that services are based on the best available scientific knowledge regarding effectiveness. Care should be respectful of and responsive to individual patient preferences, needs, and values, ensuring that patient preferences guide all clinical decisions. Care should also be provided in such a way that waiting time and harmful delays are reduced or eliminated to the extent possible so that waste, including waste of equipment, supplies, ideas, and energy, is kept to a minimum. Finally, care should not vary in quality because of personal characteristics such as gender, ethnicity, geographical location, or socioeconomic status. We shall use each of these criteria to provide a high-level evaluation of the performance of PGPs to date, relative to other arrangements. (More detailed assessments can be found in Chapters Two, Three, and Five.)

Safety

Since the publication of the Institute of Medicine's report *To Err Is Human* in 1999, increased attention has been given to reducing medical errors and increasing patient safety. Although a number of studies are under way, none has addressed differences in the ability of PGPs to reduce medical errors or increase patient safety in comparison with other organizational or financial arrangements. To the extent that costly electronic medical record systems, computerized drug order entry systems, and related technologies enhance patient safety, one might expect larger, better-capitalized organizations of whatever type, including PGPs, to achieve greater safety gains than independent or autonomous arrangements. This is in part because of the greater ability of the medicine-management partnership of the PGPs to focus attention, resources, leadership, and accountability on the task of reducing errors and enhancing safety. Whether or not this is true is an area for future research.

Effectiveness

Miller and Luft provide the most recent and comprehensive update on the comparative effectiveness and efficiency of health maintenance organizations (HMOs), including carrier HMOs, versus alternative arrangements.¹² Consistent with earlier research, the recent literature suggests no consistent, systematic differences in quality or outcomes of care between HMOs broadly defined and non-HMO arrangements. However, a recent national study of the management of chronic illness for patients with asthma, congestive heart failure, depression, and diabetes found that a select group of twelve large multispecialty medical groups were

significantly more likely to use recommended, evidence-based care management processes (disease registries, reminder systems, guidelines, case management systems, and so on) and to report a positive financial impact from their investment in these processes than other, more loosely organized groups, including other large groups of one hundred physicians or more (see Table 1.2).

Recent evidence also suggests that groups affiliated with or owned by HMOs, hospitals, or health systems use more recommended care management processes than freestanding groups.¹³ Also, recent work comparing Kaiser Permanente with the British National Health Service revealed that Kaiser Permanente patients receive more recommended treatment for diabetes and heart disease—for example, 93 percent of Kaiser Permanente heart attack patients receive beta blockers versus 42 percent in the United Kingdom.¹⁴

Further, for the past five years, the California Cooperative Health Care Reporting Initiative (CCHRI) has rated Kaiser Permanente among the best in the state in providing breast and cervical cancer screening, comprehensive diabetes care, cholesterol management in patients with heart disease, and follow-up care after hospitalization for mental illness. In fact, cardiovascular disease is no longer the leading cause of death among Kaiser Permanente's Northern California population, although it remains so among the population at large. The 15 percent decline in the cardiovascular death rate at Kaiser Permanente, Northern California, between 1990 and 1998 is attributed largely to a coordinated strategy of implementing guidelines.¹⁵ In a similar example, Intermountain Health Care has increased the percentage of its post-heart attack and congestive heart failure patients on ACE inhibitors and beta blockers from 60 percent to 90 percent, saving an estimated 450 lives per year and about \$3 million per year in reduced hospitalizations.¹⁶

Efficiency

Recent evidence suggests that HMOs continue to have lower hospital use and use less expensive technologies than other types of delivery or financing arrangements.¹⁷ Other investigators have found that prepaid groups are associated with lower costs to patients and that groups with a strong culture of shared values among physician members had lower costs.¹⁸ In a related study of eighty-six clinics, use of physician profiles and clinical guidelines were associated with lower costs.¹⁹ At the level of the overall organized delivery system, it was found that more centralized systems and networks experienced significantly lower costs than more decentralized and independent systems and networks.²⁰ It appears that the cost savings are due to different use of resources (for example, less inpatient hospital care, more outpatient care, and possibly closer management of patients

TABLE 1.2. COMPARISON OF SELECTED PGPs TO OTHER GROUPS.

NSPO Survey Item	PGP (N = 12)	Groups with 100 + M.D.'s (N = 468)	All Other Groups (N = 1,028)
Percentage with financial gains in the past year	66.7%	46.7%	45.7%
Percentage whose investment in asthma had positive financial impact ^a	41.7%	32.8%	27.0%
Percentage whose investment in CHF had positive financial impact ^a	75.0%	36.8%	29.5%
Percentage whose investment in depression had positive financial impact ^a	27.3%	14.6%	13.5%
Percentage whose investment in diabetes had positive financial impact ^a	75.0%	42.0%	37.7%
Percentage with smoking cessation programs for patients	100%	42.8%	39.9%
Mean POCMI (out of 16) ^b	12.5	5.9	5.3
Mean CCMI (out of 11) ^c	9.0	4.8	4.6
Mean Clinical IT Index (out of 6) ^d	4.5	1.2	1.3
Mean External Incentives Index (out of 7) ^e	4.1	1.9	1.7

^aFor groups who treat this illness.

^bPOCMI = Physician Organization Care Management Index—use of disease registries, patient self-management, guidelines, automated reminders, performance feedback, and the like.

^cCCMI = Chronic Care Management Index—patient self-management, linkages to community resources, delivery system redesign, decision support tools, and the like.

^dClinical IT = An electronic medical record for each patient—a standardized problem list, laboratory findings, medications prescribed, radiology findings, clinical guidelines and protocols, medication ordering reminders and drug interaction information—entered into an electronic medical record directly by the physician or after being dictated and transcribed and electronic reporting of the number of patients with diabetes.

^eExternal Incentives = Bonuses from health plans, public recognition, better contracts with health plans, quality reporting on HEDIS data, clinical outcome data, results of quality improvement projects, patient satisfaction data.

Source: Data from *National Study of Physician Organizations and the Management of Chronic Illness* (Berkeley: School of Public Health, University of California, 2002).

with high-cost chronic illnesses) rather than economies of scale or scope.²¹ This is supported by the recent Kaiser Permanente–United Kingdom study in which Kaiser Permanente averaged 270 acute bed days per 1,000 population versus 1,000 for the United Kingdom.²²

Patient-Centeredness

A potential advantage of PGP is that by knowing who their patient population is in advance, they can tailor treatment to meet individual patient needs and use cost-effective interventions for each patient.²³ To the extent that personalized patient care might be loosely measured by patient satisfaction with care, the bulk of the evidence suggests that patient satisfaction is lower in organized delivery system arrangements than in other arrangements.²⁴ The lower satisfaction appears to be true for both measures of access to care, such as difficulty in getting an appointment, and measures of patient-physician communication and quality of services received. However, these studies have included both loosely organized network-model HMOs and more highly organized group practice HMOs.

Some group practice HMO models have committed significant time and resources to improving the overall patient care experience. For example, Kaiser Permanente has established the Care Experience Council to help redesign the patient care experience throughout the Kaiser Permanente system by identifying the specific functions most strongly associated with member satisfaction and retention and then designing interventions to improve those factors. In recent years, Kaiser Permanente has received above-average marks in customer service and the ability of patients to get needed care. The California Cooperative Health Care Reporting Initiative and the California Office of the Patient Advocate gave Kaiser Permanente high marks on effective physician communication with members. Further research is needed to compare different types of HMO and PGP models in regard to patient satisfaction and personalized care.

Timeliness

The literature addresses the issue of timely care largely in the context of time to receive an appointment and waiting time in the physician's office. As previously noted, PGPs generally score lower on these aspects of the care experience. To address this issue, organizations such as Kaiser Permanente and Group Health Cooperative have implemented nurse call systems, same-day appointments, and automated reminder systems. Within Kaiser Permanente, appointments can be made online, prescription refills are available without calling or visiting a doctor, and patients referred to a specialist are seen within two weeks.

Equity

Emerging research suggests that not only are there inequities in people's access to health care services, but there are also differences by race, ethnicity, and related socioeconomic variables in the actual provision of care.²⁵ However, there have been no studies examining differences in care among different socioeconomic or ethnic groups within PGPs versus other care arrangements. To the extent that PGPs are more likely to use evidence-based, standardized care management processes, one might hypothesize fewer differences in quality of care by socioeconomic status within PGPs than in other arrangements subject to the greater variability in individual provider practices. Further, given the presence of prepayment, there are no differential financial incentives to use more services or treatments than the evidence and best clinical judgment suggest is necessary. Nonetheless, comparisons between PGP models and more independent or autonomous models of equity in treatment merit further study.

Summary of Prepaid Group Practice Performance

Using the Institute of Medicine's system criteria, current evidence is mixed regarding the performance of PGPs in comparison with other arrangements. It is important to note that past summaries of quality and outcomes of care have been based on HMOs broadly defined to include carrier HMOs. These reviews show no systematic differences in quality or outcomes of care between HMOs and fee-for-service arrangements. But emerging work comparing more integrated forms of PGPs suggest superior quality and outcomes of care relative to other arrangements, particularly in regard to chronic illness management.

On the efficiency front, HMOs may be somewhat less costly than other arrangements, but outpatients seem to be less satisfied with their care—at least for HMOs overall, which include network models as well as group practice models. No evidence is available regarding the provision of safe care or differences in equity of care. However, there is as much variability *within* PGPs on many of the criteria as there is between them and other arrangements.²⁶ In particular, research is needed that compares different types of PGPs with each other as well as with the independent, fee-for-service, and autonomous models in regard to (1) the management of chronic illness, including issues of patient safety; (2) patient satisfaction with care; (3) treatment patterns and practices by ethnicity, gender, socioeconomic status, and related variables; and (4) patterns of underuse, overuse, and misuse of services in areas where evidence-based standards exist. Research is also needed to identify the components of PGPs that can be most easily transferred to other delivery arrangements, as well as to examine the processes of

transfer themselves, so that the most efficient and most effective transfer processes can be identified. In-depth comparative research on high-performing PGPs would also be useful to “unpack” the specific features of these organizations that have made them successful over time.

Next, exploratory interviews with leaders of six such organizations are used to assess their experiences to date and the future potential of the PGP model.

The Experiences of Six Selected PGPs

Twelve top executives from six of the highest performing PGPs and organized delivery systems in America were interviewed: Group Health Cooperative (Seattle, Washington), HealthPartners (Minneapolis–Saint Paul, Minnesota), Henry Ford Health System (Detroit, Michigan), Intermountain Health Care System (Salt Lake City, Utah), Kaiser Permanente (Oakland, California), and the Mayo Clinic (Rochester, Minnesota). These leaders shared their views on what they saw as the accomplishments, limitations, and future potential of this form of health care delivery.

Four themes—patient-centeredness, efficiency, effectiveness, and information technology capability—were viewed as major advantages for PGPs, while two themes—lack of a group culture and lack of financial incentives—were identified as barriers to further diffusion of the model. In regard to patient-centeredness, many of those interviewed felt that the teamwork of physicians in multispecialty group practice made the notion of a “system looking out for the patients” a reality.

Another common theme was efficiency. Many executives strongly believed their groups were started on the principle that multispecialty group practice, grafted on to the concept of prepayment, inherently provided the most efficient and cost-effective way to provide care.

Executives also cited numerous ways in which the organized delivery system enhanced patient care delivery, especially in the use of chronic care management and evidence-based medicine. As one executive stated, “The integrated model is the most advanced approach for dealing with chronic illness management and disease prevention. It is more advanced than any of the alternatives.” The reasons cited for this advantage ranged from optimal alignment of interests and incentives through integration and population-based medicine; continuity of care and treatment through vertical integration of hospitals; use of a built-in network of doctors to provide a medium for diffusing best practices and innovation; and superior information technology.

Information technology was frequently cited as being a key way for health care systems to optimize efficiency. “Information technology has to become part

of active health care delivery in a more effective way than it is now. We are in the dark ages compared to most other industries,” said one executive. Many pointed out that PGPs have a greater ability to invest in technical infrastructure than smaller groups, and their integrated structure allows them to maximize the return on their IT investments in part because of their ability as integrated systems to offer patients online access to physicians, prescriptions, lab test results, and health care information. “We offer consumers the best available knowledge and advice to inform their health care decisions. [We put] them in the driver’s seat,” said an executive.

Enhanced IT capabilities offer PGPs a way to leverage their coordinated structure to lubricate the “natural friction points” between health plans, physicians, and hospitals, said many executives, who nonetheless acknowledged that managing such organizations is difficult. “I believe that there is no more complex organization on the planet than an integrated group practice,” said one executive. Information technology may also prove to be a key to making such integration work for other kinds of health care organizations without necessarily integrating their structure. As one executive put it, “Information technology will be the glue for virtual groups.”

Many organizations reported using their IT capabilities to implement computerized patient medical records; however, with or without paperless offices, many felt that their unified medical charts made it easier to provide continuity of care and to make that care transparent to all. “All of [the physicians] tend to have a very active peer review mechanism because of the unified chart,” said one physician executive. Another pointed out that the common medical record “changes our practice style automatically because we are more prudent about what we do.”

Despite the advantages, health care executives acknowledged that there were limitations to the appeal of the PGP model, including developing a culture in which physicians put the group ahead of individual entrepreneurial interests. “The group comes first,” said one leader, adding, “We don’t tolerate superstars here very well.” Said another, “The biggest limitation is how do we take a whole group of incumbents, whether they are medical students or practicing physicians, and develop a model where they hopefully align incentives so that people can effectively sublimate their own individual ambitions and rewards to [those of] a group.”

Many executives felt that the potential for PGPs to expand is held back by health care’s current financial incentive system, which encourages competition among specialties and physicians rather than cooperation. They also felt that without substantial changes to the U.S. financial and regulatory systems, it would be difficult for new PGPs to develop and for many of the current ones to expand significantly beyond current markets. They specifically noted the lack of consumer motivation to demand change and the difficulty of “exporting” the group culture.

As one executive put it, “The [integrated] model is good. We see disintegration [in the health care system] because of the inability to execute it.”

Nonetheless, many leaders believe that the PGP model remains a blueprint for addressing the future challenges of health care in America. As one executive noted: “Organized health care in this country is going to increase. I think it is going to increase because we are heading toward the edge of a cliff. . . . We are rapidly approaching the point where we will need some voluminous quantities of health care [provided by] fewer and fewer people. I think the only way we will be able to do that effectively is through organized delivery systems.”

Conclusion: Lessons and Implications

Despite the many complaints and criticisms of the U.S. health care system, one must recognize and underscore the fact that Americans like their system, with all its faults and internal contradictions, more than the alternatives. It may not be very pretty, and at times it may look downright ugly, but it is important to remember that most of the time, most Americans do not use the health system. When they do, they are willing to put up with it because they think someone else is paying for it. Further, when Americans look around at other countries, everyone else seems to be complaining as well. All of the major stakeholders—employers and purchasers, health plans, providers, and patients—value choice and autonomy, which the system offers, and they are willing to pay for it with time, money (or at least someone else’s money), and apparently, tolerance for errors and variations in treatment and outcomes. The system is not yet at the threshold or “tipping point” for fundamental change, and until it is (if that point is ever reached), the PGP model is unlikely to grow much beyond its current state. Although the fee-for-service or indemnity model is unable to meet current health care challenges, many of its core features will continue to exist because they fulfill the basic American demands for choice and autonomy. This may change as more Americans experience the mounting personal health challenges of the new century, but for now, health care is caught in a period of transition characterized by uncertainty, ambiguity, and growing anxiety. We are trapped in a maze of different delivery and financing arrangements and do not know how to get out.

In thinking about this predicament, it is useful to consider two different scenarios for the future. Each is based on the following assumptions: (1) continued growth in the number of Americans experiencing one or more chronic illnesses; (2) continued growth of new biomedical knowledge and technology and their transfer into clinical practice; (3) continued increases in costs, with consumers paying an increasing share of those costs; and (4) continued interest on the part of all parties in maintaining a pluralistic health system that features choice as one of its core values.

Evolution of the Status Quo

In the first scenario, nothing will change: the current disenchantment with managed care, the inability of PGPs (with a few exceptions) to demonstrate consistently superior performance, the aversion of most physicians to practicing in larger organizations, and the desire of most Americans for a variety of insurance products will persist, putting more pressure on consumers to pay for the cost of their care and to use the new information tools (especially the Internet) to make wise choices. Essentially, each person must make his or her own map to navigate the maze.

In this scenario, PGPs will need to compete effectively in the area of benefit design and premium rates to hold their own. PGPs are likely to continue to be major players in areas where they already enjoy a significant presence, but they are unlikely to expand beyond their current boundaries. Costs will continue to rise, and physicians and other health professionals will continue to be frustrated until enough information on system performance (cost, quality, outcomes, satisfaction, and access) is trusted by all parties to motivate a concerted search for viable alternatives. At this point, the PGP models will be looked to as possible approaches for reform, but they will be found to be too difficult to implement in most parts of the country. They will be beyond the comfort zone of most local stakeholders' tolerance for change, particularly in the absence of stronger evidence that such an approach will specifically benefit each stakeholder group—purchasers, health plans, provider organizations, and patients. However, it is possible that each party may adopt *some elements* of the PGP approach to create delivery systems that better address the challenges of the status quo. This gives rise to the second scenario.

A Coalition of Partnerships

In this second scenario, the four major stakeholder groups—purchasers, health plans, providers, and patients—join forces to create partnerships that mimic some features of the PGP model. It begins with purchasers (employers, federal and state governments) recognizing the need to obtain better value for their dollars, particularly in the areas of disease prevention and chronic illness management, and providing incentives to health plans to accomplish this. Smaller employers could come together to form “exchanges” with health plans for this purpose.²⁷ The plans in turn develop partnerships with their physician organizations, both large and small, to reward them on the basis of measurable quality and outcome metrics, in addition to cost considerations. Physicians and physician organizations now have financial incentives that reinforce and are congruent with professional values (in other words, paying for quality) and work to develop new models of care

delivery to achieve better patient outcomes. Finally, patients, with a greater economic stake in their care and a greater knowledge base, can work in partnership with their physician organizations to maintain their health. Most important, rather than finding their providers, health plans, and employers fighting with each other, patients experience greater cooperation, exchange of information, and shared accountability.

This second scenario permits a variety of different “4P partnerships” (among purchasers, plans, providers, and patients) to exist, reflecting the diversity and pluralism of the country. Thus, while existing PGPs are not likely to “generalize” or expand to the rest of the country, they will play a leadership role in serving as incubators of better practices that can be adopted by others. This is particularly true in the area of implementing evidence-based medicine, managing chronic illness, and preventing disease. They will help set the standards by which others will be judged and will change the expectations of purchasers, plans, and patients alike. (For some idea of these new standards, see Table 1.3.)

Which of the two scenarios is likely to prevail? The “evolution of the status quo” may persist for several years as Americans search for exits from the current health care maze. But as they begin to feel the impact (again) of significant cost increases, the growing burden of chronic illness, and the growth of new technologies and biomedical advances, they will grasp (again) for some straws of a “solution” to the ever-present and latest “health care crisis.”

The appeal of the “coalition of partnerships” scenario is that it allows for the possibility of multiple exits out of the maze, depending on where one is currently lost. Physicians can continue to practice in small partnerships and groups, health plans can continue to offer multiple products, purchasers can continue to engage in various cost-sharing arrangements with their employees, and patients can continue to make choices based on what they believe is best for them and their families.

So how is this different from the status quo? The answer lies in the flow of dollars attached to shared incentives driven by information technology, which makes all transactions and outcomes more transparent and accountable. Financial incentives and information technology are the primary lubricants for facilitating partnerships among purchasers, plans, providers, and patients. An early test of the feasibility and potential impact of such partnerships will come from the evaluation of demonstrations funded by The Robert Wood Johnson Foundation’s Rewarding Results Program and related pay-for-performance initiatives across the country. For example, in California, employers, physician organizations, consumer advocates, and all six of the major non-Kaiser Permanente health plans have agreed to a common set of measures for purposes of providing additional payment bonuses to physician organizations for meeting selected quality targets and

TABLE 1.3. PAY-FOR-PERFORMANCE MEASUREMENT SET.

Condition	Measure Description	Weighting
Childhood immunizations	The percentage of children who turned 2 years old during the measurement year, who were continuously enrolled for twelve months immediately preceding their second birthday, who received any of the following: <ul style="list-style-type: none"> • Four DTaP/DT <i>or</i> • Three IPV/OPV <i>or</i> • One MMR <i>or</i> • Three H influenza type B <i>or</i> • Three hepatitis B <i>or</i> • One chickenpox vaccine 	50%
Breast cancer screening	The percentage of women aged 50 through 69 years who were continuously enrolled for two years and who had a mammogram.	
Cervical cancer screening	The percentage of women aged 18 through 64 years who were continuously enrolled for three years and who received one or more Pap tests.	
Asthma	The percentage of patients with persistent asthma continuously enrolled for two years who received at least one dispensed prescription for inhaled corticosteroids. The measure should be reported for each of three age stratifications: <ul style="list-style-type: none"> • Ages 5–9 years • Ages 10–17 years • Ages 18–56 years 	
Coronary artery disease	The percentage of patients aged 18 through 75 years as of December 31 who were discharged alive by December 31 for acute myocardial infarction (AMI), coronary artery bypass graft (CABG), or percutaneous transluminal coronary angioplasty (PTCA) and had evidence of LDL-C screening.	
Diabetes	The percentage of members with diabetes (Type 1 and Type 2) aged 18 through 75 years continuously enrolled for one year who had evidence of hemoglobin A1c (HbA1c) screening.	
Patient satisfaction	<ul style="list-style-type: none"> • Specialty care • Timely access to care • Doctor-patient communication • Overall ratings of care 	40%
IT investment	<ul style="list-style-type: none"> • Integrate clinical electronic data sets at group level • Support clinical decision making at point of care 	10%

Source: Courtesy of the Integrated Healthcare Association, Walnut Creek, Calif.

for purposes of public reporting (these are presented in Table 1.3). Although there are many challenges to the implementation of such arrangements, the fact that they are beginning to take place suggests that such partnerships may be a viable approach to improving the U.S. system of health care delivery.

In particular, many industry observers hope that information technology will help smaller or more loosely organized groups of physicians provide data and learn from each other. This will vary as a function of the leadership of the independent practice association or related “virtual” groups. Physicians are not likely in the short term to form larger groups, and those that do are likely to be more motivated by increasing their negotiating leverage with health plans than by improving the quality of care.²⁸ Thus the techniques and experiences of providing evidence-based medicine learned from the PGP’s must be brought to other physicians and adapted to their needs and circumstances.

The key role of PGP’s going forward will not be in replicating themselves as wholes but as parts drawn on by others. They will serve as engines of continual innovation, particularly in regard to chronic illness management, disease prevention, and the overall design of positive patient care experiences. What might be observed over the next five to ten years is a greater number of well-functioning health care teams (the organizing principle at the micro level of our health care system) operating within a coalition of partnerships among purchasers, plans, providers, and patients (the organizing principle at the macro level of the health care system).

None of this will occur, however, until Americans become more dissatisfied with the current malaise. But once this threshold is reached, the model of aligned incentive partnerships that can vary to fit local circumstances will be viewed as more achievable and less disruptive than the PGP model.

As the old Scottish proverb notes, “There is no such thing as bad weather, only inappropriate clothing.” Perhaps, some day, PGP’s will be the appropriate “clothing” for dealing with the maelstroms of health care in America. In the meantime, “mix and match” partnerships (facilitated, perhaps, by purchaser plan exchanges) are likely to prevail.

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