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Managing The New Primary Care: The New Skills That Will Be Needed

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ABSTRACT Developing new models of primary care will demand a level of managerial expertise that few of today's primary care physicians possess. Yet medical schools continue to focus on the basic sciences, to the exclusion of such managerial topics as running effective teams. The approach to executing reform appears to assume that practice managers and entrepreneurs can undertake the managerial work of transforming primary care, while physicians stick with practicing medicine. This essay argues that physicians currently in practice could be equipped over time with the management skills necessary to develop and implement new models of primary care.

Discussions of the future of primary care have articulated a very different model of medical practice from the usual approach—the doctor who waits for patients to seek his or her counsel and helps resolve health problems during short in-person visits.

New models of primary care frame primary practice as proactive, bundled, and shared. They are proactive because the practitioner seeks and prevents expected complications and comorbidities; bundled because they focus on long-duration episodes rather than isolated incidents; and shared because care is delivered by a multidisciplinary team, which can include physicians, nurses, therapists, social workers, educators, and empowered patients.

Such new models of primary care as the medical home, the ambulatory intensive care unit, retail clinics, and so-called virtual medicine (e-mail or phone consultations with a distant physician) all share an important attribute. They represent an increase in organizational complexity resulting from two separate but often related features: increasing practice size and increasing professional diversity.

New Models Of Care

Larger practice size is a feature of many new models for several reasons. Payment models that share financial risk with physicians, such as capitation or global and episode-of-care payments, require bigger patient panels to spread the risk. When a panel consists of 10,000–20,000 patients, a handful of critically ill people can have a significant effect on the practice's finances. A critical mass of patients is also needed to support population-oriented clinical management such as disease management programs. And scale is necessary to raise the capital for investments in infrastructure, especially the electronic health records and secure online systems needed to support such programs.

Professional diversity is a feature of new models because disease management and care coordination hinge on teamwork among doctors, nurses, therapists, and social workers. This more diverse staff is organized into multidisciplinary teams among which the varied tasks of primary care can be shared.

Both increased size and diversity make primary care practices challenging to manage and place demands on the managerial skills of the doctors and nurses who work in them (Exhibit 1). Growing from a solo practice to a practice of five

EXHIBIT 1

Implications Of New Approaches To Primary Care

Traditional primary care	New models of primary care
PRINCIPLES	
Reactive and episodic care	Outreach
Full range of services	Bundled care
	Coordination/navigation
	Education/empowerment
ORGANIZATION	
Single care platform	Multiple, coexisting care platforms
Physician centered	Team centered
Autonomous	Potentially contracted to multiple providers
Single payment model	Multiple payment models for different aspects of care
TACTICS	
Most needs met during visit with individual doctor	Group meetings
	Self-help tools
	Outbound phone calling
	Referral management
	Electronic health record
	At-risk lists
MANAGEMENT	
Few staff, mostly doctors, nurses, and receptionists	Increased staff numbers and professional diversity
Practice management focus mostly on payroll, billing, and collections	Larger capital investments
Low cost structure (small office, paper record, etc.)	Greater focus on aggregate data collection and analysis
	Multiple processes

SOURCE Author's analyses.

and then to one of twenty physicians both increases managerial work and changes its nature.

In a solo practice, the work of management—ensuring the quality of the output and the financial health of the enterprise—is fairly circumscribed. The doctor ensures quality of care by providing all of the care himself or herself and can manage the finances with a simple cashbook system. Increasing physician numbers and staff diversity adds new tasks and changes others. Ensuring quality of care now requires motivating others, overseeing their work, and reviewing aggregate performance data. Financial control can be exercised only with an understanding of financial statements, and sharing both obligations and profits requires complex partnership contracts and sometimes difficult negotiations.

Implementing New Models

Size and diversity are not the only causes of increased managerial demands imposed by new approaches to primary care. The managerial work required to deliver proactive care that is efficient, reliable, and of high quality falls into three broad areas: design, management, and improvement. The diverse activities of primary care and prevention, chronic disease management, and acute as well as other types of care are operationally distinct and very different.[1] Each employs a different care platform: the staff, technology, and managerial controls that support the care.[2,3] Designing and combining several care platforms and funding and developing their supporting infrastructure is essential to implementing new primary practice models. Managing the practice involves day-to-day management of human resources, resolving conflict, measuring clinical performance, and exercising financial control. And still other work is required to ensure not only that medical outcomes are achieved reliably, but also that they are improved over time as payers' and patients' expectations inevitably rise.

Other tasks relate to the transition from established to newer models of practice. Shifting from autonomous practice with the individual physician as the central organizing construct to newer models of group-based decision making with shared authority and accountability can be wrenching. It is simply not what many doctors think they trained for and, for some, can be a real threat to their professional identity.

Equally, adding either other medical subspecialties or nonmedical professionals can create its own tensions, most often around the distri-

bution of revenue. Finally, as practices increase in size and diversity, the need arises for some practitioners to devote more of their time to management, bringing in less revenue as a result and creating two tiers of doctors within a practice. Managing all of these transitions usually falls to practice leaders, but all of the doctors in the practice are affected.

Unfortunately, evidence to date suggests that existing primary practices are not well positioned to become the newer models that predictions of future primary care envisage. The infrastructure required to support proactive care—for example, information systems or care coordination staff and tools—is still not widespread.[4] Nor are the activities and routines usually associated with coordinated care such as team meetings, performance feedback, and automated reminders.[4,5]

Moreover, new ways of organizing primary care are much like other innovations. Dissemination and adoption are often incomplete and unsuccessful.[6,7] Innovations that by their nature restructure roles, status relationships, and operational routines can cause great disruption to organizations.[8] Their successful adoption is often determined as much by how well the process of adoption and organizational change is managed as by the characteristics of the innovation itself and how well it is designed to fit into the existing organization. Yet many health care organizations do not have the skills to successfully adopt new ways of delivering care that are central to any transformation of primary care.[9,10]

Skills Needed By Physicians

What practical skills will doctors need to be able to design and manage new models of primary care? Below is some of the managerial work that is likely to be required if primary care is to be systematically reconfigured to generate high-quality outcomes efficiently.

OPERATIONS DESIGN Because the care platforms for each of primary care's component services are different, each needs to be deliberately designed and deployed. This means specifying not only clinical protocols but also the associated medical work flow; staffing model and task allocation; data requirements and information flow; routine for coordination; and even the physical layout of the ward, clinic, or office.

DATA MANAGEMENT Increasing requirements for external reporting and internal management—for operational control through clinical performance tracking, financial control, and pay-for-performance payment contracts—force practitioners to collect and analyze larger amounts of clinical and financial performance data than ever before. This demands embedding data collection in clinical work flow so as not to require extra work. It also requires the creation of routines for regularly reviewing and reacting to the data.

HUMAN RESOURCES Larger practice size and increased professional diversity bring with them staffing challenges, including recruiting and selection, performance assessment and feedback to existing staff, and staff development and succession planning.

MANAGING TEAMS The multidisciplinary team is the central organizing framework of many models of future primary care.[11] Copious research on the subject demonstrates that team size and structure, internal culture, and decision-making processes have a profound impact on teams' ability to perform.[12] Team design, goal setting, and oversight of teamwork are essential management tasks.

FINANCIAL CONTROL Innovative primary care practices in the future may have multiple revenue sources and payment models as they offer services reimbursed in different ways. For example, a practice may be paid through an episode-of-care payment for chronic care but by fee-for-service for screening. This complexity will likely make evaluating and ensuring the financial health of the practice more challenging. Capitation also places a premium on capability to manage financial risk—something many physicians found difficult the last time this reimbursement system was in vogue.

NEGOTIATION AND CONFLICT RESOLUTION Larger, more complex organizations inevitably face internal conflicts avoided by smaller practices. The division of shared revenue among primary and specialist physicians and between practitioners and managing doctors is often a particularly thorny negotiation.

CAPITAL ALLOCATION Raising, allocating, and financing the capital needed for large investments in staff, information technology, and physical space may be needed, and each investment requires a sound business evaluation.

INNOVATION AND PERFORMANCE IMPROVEMENT Innovation and performance improvement are not inevitable outcomes of routine primary care delivery; they have to be deliberately managed. Many clinicians regard these activities as nonreimbursed work layered on top of their clinical responsibilities. Yet they are essential because payers, regulators, and patients expect more and more from their health care systems over time.

This is a daunting list for many practicing primary care physicians, in large part because so few have had any preparation for such work in either their training or later careers. But pri-

mary practice redesign will require both managerial and clinical skills. In a medical home the work of prevention, acute disease management, and chronic disease coordination can be divided among doctors, nurse practitioners, and other professionals and integrated so that it is seamless for patients. This can be accomplished only by professionals who understand how these various aspects of clinical care fit together. Similarly, the day-to-day management of these practices—for example, tracking and reacting to clinical performance data—requires a clinical understanding.

Physicians As Managers

As primary care moves away from the old "reactive" model—in which physicians responded to patients' needs after they became sick, rather than attempting to manage patients toward health over time—primary care practitioners will be forced to take on more work previously regarded as managerial and out of the average practitioner's domain. In fact, new models—either physician-led such as the medical home, or entrepreneurial such as disease management or retail medicine companies—may force us to rethink what "management" and "leadership" mean in the context of primary care delivery.

All doctors involved in these models—not just those appointed to named management positions—may need to incorporate some management tasks into their daily clinical work. As other members of the team take on portions of the primary physician's clinical work, some managerial work may replace it, and doctors may be called upon to take a leadership role in some clinical teams. Reimbursement models proposed for the medical home are intended to ensure that doctors are paid for this kind of work.

How, then, can physicians be helped to acquire these skills when medical schools ignore managerial topics[13] and the time available for postgraduate management development is constrained? Could the challenges of equipping primary care practitioners with basic managerial capabilities present a barrier sufficient to impede primary care reform?

Helping Physicians Acquire Managerial Skills

One possible solution is based on the observation that not all of the management capabilities listed above are needed simultaneously. Like all adults, physicians learn when they perceive a gap between their current knowledge and the skills needed.[14] There are four points in a physician's career at which some basic management training could be undertaken, with the content tailored to meet the doctors' specific needs at the time.

MEDICAL SCHOOL The first is in medical school. Although the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS) include communication skills and systems-based practice in their core competencies, preparing students to work effectively in a complex training-hospital environment requires that students also understand the fundamentals of organizational and team behavior. For example, building, running, or being an effective participant in a team entails more than simply assembling a group of clinicians.[15] Medical school is also a time to learn how complex systems work and the ways in which they may fail and thereby cause patient harm.[16]

RESIDENCY The second is during residency, when junior physicians are already taking on managerial responsibilities. They lead small teams of interns and students and must interact successfully with complex care systems. The skills they need at this juncture include the fundamentals of leadership, negotiation, and conflict resolution. Because they are at the forefront of some of the most difficult care of patients with complex conditions, they also need to understand how to prevent harm through human-factors design and by applying the principles of high-reliability organizations.

Finally, both the ACGME and ABMS recognize the importance of practice improvement. Although these organizations' focus is on the junior physician improving his or her own practice, residency is also an opportunity to gain experience in formal approaches to process improvement, such as the tools of continuous quality improvement.

IN PRACTICE The last two opportunities for training are when physicians are in independent practice, either as junior consultants or newly in private practice. Other managerial asks such as operations design, organizational and financial control, and human resources management become relevant. Still other managerial work such as strategy setting, marketing, and raising capital is most relevant when physicians take more senior positions in a hospital, group practice, or company.

Recognizing The Need For Change

Providing training opportunities is not the primary problem. Although managerial skills are essential for reinvigorating primary care through creating and implementing new delivery models, these can be acquired by the current generation of physicians. They can be and are

being taught at the four points described above.

Medical schools can integrate teaching about organizations and teams into clinical training. Some primary care residency programs—for example, Boston's Brigham and Women's Hospital—have introduced a management track that allows trainees to learn the fundamentals of management along with clinical skills. Practitioners, for whom time away from practice for further training has an opportunity cost, can learn relevant skills in short courses. These could be scheduled to be convenient for physicians in full-time practice, such as courses already offered by many business, medical, and public health schools or by professional societies of hospitals, physicians, or physician-executives.

Delivering training is less the problem than recognizing its necessity. A bigger practical impediment to primary care reform would be underestimating the nature and extent of the managerial work needed to make it happen. Discussions of primary care reform often frame it as a policy or a payment issue, rather than a management challenge. Yet experience with other innovations such as capitation, pay-for-performance, the surgical checklist, or team-based care suggests that these can be hard to adopt. This is true in part because of the necessity for organizational change, rather than individual practice change, which challenges physicians' managerial capabilities. As we contemplate strategies to reinvigorate primary care, we must not fail to plan and budget for the development of the necessary management skills for those doctors to whom the work of implementing reform will fall. ■

NOTES

1 Bodenheimer T. Transforming practice. N Engl J Med. 2008;359 (20):2086–9.
2 Bohmer RMJ. Designing care: aligning the nature and management of health care. Boston (MA): Harvard Business School Press; 2009.
3 Bohmer RM, Lawrence DM. Care platforms: a basic building block for care delivery. Health Aff (Millwood). 2008;27(5):1336–40.
4 Rittenhouse DR, Casalino LP, Gillies RR, Shortell SM, Lau B. Measuring the medical home infrastructure in large medical groups. Health Aff (Millwood). 2008;27(5):1246–58.
5 Friedberg MW, Coltin KL, Safran DG, Dresser M, Zaslavsky AM, Schneider EC. Associations between structural capabilities of primary care practices and performance on selected quality measures. Ann Intern Med. 2009;151(7):456–63.
6 Berwick DM. Disseminating innovations in health care. JAMA. 2003;289(15):1969–75.
7 Balas EA, Boren SA. Managing clinical knowledge for health care improvement. In: Bemmel J, McCray AT, editors. Yearbook of medical informatics 2000: patient-centered systems. Stuttgart (Germany): Schattauer Verlagsgesellschaft mbH; 2000. p. 65–70.
8 Barley SR. Technology as an occasion for structuring: evidence from observations of CT scanners and the social order of radiology departments. Adm Sci Q. 1986;31(1): 78–108.
9 Pisano GP, Bohmer RMJ, Edmondson AC. Organizational differences in rates of learning: evidence from the adoption of minimally invasive cardiac surgery. Manage Sci. 2001; 47(6):752–68.
10 Edmondson AC, Bohmer RM, Pisano GP. Disrupted routines: team learning and new technology implementation in hospitals. Adm Sci Q. 2001;46(4):685–716.
11 Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington (DC): National Academies Press; 2001.
12 Fried BJ, Rundell TG, Topping S. Groups and teams in health services organizations. In: Shortell SM, Kaluzny AD, editors. Health care management: organization design and behavior. 5th ed. Clifton Park (NY): Thomson Delmar Learning; 2006. p. 174–211.
13 Emanuel EJ. Changing pre-med requirements and the medical curriculum. JAMA. 2006;296(9): 1128–31.
14 Davis DA, Thomson MA, Oxman AD, Haynes RB. Changing physician performance: a systematic review of the effect of continuing medical education strategies. JAMA. 1995;274 (9):700–6.
15 Bodenheimer T. Can health care teams improve primary practice? JAMA. 2004;291(10):1246–51.
16 National Patient Safety Foundation, Lucian Leape Institute. Unmet needs: teaching physicians to provide safe patient care. Boston (MA): NPSF; 2010.