



CALIFORNIA
HEALTHCARE
FOUNDATION



Building Teams in Primary Care: Lessons Learned

July 2007

Building Teams in Primary Care: Lessons Learned

Prepared for
CALIFORNIA HEALTHCARE FOUNDATION

by
Thomas Bodenheimer, M.D.

July 2007

About the Author

Thomas Bodenheimer, M.D., is an adjunct professor in the Department of Family and Community Medicine at the University of California, San Francisco.

About the Foundation

The **California HealthCare Foundation**, based in Oakland, is an independent philanthropy committed to improving California's health care delivery and financing systems. Formed in 1996, our goal is to ensure that all Californians have access to affordable, quality health care. For more information about CHCF, visit us online at www.chcf.org.

Contents

2 I. Preface

4 II. Teams in Primary Care

Why Teams Are Needed in Primary Care

Features of Successful Teams

Problems with and Barriers to Teams

Introducing Teams into Primary Care

10 III. Lessons from the Case Studies

Barriers to Team Development

Some Lessons from the Case Studies

15 Endnotes

I. Preface

EVERYONE SAYS THAT HEALTH CARE IS A TEAM SPORT, but not everybody plays on a smoothly functioning team. This report features 15 winning teams in primary care. None is perfect. Some involve only one aspect of what is needed to transform primary care into a team effort, but all offer lessons to primary care practices and clinics trying to build teams.

The practices and clinics featured here are by no means the only examples of high-performing teams. In the early stages of this project, dozens of health care professionals, academics, and policymakers were asked whom they would recommend as case studies. Those identified were then contacted to determine if innovative team development was taking place. If the case study seemed promising, on-site or telephone interviews were conducted, using a semi-structured questionnaire.

Between June 2006 and January 2007, 112 people were interviewed for this report. These included 41 physicians, 21 registered nurses (RNs), 12 medical assistants (MAs), 12 managers, seven population care coordinators, four licensed practical nurses (LPNs), three physician assistants, three patients, two nurse practitioners, two community health workers/promotoras, two Ph.D. researchers, two information technology experts, and one dietitian.

This introductory volume of the report summarizes some general issues regarding teams in primary care and points readers to the overall lessons provided by the case studies. The bulk of the report, presented as a separate volume, provides case studies of practices and clinics making considerable progress in forging primary care teams. The order of the case studies creates a spectrum of team-building examples flowing from less complex changes to more transformative innovations. Because team building requires great attention to detail, some of the case studies offer highly specific descriptions of how teams function. Hopefully, this level of detail will be helpful to primary care practices involved in team formation.

The report concludes with an epilogue that describes an idealized “teamlet” model, featuring ideas that I personally took away

from the achievements of the people and organizations I had the opportunity to observe.

About the report's terminology: "Clinician" is used to denote physicians, physician assistants, and nurse practitioners; "caregiver" is any person within a health care institution who helps provide care to patients; "teamlet" (meaning a small team) refers to the subset of a larger team, generally consisting of a medical assistant and clinician, the day-to-day working dyad in virtually all primary care practices.

It is hoped that this report will provide ideas and inspiration so that teamwork in primary care can spread and thrive.

— THOMAS BODENHEIMER

San Francisco

June 2007

II. Teams in Primary Care

TEAMS ARE EVERYWHERE IN HEALTH CARE: THE SURGEON, operating-room technician, operating-room nurse, and anesthesiologist in the operating suite; the oncologist, radiologist, and surgeon treating a cancer patient; the physician, medical assistant, and receptionist in a small family practice office.

Teams seem to work well in specialized facilities because the work flow tends to be more standardized. Thus dental offices, with dentists, dental assistants, and dental hygienists, often function smoothly with each person trained to perform a relatively limited set of tasks. Offices of ophthalmologists are often well organized, with the medical assistant checking visual acuity and visual fields, the ophthalmologist doing retinal exams, diagnosis, and treatment, the optometrist prescribing lenses, and the optician creating glasses.

Why Teams Are Needed in Primary Care

Primary care is different. A busy primary care office handles such a wide array of patients that it is difficult to routinize what happens each day. One elderly patient with six diagnoses, 11 medications, and cognitive dysfunction can disorganize a primary care clinic for a whole morning. A child having an acute asthma attack or an adult with new-onset chest pain can rearrange an entire afternoon's schedule. With hundreds of diagnoses and the need to provide acute, chronic, and preventive care services, organizing primary care is a major challenge.

Sometimes, the easiest way to handle the chaos of primary care is to reduce the number of people involved. Thus, some primary care physicians have chosen to limit drastically the size of their patient rosters, often referred to as "patient panels," and to employ as few people in the office as possible (perhaps only the physician and one receptionist/billing clerk), thereby reducing the need for complex systems, division of labor, training, and handoffs between one caregiver and another. However, this concept, if generalized to all primary care throughout the country, would result in fewer patients having access to primary care. Without a dramatic increase in the number of primary care physicians, this is not a population-wide solution.

If the ratio of primary care physicians to population remains at its current level, panel sizes will inevitably be high—currently an average of 2,300 per primary care physician.¹ Given this reality, another fundamental problem—even more challenging than inherent chaos—haunts primary care: too much work and too little time to do it.

The central institution of primary care is the 15-minute physician visit. Primary care physicians are expected to provide acute, chronic, and preventive care to their patients while building meaningful relationships with those patients, and managing multiple diagnoses according to a host of evidence-based guidelines. A research study estimates that it would take 7.4 hours per working day to provide all recommended preventive care to a panel of 2,500 patients (similar to the average U.S. primary care panel of 2,300) plus 10.6 hours to adequately manage this panel's chronic conditions.^{2,3} No wonder many preventive services go undone⁴ and many patients with chronic disease are poorly controlled.⁵

Reported levels of dissatisfaction bear out these estimates:

- Forty-two percent of primary care physicians report not having adequate time to spend with their patients;⁶
- Fifty percent of patients leave the visit without understanding what advice their physician gave;⁷
- Because they feel rushed, in one study physicians interrupted their patients' initial statement of their problems in an average of 23 seconds, and in 25 percent of visits, patients were never able to express their concerns at all;⁸
- In another study, patients were truly involved in only 9 percent of decisions affecting them.⁹

In sum, it becomes clear that primary care physicians in the 15-minute visit can no longer do what their patients expect and deserve.

What do we do, given the chaotic nature of primary care and the impossibility of a primary care physician adequately caring for the average panel of patients? Many practices have found the answer in the creation of high-functioning primary care teams with nonphysician team members taking on clinical tasks that patients need, that physicians have insufficient time to perform, and that involve a blending of multidisciplinary skills, focusing several people's—rather than a single physician's—insights on each patient's problems. Moreover, a number of practices have demonstrated that many primary care visits, especially for chronic disease, involve relatively simple matters that could be handled by nonphysician team members via protocols or standing orders.

Team Practice and Chronic Disease Care

Some of the greatest strain on the time and energies of clinicians in primary care practices comes from the care needs of chronic disease patients. These patients have more frequent visits than other patients, and often require considerable monitoring of testing and self-care between visits. In combination, these tasks can place an inordinate burden on practices with panels which have a high percentage of chronic disease patients. At the same time, many of these tasks can be well performed by nonphysician members of a practice team, with the support of protocols, standing orders, oversight, and sufficient training. In fact, some aspects of chronic disease care—particularly monitoring and education—may be better performed by nonphysician team members if the nonphysicians have special skills or experience, such as language proficiency or other cultural sensitivity, or personal experience of the disease. A number of the case studies in this report provide dramatic evidence of how a team approach to chronic disease care can simultaneously provide increased attention to the needs of chronic disease patients and reduce the burdens of such care on the practice's physicians.

Features of Successful Teams

Groups of health care personnel working together in an office, clinic, or hospital floor are generally called teams. But they can truly qualify as a team only by demonstrating actual teamwork.¹⁰ A simple definition of “team” may help to distinguish unstructured groups from organized teams: “A team is a group with a specific task or tasks, the accomplishment of which requires the interdependent and collaborative efforts of its members.”¹¹

Even assuming a reasonable level of competence and cooperativeness of team members, some teams perform better than the sum of their parts while others do not. The literature of both sociology and health services has paid considerable attention to why this is so. The factors identified with better performance include good leadership, a clear division of labor, training of team members in their personal roles and in team functioning, and team-supporting policies of the organization within which the team is working. Considerable and ongoing investment is required to create and sustain team cohesion. This investment includes training, the creation of protocols that define tasks and those who will perform them, the adoption of team rules including decision making and communication, and the granting of some protected, non-patient-care time for team meetings.

The features that distinguish high-performing teams from loose groups of caregivers—working at the same location but lacking organizational structure and cohesive function—are set out in the box on the following page “Key Elements of Team Building.”¹² Although the highest-functioning teams will probably demonstrate all of these features, when initiating team building into a primary care practice, the elements can be introduced gradually.

While the literature of team functioning has identified what makes a good team, it does not offer much empirical data concerning the effects of team building on primary care practice. Nonetheless, the

work that has been done suggests benefits in several areas.

Clinical Outcomes. One significant objective of reconfiguring team personnel is enhancement of clinical performance. Carefully trained and assigned team members may contribute unique talents that enhance the skill mix of the practice. Numerous studies suggest that multidisciplinary clinical teams produce clinical outcomes superior to those achieved by “usual care” arrangements, with many of these studies evaluating the addition of nurses, social workers, psychologists, and clinical pharmacists to teams.¹³ One limitation of these studies is that merely having extra personnel conveys an advantage, so it remains unclear the extent to which the benefits were produced by the teamwork or simply by virtue of a larger team.

A few other studies suggest that greater team cohesion is associated with improved clinical outcomes for the team’s patients. Research on general practices in England found that performance in diabetes care, overall patient satisfaction, continuity of care, and access to care were significantly higher in practices with higher scores on assessments of team climate.¹⁴ Similarly, a study of primary care teams in Kaiser Permanente’s Georgia region suggests that teams with higher “collaborative clinical culture” scores have superior patient outcomes, including better patient satisfaction and better control of diabetes and hyperlipidemia.¹⁵

Economic Advantage. Another motivation for creating teams in primary care practice is to conserve expensive physician or RN labor through substitution of lower-cost personnel. The substitution of licensed practical nurses (licensed vocational nurses) or medical assistants for RNs has become commonplace for just such economic reasons. Little research exists, however, on the economic impact of such substitution. Nor has any formal economic study been published examining whether the downtime set aside for team meetings in primary care produces offsetting financial benefit

Key Elements of Team Building

Defined Goals

Overall organizational mission statement

EXAMPLES:

- Improvement of patients' health
- Reduction in barriers to access to care
- Improvement in practice's financial performance
- Physician and staff satisfaction

Specific, measurable operational objectives

EXAMPLES:

- At least 80 percent of diabetic patients in practice will have hemoglobin A1c lower than 8
- Ninety percent of requests will receive a non-urgent appointment within one week
- Practice will achieve a targeted level of revenue
- Each team member will achieve an explicitly identified goal for personal professional development

Systems

Clinical systems

EXAMPLES:

- Procedures for providing prescription refills
- Procedures for informing patients of laboratory results

Administrative systems

EXAMPLES:

- Procedures for making patient appointments
- Policies on how decisions are made in the practice

Division of Labor

Clear definition of tasks

Clear assignment of roles

EXAMPLE:

- Determining which people on the team perform which tasks within the clinical and administrative systems of the practice

Training

Training for the functions that each team member regularly performs

Cross-training to substitute for other roles (in cases of absences, vacations, or periodic heavy demands on one part of the team)

Communication

Communication structures

EXAMPLES:

- Routine communication through paper and electronic information flow
- Minute-to-minute communication through brief verbal interactions among team members
- Team meetings

Communication processes

EXAMPLES:

- Feedback
- Conflict resolution

through improved team productivity, decreased absenteeism, and lower turnover.¹⁶

Reduced Clinician Workload. Yet another reason for creating teams in primary care practice is to offload work performed by clinicians. Many clinicians affirm that up to 50 percent of their time

is spent on activities that could be performed by caregivers with far less training. Delegation of tasks to nonclinician caregivers can address the challenge faced by physicians trying to provide acute, chronic, and preventive care to all their patients. Despite the seeming obviousness of this equation, the few studies

done to date are inconclusive on whether such delegation truly reduces clinician workload.¹⁷

Problems with and Barriers to Teams

If teams are such a good idea, why aren't they more prevalent? Teams have some inherent drawbacks related to their added organizational complexity. As team size increases, the transaction costs—that is, the number of handoffs between caregivers, the time these take, and the potential for error—of interpersonal communication increase exponentially and may overtake the benefits of teamwork.¹⁸ Team size may have a U-shaped relation to teamwork; too few or too many team members reduce effectiveness.¹⁹ One study of primary care teams suggests that six team members is the optimal size; teams with greater than 12 members are too large.²⁰ Teams also present more challenges of human relationships and personalities than do traditional practice structures.²¹ While some team members may shine as initiators, clarifiers, or encouragers, others may play negative roles as dominators, blockers, evaders, and recognition seekers.²² One community health center leader of the 1960s, frustrated in his continual attempts to encourage teamwork, exclaimed that “The best team size is a team of one.”²³

The undifferentiated and varied nature of clinical problems in primary care makes team building especially challenging. A single-specialty practice will find it relatively easy to delineate tasks and define roles, compared with a primary care practice facing a more diffuse array of clinical tasks. Also, it can be difficult to meld the reality that some team members are more expert than others, requiring hierarchy, with the idea that all members should participate fully in team functioning. Similarly, collaborative decision making is a challenge when physicians are used to (and sometimes should be) giving clinical orders to other caregivers.²⁴ Finally, financial realities often kill teams before they start. Economic disincentives are prominent under current fee-for-service payment policies: for example, an office visit with a physician or nurse practitioner is billable, but

A Brief History of Primary Care Teams

The general practitioner of the early 20th century was a lone ranger. Black bag in hand, he treated and comforted patients, often in their homes. As office practice emerged, the first primary care team was husband and wife, the wife serving as receptionist, billing clerk, and bookkeeper. As practice became more complex, nonphysician tasks became further subdivided into receptionist, medical assistant, and billing clerk, a pattern found in the myriad of small practices dotting the United States.

The 20th century also saw the introduction and development of a more formal team concept. In 1915, teams of physicians, health educators, and social workers were created at Massachusetts General Hospital's outpatient department. Primary care team models were developed at New York's Montefiore Hospital in 1948 and at Yale in 1951. The Neighborhood Health Center program of the 1960s developed primary care teams in some early health centers, and larger group practices incorporated a diverse complement of health professionals into teams.

Despite these efforts, primary care teams did not become the dominant paradigm. One obstacle was the territoriality of physicians and nurses who were loath to share their knowledge and authority. Another barrier was that payment systems failed to reimburse work performed by nonphysician professional members of the team, undermining the financial viability of teams. Finally, the relationships within the teams of the 1960s and 1970s were too often only vaguely defined and ultimately “touchy-feely” rather than based on training and clear divisions of labor. The “team meeting” of the times—lengthy sessions in which each team member offered his or her perspective on a patient and family—became emblematic of this failure to effectively design the team and clearly define team members' roles.

not a visit with an MA or RN, which partly offsets the economic benefit of substituting less expensive personnel.

Introducing Teams into Primary Care

Organizing primary care practices into teams is not a simple undertaking. But it is a path that primary care needs to consider: the current structure of most practices—with no teams or with loosely structured teams—is not working. As the case studies in this report demonstrate, a number of primary care practices are succeeding in team building. The cases also show that teams are a necessary and effective substrate upon which other innovations—the chronic care model, advanced access, group visits and electronic encounters—can be catalyzed.

Building a cohesive primary care team begins with an assessment of the mix and potential of existing personnel, followed by a step-by-step development of these workers into a team or teams using “Key Elements of Team Building” (above) as a guide. Detailed systems are needed to routinize practice tasks—for example, how patient telephone calls are triaged, how laboratory and X-ray results (normal or abnormal) are communicated to patients, and how refills for different categories of prescriptions are handled. Primary care practices can organize these systems one by one, starting with simpler ones—for example, how medications are refilled, then how laboratory test results are communicated to patients.

Building these systems takes time. Each team member needs clearly defined tasks within each system and requires adequate training to perform those tasks. Modes of communication—whether verbal or electronic—among team members need to be clearly delineated. Discussions are needed on whether and how certain tasks could be delegated from clinicians to nonclinicians. In addition, practices are beginning to search for ways to involve patients in the process of team formation and to encourage patient participation in teams.

In a number of practices, once the work of team building is started, the process takes on a life of its own, with a never-ending cycle of improvements in systems, division of labor, and modes of communication. While it may be difficult to get team formation started, the ultimate rewards in quality and satisfaction—for patients, clinicians, and the practice staff—are considerable.

Team development requires leadership and protected time for all potential team members: It is not possible to build a team without some relief from the never-ending work of patient care. Making time to step off the hamster treadmill to invest in team planning yields long-term benefits in the form of better patient care and an improved work environment for everyone.

III. Lessons from the Case Studies

A WIDE VARIETY OF PRIMARY CARE PRACTICES ARE engaged in the formation of teams. The work of 15 practices is described in this report. The practices encompass the spectrum of primary care, from a one-physician private office to large multispecialty groups with hundreds of primary care clinicians, RNs, licensed vocational nurses, medical assistants, health educators, pharmacists, and practice managers. Each organization featured in this report has a different approach to the team-building enterprise, and each has unique lessons to offer.

All 15 examples have two common characteristics: defining and changing the job descriptions of people on the team, and determining how the team members interact with one another.

In all cases reported here, the primary care practice realized that the physicians were responsible for too many tasks and could not optimally perform all those tasks in the time available. Moreover, these practices understand that other caregivers are often better trained or positioned than physicians to provide certain services. Accordingly, most of the 15 practices break down the tasks they need to perform into their component parts and expand the roles of nonphysician personnel to include responsibility for some of those components. For example, traditionally physicians have been responsible for informing patients of lab test results, but in many primary care practices the work does not always get done. Too many physicians do not inform patients of lab tests that are normal and some fail to inform patients of abnormal results, even though giving patients that information should be a standard responsibility of primary care.

Primary care team formation involves an assessment of many such regular tasks, plus:

- A determination of whether the task could be done by someone other than the physician;
- The creation of rules or protocols for accomplishing that task, including who needs to receive the information and how the information should be transmitted;
- Making time for someone to assume responsibility for the task;

- Training that person, and;
- Overseeing the person to make sure that the task is being done consistently and well.

In the example of informing patients about lab results, the task must also be subdivided into

normal lab results, slightly abnormal results, and significantly abnormal results, with different rules for each. Multiply this process by the number of tasks that primary care practices need to accomplish, and it becomes clear why team building is a major challenge.

Variations in Team Care Offered by the Case Studies

The case studies presented in the second volume of this report, *Building Teams in Primary Care: 15 Case Studies*, offer an extraordinary range in the size and type of practice, the patient demographic served by the team, and the nature of the team care innovations introduced. The following is a snapshot of these variations, as well as a directory to the specific case studies that present them; listed by case study number and subject.

Practice Size and Types. The case studies range from the smallest of private practices to large, multisite clinic organizations.

- **Small (1–2 physician) private practices**—1, Dr. Kwabena Adubofour; 2, Dr. Charles Burger
- **Community health centers**—3, Clinica Campesina; 15, Neighborhood Healthcare
- **Academic teaching/training clinics**—4, Harbor-UCLA Medical Center’s Family Health Center; 5, San Francisco General Hospital’s Family Health Center; 9, St. Peter Family Medicine Residency Program
- **Multi-site integrated delivery systems**—6, Santa Clara Valley Health and Hospital System’s Center for Diabetes and Metabolism; 7, Cambridge Health Alliance; 8, Kaiser Permanente Northern California; 10, Palo Alto Medical Foundation; 11, Harvard Vanguard Medical Associates; 12, Group Health Cooperative of Puget Sound; 13, HealthPartners Medical Group; 14, University of Utah Hospitals and Clinics

Patient Populations. Some teams in the case studies address patient populations with broad-spectrum primary care needs; some also—or only—focus on patients with specific chronic disease diagnoses; and some address the particular needs of populations with diverse cultural and language characteristics.

- **Broad-spectrum primary care**—2, Dr. Charles Burger; 10, Palo Alto Medical Foundation; 11, Harvard Vanguard Medical Associates; 12, Group Health Cooperative of Puget Sound; 13, HealthPartners Medical Group; 14, University of Utah Hospitals and Clinics
- **Chronic disease care**—1, Dr. Kwabena Adubofour; 4, Harbor-UCLA Medical Center’s Family Health Center; 6, Santa Clara Valley Health and Hospital System’s Center for Diabetes and Metabolism; 8, Kaiser Permanente Northern California; 9, St. Peter Family Medicine Residency Program
- **Culture/language diversity**—3, Clinica Campesina; 5, San Francisco General Hospital; 7, Cambridge Health Alliance; 15, Neighborhood Healthcare

Team Care Innovations. The practices and clinics included in the case studies have developed team care innovations of a wide variety, including changing job categories and the nature of tasks performed by personnel, altering relations between clinicians and assistants, using patient panels to focus staff attention, introducing spatial and technological changes, expanding the “visit” paradigm, providing community outreach, and providing financial incentives.

- **Job category/task changes**—Every one of the practices and clinics included in the case studies established new job categories, altered the definitions of existing categories and/or changed the tasks performed by established categories of personnel, including both clinicians and non-clinicians.
- **Clinician/medical assistant relations**—Most of the practices and clinics in the case studies made changes to the traditional physician/medical assistant dyad, as well as shifts in common hierarchical structures among other personnel.

Variations in Team Care Offered by the Case Studies, *continued*

Team Care Innovations, *continued*

- **Expanded visit paradigm**—In one way or another, each of the practices and clinics in the case studies have transformed the traditional 15-minute physician visit by expanding the role of other clinicians and caregivers in direct patient care, and/or by expanding the visits themselves beyond the primary clinician encounter with pre-visit and post-visit consultations, between-visit contacts, and/or community care away from the clinical site.
- **Defining patient panels for teams**—3, Clinica Campesina; 7, Cambridge Health Alliance; 8, Kaiser Permanente Northern California; 10, Palo Alto Medical Foundation's Family Practice Dept.; 11, Harvard Vanguard Medical Associates
- **Spatial or technological innovations**—2, Dr. Charles Burger; 3, Clinica Campesina; 8, Kaiser Permanente Northern California; 12, Group Health Cooperative of Puget Sound; 13, HealthPartners Medical Group; 14, University of Utah Hospitals and Clinics
- **Financial incentives for staff members**—1, Dr. Kwabena Adubofour; 3, Clinica Campesina
- **Community outreach**—4, Harbor-UCLA Medical Center's Family Health Center

Barriers to Team Development

Even when primary care practitioners come to recognize the value team care might bring to their organization, implementing the structural changes required to develop team care can run up against substantial barriers. Foremost among these are resistance to changes in job descriptions and tasks, and formal scope-of-work conceptions.

Changing Job Descriptions. Perhaps the most essential aspect, but also the most difficult challenge of team building is changing team members' job descriptions. There are several aspects to this difficulty. Many people feel comfortable with their current tasks and do not wish to change. Most are busy doing essential tasks and do not have time to add new activities. Stopping the performance of one task in order to make time for a new one is not easy. Management regulations, scope-of-work laws, and union contracts also may impede job description changes. And training people to assume new duties takes time away from day-to-day patient care. Also, even while complaining about their workloads, physicians may not wish to give up responsibilities.

Practices and clinics have used different approaches to changing the jobs of their primary care team

members. Each practice or clinic hoping to build primary care teams must choose how it will carry out job description changes.

- Some have utilized the incremental rapid change cycle method. For example, a small, concrete change could be made in the job description of one medical assistant, such as asking her to remove the shoes of a diabetes patient before the physician sees the patient, or training the medical assistant to perform the microfilament foot exam of patients with diabetes prior to the physician visit. After the change is established, it can be gradually spread to the practice's or clinic's other medical assistants. This method can work for very small job description changes.
- Some organizations test a change in one clinical site, tweak the change to make sure it works smoothly, then mandate the change throughout the organization. Sometimes people in the pilot site teach the change to others throughout the organization. This method can work for relatively small but substantial changes in job descriptions.
- Some organizations make a leadership decision that the job description of one group of caregivers will change in a major way, discuss the change with representatives of the affected group of

caregivers, take away the previous work of those caregivers, and mandate the change with a major organizational training effort.

The Scope-of-Work Dilemma. Another innovation-stopping barrier to team development is the scope-of-work conception that limits what different caregivers can do by professional degree or educational certification rather than by competency based on performance evaluation. There is no compelling reason why a receptionist cannot advise a patient, based on protocols, to get a chest X-ray before coming to the office—as long as the receptionist has received sufficient training, mentoring, and competency evaluation. Nor is there a good reason why a well-trained and mentored medical assistant could not take a patient’s initial medical history, to be deepened by the clinician—after all, patients often enter their own histories into medical record systems.

While there are good reasons to make use of task-specific competency evaluations to determine a caregiver’s ability to perform a certain task, the legal and medical regulatory systems may not always support this mode of thinking. But at times it is professional territoriality rather than actual scope-of-practice regulations that is the principal barrier. The scope-of-work paradigm versus the training/mentoring/competency evaluation paradigm requires considerable thought and discussion if team building is to succeed.

Some Lessons from the Case Studies

What are some of the specific lessons offered by the case studies in this report? They present a variety of transformations in job descriptions and tasks, and demonstrate several ways to break out of the constraints of the traditional 15-minute physician visit.

Small Private Practices. The examples of Drs. Adubofour and Burger (case studies 1 and 2) demonstrate that even small primary care offices can create effective teams.

Medical Assistants (MAs). MAs are everywhere in primary care: in private practices, community health centers, hospital out-patient clinics, and large multi-specialty groups. Because medical assistants are ubiquitous, and because they often play the key role of managing the flow of activity in primary care, they are crucial to team development. The practices of Dr. Adubofour (case study 1), St. Peter Family Medicine Residency Program (case study 9), the University of Utah Hospitals and Clinics (case study 14), and Neighborhood Healthcare (case study 15) show that medical assistants can take on greatly expanded roles in patient care provided that they are adequately trained. One risk in delegating more responsibility to medical assistants, however, is that well-trained MAs may leave for higher-paying jobs or to enter health-professional schools.

Receptionists. Sometimes taking on such titles as patient service representative, receptionists have played relatively minor roles in most team-building efforts. An exception is provided by the practice of Dr. Burger (case study 2), who has given his highly-trained receptionists (patient representatives) a central role on the team, including the use of computerized protocols for incoming phone calls from patients.

Licensed Practical Nurses (LPNs). Group Health Cooperative (case study 12), HealthPartners (case study 13), and Clinica Campesina (case study 3) are examples of organizations employing both MAs and LPNs (in some states called licensed vocational nurses—LVNs) in primary care. These organizations have found that LPNs, with considerably more clinical training than MAs, can more easily take on tasks that require clinical acumen. If LPNs are available in the local market and are not much more expensive than MAs, it is advantageous to employ LPNs as skilled members of the team. At Clinica Campesina, LPNs are the team (pod) coordinators, responsible for making each day flow smoothly, performing a number of clinical tasks, overseeing the MAs, and acting as the “quarterback of the pod.”

Registered Nurses (RNs). Larger primary care organizations have a long history of employing RNs, but as RNs have become more expensive, their roles have changed dramatically. Formerly doing the work now performed by MAs, RNs have been searching for their proper place in modern primary care. In some cases, most prominently the Santa Clara Valley Health and Hospital System (case study 6), they have become chronic conditions care managers. In other organizations, they have assumed the role of advice nurses, working on the phone and via electronic messaging. Palo Alto Medical Foundation (case study 10) found that RNs teamed with a few physicians, rather than serving on a non-team-based nurse advice pool, can work more rapidly and effectively because they know the patients they are caring for.

Advanced Practice Clinicians (APCs). Primary care practices have also been searching for the optimal roles for advanced practice clinicians (nurse practitioners and physician assistants). In some cases, most prominently Clinica Campesina (case study 3), they are indistinguishable from physicians, having their own designated panels of patients. In other organizations, they perform acute care visits but without having their own patient panels. Harvard Vanguard Medical Associates (case study 11) has given advanced practice clinicians the role of chronic conditions care manager, with a job description similar to that of Santa Clara Valley’s Center for Diabetes and Metabolism’s (case study 6) RNs and pharmacists.

Expanding the 15-Minute Visit. Virtually all the examples of team building described in this report have confronted—to a greater or lesser degree—the limitations of the 15-minute physician visit in primary care. Three of the organizations have made major strides in expanding the primary care patient encounter beyond the 15-minute physician visit.

HealthPartners Medical Group in Minnesota (case study 13) has designed the care model process, currently in its initial stages of implementation,

which conceives of the patient encounter as including pre-visit, visit, post-visit, and between-visit care. HealthPartners has implemented the pre-visit component of this structure and is working on the addition of post-visit and between-visit elements.

The University of Utah has restructured the primary care visit (case study 14) into the care team model, strengthening the encounter by involving not only the physician but also the medical assistant, who remains with the patient during pre-visit, visit and post-visit phases, including assisting the physician during the visit. Neighborhood Healthcare in San Diego (case study 15) also expands the medical assistant role by having the MA participate in the clinician visit. The dramatic innovation of the “Utah model” and Neighborhood Healthcare—which allows physicians to offer more meaningful visits to patients in the same amount of time because the medical assistant helps with documentation and other tasks—requires not only extensive medical assistant training but at least a 2:1 ratio of medical assistants to physicians.

The Teamlet Model of Primary Care

Each of the practices and clinics in this report’s case studies has embarked on team care development through some form of changing and expanding the job descriptions and tasks of nonphysician personnel and thereby expanding the clinical experience of the patient beyond the traditional 15-minute physician visit. Many of the organizations in this report have adopted components of the pre-visit, visit, post-visit, between-visit formula as a crucial aspect of their team care changes. This formula is the foundation of a comprehensive team care structure and process developed by Dr. Thomas Bodenheimer, author of this report, in response to the many lessons regarding primary care team development learned from the report’s case studies. This structure, called the teamlet model of primary care, is described in the epilogue to the case studies section of this report.

Endnotes

1. Alexander, G.C., J. Kurlander, M.K. Wynia. "Physicians in retainer ("concierge") practice. A national survey of physician, patient, and practice characteristics." *Journal of General Internal Medicine* 2005; 20:1079–83.
2. Yarnall, K.S., K.I. Pollak, T. Ostbye, K.M. Krause, J.L. Michener. "Primary care: is there enough time for prevention?" *American Journal of Public Health* 2003; 93:635–41.
3. Ostbye, T., K.S. Yarnal, K.M. Krause, K.I. Pollak, M. Gradison, J.L. Michener. "Is there time for management of patients with chronic diseases in primary care?" *Annals of Family Medicine* 2005; 3:209–14.
4. Stange, K.C., S.A. Flocke, M.A. Goodwin, R.B. Kelly, S.J. Zyzanski. "Direct observation of rates of preventive service delivery in community family practice." *Preventive Medicine* 2000; 31:167–76.
5. Bodenheimer, T. "Interventions to improve chronic illness care: evaluating their effectiveness." *Disease Management* 2003; 6:63–71.
6. Center for Studying Health System Change Physician Survey: <http://CTSONline.s-3.com/psurvey.asp>.
7. Roter, D.L., J.A. Hall. "Studies of doctor-patient interaction." *Annual Review of Public Health* 1989; 10:163–80.
8. Marvel, M.K., R.M. Epstein, K. Flowers, H.B. Beckman. "Soliciting the patient's agenda: have we improved?" *JAMA* 1999; 281:283–287.
9. Braddock, C.H., K.A. Edwards, N.M. Hasenberg, T.L. Laidley, W. Levinson. "Informed decision making in outpatient practice: time to get back to basics." *JAMA* 1999; 282:2313–2320.
10. Fried, B.J., T.G. Rundall, S. Topping. "Groups and teams in health services organizations," in S.M. Shortell, A.D. Kaluzny, eds. *Health Care Management* (Albany, NY: Delmar Thomson Learning, 2000).
11. Wise, H., R. Beckhard, I. Rubin, A.L. Kyte. *Making Health Teams Work*. (Cambridge, MA: Ballinger Publishing Co., 1974).
12. Bodenheimer, T., K. Grumbach, *Improving Primary Care: Strategies and Tools for a Better Practice* (New York, NY: McGraw-Hill, 2006), 162–3
13. Wagner, E.H., "The role of patient care teams in chronic disease management." *BMJ* 2000; 320:569–72.
14. Campbell, S.M., M. Hann, J. Hacker, C. Burns, D. Oliver, A. Thapar, N. Mead, D.G. Safran, M.O. Roland, "Identifying predictors of high quality care in English general practice: observational study." *BMJ* 2001; 323:1–6.
15. Roblin, D.W., S.H. Kaplan, S. Greenfield, M.H. Roberts, L.D. Jacobs, D.G. Carlton, "Collaborative clinical culture and primary care outcomes." *Washington DC, program and abstracts of the annual meeting of the Academy for Health Services Research and Quality* June 23–5, 2002.
16. See note 12.
17. Laurant, M.G, R.P. Hermens, J.C. Braspenning, B. Sippald, R.P. Grol, "Impact of nurse practitioners on workload of general practitioners: randomized controlled trial." *BMJ* 2004; 328:927–30.
18. Barr, D.A., "The effects of organizational structure on primary care outcomes under managed care." *Annals of Internal Medicine* 1995; 122:353–9.
19. Cohen, S.G., D.E. Bailey, "What makes teams work: group effectiveness research from the shop floor to the executive suite." *Journal of Management* 1997; 23: 239–90.
20. Starfield, B., *Primary Care: Balancing Health Needs, Services, and Technology* (New York, NY: Oxford University Press, 1998).
21. Lencioni, P., *The Five Dysfunctions of a Team: A Leadership Fable* (San Francisco, CA: Jossey-Bass, 2002).
22. See note 10.
23. See note 11.
24. Feiger, S.M., M.H. Schmitt, "Collegiality in interdisciplinary health teams: its measurement and its effects." *Social Science and Medicine* 1979; 13:217–29.



CALIFORNIA
HEALTHCARE
FOUNDATION

476 Ninth Street
Oakland, California 94607
Tel: 510.238.1040
Fax: 510.238.1388
www.chcf.org