ACHIEVING A NEW STANDARD IN PRIMARY CARE FOR LOW-INCOME POPULATIONS: CASE STUDIES OF REDESIGN AND CHANGE THROUGH A LEARNING COLLABORATIVE

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ABSTRACT: This paper presents case studies of learning collaboratives undertaken at four community health centers to improve the delivery of patient care. Undertaken by New York City's nonprofit Primary Care Development Corporation (PCDC), the collaboratives were guided by five overarching principles: build a high-functioning team; cultivate leadership support and involvement; track data and map the process from the patient's perspective; open lines of communication; and utilize the expertise of coaches and program leaders. Each of the four PCDC health centers made dramatic improvements in getting patients in and out of the center quickly; offering appointments with the patient's primary care provider on demand; enhancing revenue collections; and attracting and retaining patients. The authors say that sustaining the processes that were changed so that benefits continue to accrue beyond the end of the collaboratives is the primary challenge for the organizations.

Click here to view the case studies.

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EXECUTIVE SUMMARY

Community health centers deliver primary health care to much of New York City's low-income population. But the design and delivery of health care services at these centers can be made more patient friendly. There often are delays in access to care, making it difficult to get an appointment. Inefficiencies in patient flow also are common, resulting in office visits that are needlessly long.

This paper describes four case studies that focus on improving patient care delivery systems through "learning collaboratives." The nonprofit Primary Care Development Corporation (PCDC) implemented its learning collaborative model at four community health centers in New York City. Using PCDC's methods, each center made dramatic improvements in key operations: getting patients in and out of the center quickly; offering appointments with the patient's primary care provider on demand; enhancing revenue collections; and attracting and retaining patients.

Founded in 1994, PCDC works closely with city, state, and federal governments and with private funding sources to provide construction loans and technical assistance to health care providers. These funds are used to modernize, expand, or build medical facilities in communities that lack critical primary care services. This program aims to build a sustainable, permanent, community-based infrastructure capable of delivering affordable primary care services in underserved communities.

To lend additional support, PCDC set out to provide operational technical assistance to health centers. It advises providers on "change concepts" that can radically improve their delivery systems. Working with experts from around the country, PCDC developed a comprehensive strategy for improving efficiencies and building operational and programmatic capacity. This effort resulted in the creation of several technical assistance programs (Operations Success Programs) that focus on performance improvements. By revamping their operational processes, ambulatory care centers can accommodate higher volumes of patient visits and offer a better level of care.

Over the past six years, PCDC has worked with 100 teams from 22 New York City health care organizations to create patient-focused health care centers. When care is patient focused, a visit to the doctor should last no more than an hour, and patients should be able to get an appointment with their own primary care provider within 24 hours.

PCDC created learning collaboratives modeled after the Institute for Healthcare Improvement's Breakthrough Series Model. A learning collaborative is an initiative that provides clinical, technical, and social support to health care organizations. The goal is to make dramatic improvements in specific clinical and operational areas. To participate in a learning collaborative, an organization appoints several staff members to a team. Over the course of six to eight months, teams from various organizations that share common goals meet in learning sessions. There, they learn from expert faculty how to improve their performance, and share progress reports. The period between learning sessions is called the "action period"; during this time, teams work intensely to implement what they have learned at the learning sessions.

PCDC created a set of four unique learning collaboratives. Two of them (Redesigning the Patient Visit and Advanced Access) address delays in access to care and long cycle times. The other two collaboratives (Revenue Maximization and Marketing and Customer Service) focus on key operational areas.

In its consulting capacity, PCDC developed broad expertise on the challenges of adapting *transformational change* at primary care health centers. Change is extraordinarily difficult to implement and sustain—even when leadership and staff both endorse it.

A successful implementation model is based on clear, simple, and effective principles. There are five strategic principles that apply to all collaboratives.

Five Strategic Collaborative principles:

- Build a high-functioning team
- Cultivate leadership support and involvement
- Track data and map the process from the patient's perspective
- Open lines of communication
- Utilize the expertise of PCDC coaches and program leaders

Each PCDC learning collaborative has these five principles at its core, but also has its own unique set of principles targeted to a specific process.

Patient-centered care requires a significant expenditure of energy. PCDC has been fortunate to work with experts from around the country to develop comprehensive strategies for building the capacity of freestanding health centers. The following four case

studies illustrate the success of PCDC's collaborative model. Each of these studies follows the framework of a learning collaborative model but was implemented in very different settings.

Case Study 1: Redesigning the Patient Visit Program at the Jerome Belson Health Center

This case study documents the rigorous six-month redesign of the patient visit process at the Jerome Belson Health Center in the Bronx. The health center is one of four full-time and three part-time centers in New York City operated by the Cerebral Palsy Association (CPA) of New York State. The center serves a developmentally disabled population, which makes the task of reducing patient cycle times even more challenging than usual. Even so, the principles of redesign successfully transformed an overcrowded waiting room that was far from user-friendly into an environment where the patient comes first, and providers and staff are highly productive.

The Jerome Belson Health Center followed a rigorous PCDC training program as it implemented the learning collaborative model. The center benefited dramatically from these changes. It decreased its average patient cycle time (total clinic visit time) from 68 minutes to 41 minutes, a reduction of 40 percent. As clinic visits became more efficient, provider productivity rose 58 percent. Providers had been treating 2.85 patients per hour, but were able to treat 4.5 patients per hour after the redesign.

Pre-Redesign	**Post-Redesign**
Cycle time: 68 minutes	Cycle time: 41 minutes ↓ 40%
Productivity: 2.85 patients per hour	Productivity: 4.5 patients per hour ↑ 58%

The Jerome Belson Health Center followed the five strategic collaborative principles outlined above. In addition, it followed 12 principles that were specific to its Redesign Collaborative:

Twelve Redesign principles:

- Don't move the patient
- Eliminate needless work
- Increase clinician support
- Communicate directly
- Exploit technology

- Monitor capacity in real time
- Get all the tools and supplies you need
- Create broad work roles
- Organize patient care teams
- Start all visits on time
- Prepare for the expected
- Do today's work today

Case Study 2: Advanced Access Learning Collaborative at Union Health Center
This case study examines how a health center dramatically redesigned its patient visit process. Union Health Center, which has provided health care services to garment industry workers in New York City since 1914, turned to PCDC to implement its Advanced Access program. The redesign was led by experts Mark Murray, M.D. and Catherine Tantau, R.N.

Union overhauled its patient scheduling system to meet its goal: offering patient appointments on demand. The key to reducing backlog and meeting demand is to measure the third-next-available appointment time. Union patients commonly had to wait as long as 15 days before they could schedule an appointment. After the seven-month-long redesign, patients received an appointment within one day or less, which represents a 93 percent decrease in appointment scheduling time. In addition, the patient no-show rate fell, and both staff and patient satisfaction levels increased.

Pre-Redesign	**Post-Redesign**
Cycle time: 123 minutes	Cycle time: 52 minutes ↓ 58%
Pre-Advanced Access	**Post-Advanced Access**
Third-next-available appt.: 15 days	Third-next-available appt. : 0–1 day ↓ 93%
No-show rate: 20%	No-show rate: 15% ↓ 25%

Union's efforts to decrease cycle times and increase productivity through the Redesign Collaborative laid the groundwork for the next program it undertook, called an Advanced Access Collaborative. This process enabled Union to implement a scheduling system that offers patients appointments on demand.

In summary, Union implemented the five strategic principles adopted by all collaborative participants. In addition, it implemented the Advanced Access core program

principle (Doing Today's Work Today), and embraced six Advanced Access principles (also known as "high-leverage changes").

Advanced Access principles:

- Do today's work today
- Work down the backlog
- Reduce appointment types and times
- Develop contingency plans
- Reduce demand for visits
- Balance supply (provider time) and demand (patient visits) daily

Case Study 3: Revenue Maximization Program at the Brownsville Multi-Service Family Health Center

This case study chronicles the Brownsville Multi-Service Family Healthy Center's (BMS's) effort to collect revenues efficiently throughout the entire collection process. BMS serves a low-income community living predominantly in public housing. BMS's challenge was how to sustain revenue while meeting the overwhelming needs of its clients.

BMS was acutely aware of its pressing need to increase revenue, but its numerous attempts to fix the problem internally had failed. BMS turned to PCDC for help, and implemented PCDC's Revenue Maximization (RevMax) Learning Collaborative.

BMS used the learning collaborative model over a six-month period to streamline its entire collection process, which produced dramatic results in several financial indicators. As a result of the changes, average weekly cash receipts increased by 46 percent. Reimbursement per visit rose 55 percent, from $78 to $121.

Pre-RevMax	**Post-RevMax**
Weekly cash receipts: $66,434	Weekly cash receipts: $97,174 ↑ 46%
Reimbursement per visit: $78	Reimbursement per visit: $121 ↑ 55%
	Total revenue increase: $345,000 ↑ 51%

This case study also documents how the work of the collaborative improved employee morale and encouraged high performance throughout the organization. These changes delivered another significant result: the adult medical care unit increased patient visit volume by 5 percent after several years of decline.

BMS improved its bottom revenue line by following the five strategic collaborative principles and, in addition, 10 RevMax specific change principles.

Ten RevMax principles:

- Do it right the first time
- Collect money due at the point of service
- Eliminate lag times between service and billing
- Manage claim rejections
- Redesign bad processes
- Encourage teamwork
- Leverage technology
- Share the data
- Establish good internal control systems
- Maintain appropriate staffing

Case Study 4: Marketing and Customer Service at the Urban Health Plan
This case study provides insight into how a South Bronx health center adapted highly-targeted marketing practices and by doing so was able to increase and sustain patient volume in a very competitive environment.

Urban Health Plan (UHP) had conducted an extensive and expensive media campaign for its new facility, which had generated much interest. But UHP soon realized it needed help in understanding the process of marketing without relying on expensive consultants. UHP enrolled in PCDC's Marketing and Customer Service Learning Collaborative.

PCDC helped UHP understand the importance of a two-pronged approach to community outreach. The first step was to create an in-house marketing division that was able to customize outreach efforts to narrowly defined populations. The second step was to create and maintain employee and customer satisfaction.

The case study examines how UHP created an in-house marketing division. Its goal was to increase and sustain patient volume through outreach to a specific population

base. By achieving this goal, it significantly improved both employee and customer satisfaction.

Patient satisfaction survey results:

Centerwide patient survey—
UHP surveyed about 60 patients who gave their opinion of the center on a scale of 1 to 7, with 7 being the highest.

Opinion of center	6
Customer service	6
Rating of different programs	6–7
Overall satisfaction	6

Focus group surveys of UHP services—

Excellent	25%
Very good	50%
Fair	25%

Over the six-month course of the collaborative, the team clearly identified the unique needs of targeted market segments. It established a method of tracking new patients who came to UHP from those market segments. It also secured support from providers, board members, and other staff members, which is crucial to sustaining gains.

Urban Health Plan followed a Marketing Road Map, which is an outline for following new customer service principles that places strong emphasis on the patient. The health center used the five basic marketing principles as well as an additional eight customer service principles.

Five Marketing principles:

- Situational analysis
- Marketing objectives
- Marketing strategies
- Marketing tactics
- Evaluation

Eight Customer Service principles:

- Leadership commitment
- Service defined from a patient perspective
- Service standards
- Continuous improvement
- Internal communication
- Ongoing communication
- Reward and recognition
- Patient satisfaction measures

In conclusion, the data from these four collaboratives support the effectiveness of the learning collaborative model for implementing change. The groups used the model to achieve such goals as appointment access within 24 hours; visit cycle times of less than one hour; increase in reimbursement; and improved patient and staff satisfaction.

PCDC believes it can reproduce its success in diverse settings with future collaboratives. Its experience in working with a variety of groups over the past six years has enabled it to identify common issues that can hamper the process.

One challenge, for example, is helping organizations sustain the processes that were changed so that benefits continue to accrue. Frequently, PCDC has encountered what it labels the "myth of the self-maintaining innovation": the belief that gains achieved during a collaborative can be sustained without further effort. PCDC has learned that the improvement process is not a finite project; it is a never-ending commitment that requires continued organizational focus, resources, and course corrections.

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INTRODUCTION TO PCDC AND THE COLLABORATIVE EXPERIENCE

Over the past six years, the Primary Care Development Corporation has worked with 100 teams from 22 New York City health care organizations to create patient-focused health care centers. The goal of this work is to ensure that a visit to the doctor lasts no more than an hour, and patients can get an appointment with their own primary care provider within 24 hours.

PCDC created learning collaboratives modeled after the Institute for Healthcare Improvement's Breakthrough Series Model. A learning collaborative is an initiative that provides clinical, technical, and social support to health care organizations. The goal of a collaborative is to make dramatic improvements in specific clinical and operational areas. To participate in a learning collaborative, an organization appoints several staff members to a team. Over the course of six to eight months, teams from various organizations that share common goals meet in learning sessions. There they share progress reports and learn from expert faculty how to improve their performance. The period between learning sessions is called the "action period"; during this time, teams work intensely to implement what they have learned at the learning sessions.

PCDC created a set of four unique learning collaboratives. Two collaboratives—Redesigning the Patient Visit and Advanced Access—address delays in access to care and long cycle times. The other two collaboratives—Revenue Maximization and Marketing and Customer Service—focus on key operational areas.

PCDC's growing expertise in collaborative programs has made it acutely aware of the challenges of initiating *transformational change*. Change can deliver undeniable improvements. And yet, change is extraordinarily difficult to implement and sustain—even when there is consensus about the need for change. A successful implementation model must be based on clear, simple, and effective principles that guide the journey of change. A successful model includes strategies for coping with inevitable challenges and for meeting resistance on the road to a transformed and effective health care system.

The collaborative data suggest that PCDC has developed an effective model for helping organizations implement change and reach such goals as appointment access

within 24 hours, visit cycle times of less than one hour, higher reimbursement, and improved patient and staff satisfaction.

PCDC believes it can reproduce its success in diverse settings with future collaboratives. Its experience in working with a variety of groups over the past six years has enabled it to identify many common obstacles.

One challenge, for example, is addressing how organizations can sustain the improvements that were made to their operational processes. The improvements will be lost if the processes are not maintained. Frequently, PCDC encounters what it labels the "myth of the self-maintaining innovation": the belief that gains achieved during a collaborative can be sustained without further effort. PCDC has learned that the improvement process is not a finite project. It is a never-ending commitment that requires continued organizational focus, resources, and course corrections. The process of transformational change is difficult.

THE EARLY YEARS: EXPANDING CAPACITY THROUGH PHYSICAL INFRASTRUCTURE

Founded in 1994, PCDC works closely with private funding sources and with city, state, and federal governments to provide construction loans and technical assistance to health care providers. These funds are used to modernize, expand, or build medical facilities in communities that lack critical primary care services. This program aims to build a sustainable, permanent, community-based infrastructure capable of delivering affordable primary care services in underserved communities. To date, PCDC has financed the construction or renovation of 32 primary care centers in all five boroughs of New York City, investing a total of $109 million. These centers have a collective capacity to serve more than 300,000 patients.

PCDC-funded centers fall into two categories. The first group includes freestanding and hospital-sponsored community-based centers that provide a broad array of primary care and specialty services to people who live and work near the center. The second group consists of special needs providers that target their services to a particular population subgroup, such as the developmentally disabled, the frail elderly, or people with HIV/AIDS. These centers serve a citywide patient population.

The centers themselves differ widely in size, ranging from under 1,000 square feet to more than 50,000 square feet. The centers provide between 3,000 and 160,000 visits

annually, although 60 percent of PCDC-funded centers have the capacity to deliver between 25,000 and 50,000 visits a year.

Their organizational structures also vary. Some are single-center freestanding organizations or hospital-based clinics, while others belong to multi-center networks that offer basic primary care services as well as the array of ancillary and specialty services found in academic medical centers. They primarily serve low-income, uninsured, underinsured, and Medicaid-eligible New Yorkers. Most patients are ethnic minorities—notably African-American, Hispanic, and Asian—and many are women and children.

THE NEXT PHASE: EXPANDING CAPACITY THROUGH OPERATIONS PERFORMANCE IMPROVEMENT

After the first set of health centers became operational, their leaders and PCDC recognized that the centers needed help to translate this expanded capacity into higher volumes of patient visits and a better level of care. To lend additional support, PCDC set out to provide operational technical assistance to these health centers.

Working with experts from around the country, PCDC developed a comprehensive strategy for improving efficiencies and building operational and programmatic capacity. This effort resulted in the creation of several technical assistance programs, called the Operations Success Programs, which focus on performance improvements.

By revamping their operational processes, ambulatory care centers can accommodate higher volumes of patient visits and a better level of care. The re-engineering of work processes makes operations more streamlined, and this greater efficiency can radically improve the delivery systems of ambulatory care centers.

The initiatives seek to create a patient-focused system of care that minimizes delays in getting appointments, increases the continuity of care, and decreases cycle times for patient visits. Collectively, these improvements increase productivity and the quality of care, and ultimately, they improve the health of communities served by the health centers.

Learning collaboratives produce consistent results in all types of facilities and clinical practice areas. The PCDC learning collaborative structure was modeled after the Institute for Healthcare Improvement's (IHI's) Breakthrough Series Model. PCDC added three elements to the IHI model: facility selection, leadership conference, and team member selection. Each PCDC collaborative training program generally accommodates

seven to 15 teams from different organizations. Each team consists of five or six frontline individuals who typically come from such clinical areas as medicine, pediatrics, women's health, or orthopedics.

Over the past six years, the Operations Success Programs have expanded from one health center working with a single redesign expert trainer to a complete learning collaboratives methodology. PCDC offers active coaching in four areas: Redesigning the Patient Visit, Advanced Access Patient Scheduling, Revenue Maximization, and Marketing and Customer Service.

A Clinical Collaborative is the newest offering, and is designed to address disparities experienced by low-income communities in pediatric asthma and prenatal care outcomes. This program was developed in partnership with a long-time client, a major primary care provider in Brooklyn.

THE LEARNING COLLABORATIVE: POWER FOR MAKING CHANGE

As defined by Michael Hammer in his book, *The Reengineering Revolution,* reengineering forms the core philosophy of PCDC's Operations Success collaboratives. As Hammer explains, reengineering is the fundamental rethinking and radical redesign of business processes. The goal is to achieve dramatic improvements in performance. This concept assumes that poor performance typically stems from faulty processes.

PCDC's reengineering strategy focuses on redesigning patient throughput, provider paneling, and patient scheduling. Overhauling these processes is the key to enhanced health care access, provider and customer satisfaction, and operating efficiency. The end result is the delivery of patient-centered care.

Patients are very satisfied with these changes. They are able to access their primary care provider on the same day instead of the next week or next month and are able to complete the visit in less than one hour instead of the typical two or four. For staff, the days run more smoothly. Employees are able to work at their highest level. People are able to go to lunch and the clinic closes on time. Ultimately, clinicians have better support for their work and can focus on building relationships with patients.

The Redesigning the Patient Visit program is PCDC's oldest improvement program, and was originally developed by Roger Coleman, a leader in health care process redesign. PCDC has worked with 59 teams from nine organizations since it implemented the redesign program. Many of the organizations are multi-hospital networks or multi-

health center systems and field multiple teams. Participating organizations have seen cycle times reduced by 50 percent or more, and one-hour cycle times are very achievable. In the four-year period between 1998 and 2002, 18 participating teams halved their cycle times, from an average of 99 minutes to 50 minutes.

Advanced Access Patient Scheduling, developed by Mark Murray and Catherine Tantau, is the most recent Operations Success Program and was first offered in 2001. This Learning Collaborative Training Program teaches teams to reengineer their appointment scheduling and supporting procedures. The goal is to provide patients with a convenient appointment with their own primary care provider. Patients often receive an appointment for the same day on which they call—even for non-urgent care. This re-engineering creates an important benefit—continuity of care—so that patients are treated by their regular clinical provider. The final results are impressive. During the collaborative's first round, five teams reduced delays for all appointments by 85 percent, from an average of 29 days to four days.

The other Operations Success Collaborative Training Programs provide successful wraparounds to the first two access programs described above, the patient visit and patient scheduling initiatives. The Marketing and Customer Service Collaborative teaches teams to use market segmentation as they develop marketing strategies and new programs to meet community needs. The collaborative also teaches the importance of internal marketing and patient satisfaction.

The RevMax Collaborative teaches teams how to reengineer revenue processes and foster teamwork between financial and operations staff. The goals are to minimize rework and to ethically maximize revenue. PCDC implemented the RevMax Collaborative twice over the last two years. The two small test collaboratives had five and four teams, respectively, and both produced good results.

In the second collaborative, the four participants (three health centers and a large hospital ambulatory care department) realized increased cash collections of $2.4 million within the last two months of the six-month collaborative. PCDC's third RevMax Collaborative was completed in February 2004. It was sponsored by the Community Clinics Initiative, a joint program of the Tides Foundation and the California Endowment, and involved 14 California health centers.

Generally speaking, PCDC has learned that it is best for an organization to first participate in the Redesigning the Patient Visit Collaborative before it participates in the

Advanced Access Patient Scheduling Collaborative. It is too difficult to tackle the programs simultaneously because of the scope and breadth of change required to succeed in redesigning the patient visit. Both programs greatly appeal to the health care community and produce sharply improved patient outcomes. But they also present a major challenge: sustaining these dramatic improvements over the long run.

COLLABORATIVE STAGES: TRAVELING A SPIRAL-SHAPED PATH

All PCDC collaborative participants use the same learning collaborative model. There are three different stages to a collaborative. At each stage, different elements of the collaborative are introduced and implemented. Each stage is a distinct entity, followed in chronological order by the next stage. But it is important to keep in mind that the path through these stages is not really linear, in the same way that a learning collaborative "journey" is nonlinear.

The collaborative "path" is more like a spiral than a straight line. Each collaborative stage overlaps other stages like the curves of a spiral; the work of one stage spills into and informs the work of the other stages. Rather than following directions that take them from point A to point Z, participants also move forward in an elliptical path that is marked by their growing awareness of what works and what does not work at their particular health center. With this awareness comes an ability to use tools to make and sustain permanent changes in productivity, efficiency, and attitude.

Pre-work

The first step of the pre-work stage is to bring together staff members from multiple disciplines to form the team. Once the team is established, it participates in a telephone conference with its expert coach, who outlines what to expect in the months to come. The team then starts gathering baseline data. It brings that data to the first learning session, where it meets teams from other health centers. Gathering the first hard patient tracking data is extremely important. This information is the basis upon which all improvements are measured.

Learning Sessions

Teams participate in three learning sessions (LS), each one facilitated by PCDC staff and nationally recognized leaders in the specific collaborative field. During LS1, the experts and coaches introduce themselves and explain the program's principles. Teams from participating centers meet each other and present their individual data and goals. Teams interact, share information, and present progress reports to each other at every learning

session. This format expands all participants' awareness of community-based health center issues.

During subsequent sessions, the experts continue to outline program objectives and to support teams in reaching goals. They also coach teams in overcoming resistance to change by team members and non-team personnel. LS3 includes a 10-minute creative presentation by each team about its accomplishments. Then experts prepare teams for ongoing and long-term change.

Action Periods

Two action periods take place in between the three learning sessions. Teams are inspired by these sessions to fire up the process of implementing change at their health centers. They gather once or twice a week for intensive meetings, which can include on-site visits or conference calls with their coach.

During these action periods, the teams run through rapid tests of change in highly controlled situations. These sessions use the Plan, Do, Study, Act (PDSA) cycle method. In the Redesign Collaborative, a newly designed visit is tested through a series of PDSA cycles known as Rapid Redesign Tests (RRTs). This process leads to a final redesign model, which is completed over a period of three full days. All the learning collaboratives use PDSAs to capture data. Once the process is finalized, the methods are passed on to non-team personnel, who are trained to participate in the new model.

REACHING AND SUSTAINING ORGANIZATIONAL GOALS

"I thought I could just walk away after the collaborative and the gains would stay in place."
—Ambulatory care director

"Why would anyone go back to the old way after realizing such incredible changes?"
—Health center CEO

"Don't the process changes in and of themselves ensure sustainability?"
—Health policy colleague

"What's the big deal anyway? It's simple. We know what the solutions are. We just need to do it."
—Many CEOs

Collaboratives do more than simply fix particular operations problems. They transform the way people work, expand the boundaries of responsibility, and instill a sense of accountability to patients.

The collaborative journey infuses the unsung heroes of the front lines with a remarkable new level of motivation. Team members become charged up over the course of a learning collaborative. They willingly assume substantially more work, rise to overcome formidable challenges, reinvigorate themselves after moments of despair, and work unselfishly as a team for the good of the patient.

Many team members begin the journey steeped in skepticism if not cynicism. They brandish outright contempt for the trainers' messages of hope, and drag their feet through the first few hours of the first learning session. Yet by the final learning session, they have become converts obsessed with the process of improvement, sharing news of their victories with energy and passion. At the end of the collaborative program, it is very powerful to hear team members discuss what the collaborative learning experience has meant to them both personally and professionally. The collaboratives have a way of unleashing unusual zeal in employees.

PCDC believes it is very important to engage health center leadership in this process. Organizational leaders are inspired when they experience the change process through the perspective of their newly motivated staff. Senior leadership must be involved if the collaborative team is to be successful over the long run. Teams with weak organizational leadership frequently reach their goals. But without consistent, engaged leadership, few teams can sustain success.

Reaching a goal is often easier than maintaining an improved process. Reaching a goal requires intense focus, dedicated resources, keen leadership, and passionate participants. Maintaining the goal requires no less of a commitment. Patient-centered care is not easy, and it demands more work and energy from the staff. It is very important that the health center's management works together with employees to maintain these hard-won improvements on an ongoing basis.

THE EVIDENCE ON SUSTAINABILITY

Can the gains delivered by learning collaboratives be maintained? This is a key question. Data collection often stops shortly after a collaborative ends, but unfortunately, there is no strong evidence that supports the sustainability of gains in the long term.

PCDC has often observed that when a collaborative ends there is little focus on maintaining the initiative. Inevitably, the improvements do not last. Teams are consistently able to make breakthrough changes and completely overhaul existing processes but if they do not build in accountability for ongoing measurements, the improvements are lost.

Many experts on collaborative programs, including PCDC, end the program at the final learning session and leave participating organizations on their own. The data suggest that this approach is flawed. Health center leaders must recognize that they should take steps to preserve these gains, even after the collaborative concludes.

Are there successful models that extend involvement without creating dependency? One example is Weight Watchers, a breakthrough series model that is recognized by millions of Americans as an effective weight-loss program. It is based on three simple principles: eat less, move more, and drink eight glasses of water every day. These principles are easy to understand. But in practice, they are quite difficult to follow.

Similarly, the principles for Redesigning the Patient Visit and for Advanced Access are simple and easy to understand. But, as in the Weight Watchers model, they are hard to follow.

Redesign:

- Don't move the patient
- Eliminate needless work
- Increase clinician support
- Communicate directly
- Exploit technology
- Monitor capacity in real time
- Get all the tools and supplies you need
- Create broad work roles
- Organize patient care teams
- Start all visits on time

- Prepare for the expected
- Do today's work today

Advanced Access:

- Do today's work today
- Work down the backlog
- Reduce appointment types and times
- Develop contingency plans
- Reduce demand for visits
- Balance supply (provider time) and demand (patient visits) daily

When people reach their Weight Watchers goals, they becomes lifetime members and enter a maintenance phase. Even at this phase, there is some degree of "outside" intervention to help them keep focused and preserve their recent but fragile victory over weight. Collaborative participants could use similar support as they emerge from their final learning session, flush with the victory of "wait" loss.

Perhaps the problem lies in the way a collaborative is described as a framework for learning a new method. Instead, it should be recast as a process used by a community of participants to make "lifelong" behavioral changes.

Transforming the dismal patient experience into one that is satisfying for both patients and health care workers takes effort. Health centers must permanently change their individual and collective work behaviors: the way they treat patients, the engineering of work processes, the ability to work together in teams, and the use of technology.

Problems arise because an organization's leadership often views the collaborative journey as a consulting engagement. Leaders demand solutions that require little effort or time on the part of management. Despite their health center's participation in the collaborative, many leaders never learn how to initiate and sustain change. These important lessons, however, are indeed taught during the collaborative journey.

PCDC prepares the organization as best it can for sustained gains. But once the collaborative ends, the health center can flounder or flourish; its fate depends on its leadership's actions.

Drawing again upon the Weight Watchers analogy, there are three keys to losing weight: eat less, move more, and drink at least eight glasses of water every day. These three "change concepts" are simple, and yet more than 60 percent of adult Americans are overweight. Change requires much more than willpower. It demands an enormous amount of focus, the resolve to develop a new habit and a new level of performance.

Now consider the goal at hand: achieving a 60-minute cycle time for a visit with a patient's own primary care provider on the same day. This task seems so simple and achievable that many people believe the transformation process should take far less time than six to nine months. Few of them, of course, consider the obvious—it has taken years to produce the current system that results in patient visits lasting two hours or more and endless delays in securing an appointment.

It is impossible for one-hour cycle times to be achieved overnight. To meet this goal, individuals must change how they work alone, how they work together, and their expectations about accountability. This is a radically different goal for health centers and it cannot be achieved overnight.

Several factors contribute to the length of the process. Investment in training is often minimal. As a result, collaborative team members stay focused on change processes only through the end of the formal program. In truth, these new patient care teams should behave more like champion relay-race runners, displaying smooth execution, perfect handoffs, and no dropping of the baton. Real champion athletes practice often to achieve and maintain this level of performance. Health care workers also should practice often to achieve the best results.

Unfortunately, many health care centers that participate in collaboratives revert to their old patterns within one to five years. There are methods to prevent this regression. One solution is to change the improvement process from something that occurs over a finite time period to something that is a lifelong process. The collaborative framework can be reinvented to achieve two goals. First, it can help organizations maintain their "wait loss." Second, it can help spread improved processes throughout an organization by infusing its culture with a passion for improvement.

Cultural transformation is a lifelong commitment, but groups that sponsor collaboratives commonly fail to prepare their clients for that challenge. PCDC recognizes it must prepare its clients for a prolonged effort to maintain cultural change. This kind of maintenance is a critical investment against the slow unwinding of hard-won gains. The learning collaborative may end, but then the periodic tune-ups begin.

CHALLENGES IN IMPLEMENTATION: WHERE DO WE GO NOW?

Collaboratives are based on five strategic principles. They are:

- Build a high-functioning team
- Cultivate leadership support and involvement
- Track data and map the process from the patient's perspective
- Open lines of communication
- Utilize the expertise of PCDC coaches and program leaders

How do these five principles become incorporated into a health center's culture? PCDC understands that the gains achieved through the collaborative process are fragile. They are almost certain to unravel if left unattended, because the *transformation* of the organization is incomplete.

The solution is to make the health center's leadership responsible for anchoring the new culture in the organization. First, management should communicate to employees—frequently and clearly—that these new methods, and new ways of measuring results, are now part of the organization's culture. Every person who works at the health center should be passionate about these changes. This attitude empowers and energizes everyone in the organization. There is no ambiguity about expectations. Second, management should implement clear, consistent systems for defining, measuring, and sharing key results. These two actions by management form the foundation of a strong organizational culture.

Even these efforts by corporate leadership, however, are not enough. In his book *The Four Obsessions of an Extraordinary Executive*, Patrick Lencioni writes, "[organizational] clarity provides for power like nothing else can. It establishes a foundation for communication, hiring, training, promotion, and decision making, and serves as the basis for accountability in an organization, which is a requirement for long-term success."

Communication about organizational purpose is critical. Equally important is an effort to ensure that the human systems of the organization are aligned in way that fosters and reinforces the new culture and its values. "Alignment of the human systems" means that the systems for hiring, assessing performance, providing rewards and recognition, and dismissing employees are consistent with, and shaped by, the new values and goals.

In simple terms, the people who were trained by the collaboratives to be passionate transformation "converts" are powerful drivers of change. These people, however, may leave the organization at some point. When they do, they may be replaced by people who rely on those old inefficient processes. This pattern, unfortunately, is quite common. People who thrive on driving change can never fully adjust to a system that fails to maintain the new culture. They leave. Then the system looks like it has reverted to its former ways, when in truth it merely has lost its most powerful drivers of change: employees who have taken the journey.

As Lencioni warns, ". . . like so many other aspects of success, organizational health is simple in theory but difficult to put into practice. It requires extraordinary levels of commitment, courage, and consistency."

PCDC's agenda for the future is to build on the success of the collaborative programs by adding elements that support and sustain transformational change. One area of concern is that organizational leadership is generally unprepared to make a lifetime commitment when it signs up for a collaborative.

The collaborative teams do the real work—redesigning the patient visit or the scheduling systems. But the teams soon discover the limits of their authority when they try to engage other departments of the organization. How does the team get the medical record department to change the way it works so that a chart is ready for a patient who calls at 10:00 a.m. and is given an appointment for 2:00 p.m. that same day? How can a team redesign the registration process when it has no authority over that department? How can it get the lab or the pharmacy to be more responsive? The entire organization must be aligned to produce new results. It takes committed leadership to see that the job is done.

PCDC is taking its first steps toward helping prepare leadership for the transformational change journey. It added a Leadership Conference at the beginning of the program and special leadership sessions within the learning sessions. These improvements have helped many organizational leaders, but PCDC hopes to accomplish more. It plans to develop a program specifically designed for leaders, to train them and teach them about their role in the change journey.

PCDC is considering another improvement. In conjunction with its partner, Coleman Associates, PCDC is rethinking the entire structure of the learning collaborative program in an attempt to accelerate the process of transformational change. PCDC

believes that introducing change concepts and redesigning systems can be accomplished more quickly. Changing clinical processes usually proceeds quickly. Overhauling supporting areas such as radiology, the lab, or the pharmacy, however, can stop the process in its tracks. Such problems can be overcome to a degree if leadership is strong. But even a committed, focused leader can be challenged by this task, resulting in slippage along the way.

The new approach addresses a larger part of the organization, and in some cases, the entire organization. It creates change more quickly, using rapidly progressive waves of training and action steps. The initial change introduction period is followed by a longer period of active coaching and maintenance check-ups. The goal is to ensure that these changes are permanent.

These new approaches hold promise, but there are several challenges to implementing them. First, some clients want to finish quickly. The client must be made to understand that the process takes time—and, in fact, is never complete. The second issue is financing the work. Regular maintenance checks are not very expensive. Still, a health center first must be convinced that this is an important investment, and second, must be in a position to afford the investment.

PCDC clients largely provide care to the poor, and operate on limited budgets. PCDC recognizes that its clients face fiscal constraints. To continue this important work, PCDC and its clients rely on continuing strong supportive relationships with corporate and private philanthropic partners, as well as on government support.

"WAIT WATCHERS": STAYING ON THE SCALE

Trying to lose weight and keep the pounds off is very much like the "wait loss" efforts of learning collaborative participants. Both are group efforts. Both can fail without careful monitoring and corrections. In both cases, the new process cannot be expected to ensure optimal performance without constant attention.

PCDC is inspired on a daily basis by a team's hard work on behalf of the patients it serves. PCDC is committed to improving this process. The success of Weight Watchers illustrates that working in a collaborative model helps people maintain difficult lifestyle changes that improve their health. The same principles that apply to losing weight and keeping it off hold true for improvements made in redesign initiatives. Success means stepping on the measurement scale every single day to monitor and maintain the wait loss.

RELATED PUBLICATIONS

In the list below, items that begin with a publication number can be found on The Commonwealth Fund's website at www.cmwf.org. Other items are available from the authors and/or publishers.

#754 *Beyond Return on Investment: A Framework for Establishing a Business Case for Quality* (forthcoming). Michael Bailit and Mary Beth Dyer.

#731 *Recommendations for Improving the Quality of Physician Directory Information on the Internet* (August 2004). Linda Shelton, Laura Aiuppa, and Phyllis Torda, National Committee for Quality Assurance. Millions of American consumers rely on the Internet for health information, and most health insurance plans have made their physician directories available online. According to the authors, however, physician directories on the Web are often missing key data or contain inaccurate or outdated information.

#767 *Exploring the Business Case for Improving the Quality of Health Care for Children* (July/August 2004). Charles Homer et al. *Health Affairs,* vol. 23, no. 4. *In the Literature* summary forthcoming; full article available at http://content.healthaffairs.org/cgi/content/full/23/4/159.

#768 *Overcoming Barriers to Adopting and Implementing Computerized Physician Order Entry Systems in U.S. Hospitals* (July/August 2004). Eric G. Poon, David Blumenthal, Tonushree Jaggi, Melissa M. Honour, David W. Bates and Rainu Kaushal. *Health Affairs,* vol. 23, no. 4. *In the Literature* summary available at http://www.cmwf.org/publications/publications_show.htm?doc_id=233607; full article available at http://content.healthaffairs.org/cgi/content/full/23/4/184.

#736 *Hospital Quality: Ingredients for Success—Overview and Lessons Learned* (July 2004). Jack A. Meyer, Sharon Silow-Carroll, Todd Kutyla, Larry S. Stepnick, and Lise S. Rybowski. The authors offer suggestions for how hospitals can improve their care and promote effective quality improvement strategies at reasonable cost through an examination of key factors contributing to the success of four high-performing hospitals.

#700 *Quality of Health Care for Children and Adolescents: A Chartbook* (April 2004). Sheila Leatherman and Douglas McCarthy. The researchers use 40 charts and analyses to outline the current state of children's health care, arguing that the health care system has devoted far less attention to measuring the quality of care for children and adolescents than it has for adults. Download the chartbook at http://www.cmwf.org/publications/publications_show.htm?doc_id=225395

#702 *Use of High-Cost Operative Procedures by Medicare Beneficiaries Enrolled in For-Profit and Not-for-Profit Health Plans* (January 8, 2004). Eric C. Schneider, Alan M. Zaslavsky, and Arnold M. Epstein. *New England Journal of Medicine,* vol. 350, no. 2. *In the Literature* summary available at http://www.cmwf.org/publications/publications_show.htm?doc_id=221468

#701 *Physician–Citizens—Public Roles and Professional Obligations* (January 7, 2004). Russell L. Gruen, Steven D. Pearson, and Troyen A. Brennan. *Journal of the American Medical Association,* vol. 291, no. 1. *In the Literature* summary available at

www.cmwf.org/publications/publications_show.htm?doc_id=221468; full article available at http://jama.ama-assn.org/cgi/content/full/291/1/94.

#699 *Malpractice Reform Must Include Steps to Prevent Medical Injury* (January 6, 2004). Stephen C. Schoenbaum and Randall R. Bovbjerg. *Annals of Internal Medicine,* vol. 140, no. 1. *In the Literature* summary available at http://www.cmwf.org/publications/publications_show.htm?doc_id=221474.

#686 *Obtaining Greater Value from Health Care: The Roles of the U.S. Government* (November/ December 2003). Stephen C. Schoenbaum, Anne-Marie J. Audet, and Karen Davis. *Health Affairs,* vol. 22, no. 6. *In the Literature* summary available at http://www.cmwf.org/publications/publications_show.htm?doc_id=221475; full article available at http://www.healthaffairs.org/CMWF/Schoenbaum.pdf.

#636 *Value-Based Purchasing: A Review of the Literature* (May 2003). Vittorio Maio, Neil I. Goldfarb, Chureen Carter, and David B. Nash. From their review of the literature, the authors conclude that value-based purchasing will only be effective when financial incentives are realigned with the goals of high-quality care and performance measures address purchasers' particular concerns.

#635 *How Does Quality Enter into Health Insurance Purchasing Decisions?* (May 2003). Neil I. Goldfarb, Vittorio Maio, Chureen Carter, Laura Pizzi, and David B. Nash. According to the authors, public and private purchasers may be able to hold physicians and insurers accountable for the quality and safety of the health care they provide. Yet, there is little evidence that current value-based purchasing activities—collecting information on the quality of care or selective contracting with high-quality providers—are having an impact.

#614 *The Business Case for Tobacco Cessation Programs: A Case Study of Group Health Cooperative in Seattle* (April 2003). Artemis March, The Quantum Lens. This case study looks at the business case for a smoking cessation program that was implemented through the Group Health Cooperative (GHC), a health system and health plan based in Seattle.

#613 *The Business Case for Pharmaceutical Management: A Case Study of Henry Ford Health System* (April 2003). Helen Smits, Barbara Zarowitz, Vinod K. Sahney, and Lucy Savitz. This case study explores the business case for two innovations in pharmacy management at the Henry Ford Health System, based in Detroit, Michigan. In an attempt to shorten hospitalization for deep vein thrombosis, Henry Ford experimented with the use of an expensive new drug, low molecular weight heparin. The study also examines a lipid clinic that was created at Henry Ford to maximize the benefit of powerful new cholesterol-lowering drugs.

#612 *The Business Case for a Corporate Wellness Program: A Case Study of General Motors and the United Auto Workers Union* (April 2003). Elizabeth A. McGlynn, Timothy McDonald, Laura Champagne, Bruce Bradley, and Wesley Walker. In 1996, General Motors and the United Auto Workers Union launched a comprehensive preventive health program for employees, LifeSteps, which involves education, health appraisals, counseling, and other interventions. This case study looks at the business case for this type of corporate wellness program.

#611 *The Business Case for Drop-In Group Medical Appointments: A Case Study Luther Midelfort Mayo System* (April 2003). Jon B. Christianson and Louise H. Warrick, Institute for Healthcare Improvement. Drop-in Group Medical Appointments (DIGMAs) are visits with a physician that take place in a supportive group setting, and that can increase access to physicians, improve patient satisfaction, and increase physician productivity. This case study examines the business case for

DIGMAs as they were implemented in the Luther Midelfort Mayo System, based in Eau Claire, Wisconsin.

#610 *The Business Case for Diabetes Disease Management at Two Managed Care Organizations: A Case Study of HealthPartners and Independent Health Association* (April 2003). Nancy Dean Beaulieu, David M. Cutler, Katherine E. Ho, Dennis Horrigan, and George Isham. This case study looks at the business case for a diabetes disease management program at HealthPartners, an HMO in Minneapolis, Minnesota, and Independent Health Association, an HMO in Buffalo, New York. Both disease management programs emphasize patient and physician education, adherence to clinical guidelines, and nurse case management.

#609 *The Business Case for Clinical Pathways and Outcomes Management: A Case Study of Children's Hospital and Health Center of San Diego* (April 2003). Artemis March, The Quantum Lens. This case study describes the implementation of an outcomes center and data-based decision-making at Children's Hospital and Health Center of San Diego during the mid-1990s. It examines the business case for the core initiative: the development of a computerized physician order entry system.

The Business Case for Quality: Case Studies and An Analysis (March/April 2003). Sheila Leatherman, Donald Berwick, Debra Iles, Lawrence S. Lewin, Frank Davidoff, Thomas Nolan, and Maureen Bisognano. *Health Affairs,* vol. 22, no. 2. Available online at http://content.healthaffairs.org/cgi/reprint/22/2/17.pdf.

#606 *Health Plan Quality Data: The Importance of Public Reporting* (January 2003). Joseph W. Thompson, Sathiska D. Pinidiya, Kevin W. Ryan, Elizabeth D. McKinley, Shannon Alston, James E. Bost, Jessica Briefer French, and Pippa Simpson. *American Journal of Preventive Medicine,* vol. 24, no. 1 (*In the Literature* summary). The authors present evidence that health plan performance is highly associated with whether a plan publicly releases its performance information. The finding makes a compelling argument for the support of policies that mandate reporting of quality-of-care measures.

#578 *Exploring Consumer Perspectives on Good Physician Care: A Summary of Focus Group Results* (January 2003). Donna Pillittere, Mary Beth Bigley, Judith Hibbard, and Greg Pawlson. Part of a multifaceted Commonwealth Fund-supported study, "Developing Patient-Centered Measures of Physician Quality," the authors report that consumers can understand and will value information about effectiveness and patient safety (as well as patient-centeredness) if they are presented with information in a consumer-friendly framework.

#563 *Escape Fire: Lessons for the Future of Health Care* (November 2002). Donald M. Berwick. In this monograph, Dr. Berwick outlines the problems with the health care system—medical errors, confusing and inconsistent information, and a lack of personal attention and continuity in care—and then sketches an ambitious program for reform.

#534 *Room for Improvement: Patients Report on the Quality of Their Health Care* (April 2002). Karen Davis, Stephen C. Schoenbaum, Karen Scott Collins, Katie Tenney, Dora L. Hughes, and Anne-Marie J. Audet. Based on the Commonwealth Fund 2001 Health Care Quality Survey, this report finds that many Americans fail to get preventive health services at recommended intervals or receive substandard care for chronic conditions, which can translate into needless suffering, reduced quality of life, and higher long-term health care costs.